INTERNATIONAL COURT OF JUSTICE

OBLIGATIONS OF STATES IN RESPECT OF CLIMATE CHANGE

(REQUEST FOR ADVISORY OPINION)

Written Statement of the

MELANESIAN SPEARHEAD GROUP (MSG)

Index of Exhibits

22 March 2024

Obligations of States in Respect of Climate Change

Written Statement of the Melanesian Spearhead Group (MSG)

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Exhibit 1

No. 47291*

Multilateral

Agreement establishing the Melanesian Spearhead Group. Port Vila, 23 March 2007

Entry into force: *12 March 2010, in accordance with article 19*

Authentic texts: *English and French*

Registration with the Secretariat of the United Nations: *Melanesian Spearhead Group, 30 March 2010*

Note: *See also annex A, No. 47291.*

No UNTS volume number has yet been determined for this record. The Text(s) reproduced below, if attached, are the authentic texts of the agreement /action attachment as submitted for registration and publication to the Secretariat. For ease of reference they were sequentially paginated. Translations, if attached, are not final and are provided for information only.

Multilatéral

Accord établissant le Groupe de fer de lance mélanésien. Port Vila, 23 mars 2007

Entrée en vigueur : *12 mars 2010, conformément à l'article 19*

Textes authentiques : *anglais et français*

Enregistrement auprès du Secrétariat des Nations Unies : *Groupe de fer de lance mélanésien, 30 mars 2010*

Note : *Voir aussi annexe A, No. 47291.*

* *Numéro de volume RTNU n'a pas encore été établie pour ce dossier. Les textes réproduits ci-dessous, s'ils sont disponibles, sont les textes authentiques de l'accord/pièce jointe d'action tel que soumises pour l'enregistrement et publication au Secrétariat. Pour référence, ils ont été présentés sous forme de la pagination consécutive. Les traductions, s'ils sont inclus, ne sont pas en form finale et sont fournies uniquement à titre d'information.*

Participant	**Ratification**	
Fiji	17 Jan	2010
Papua New Guinea	30 May	2008
Solomon Islands	4 Mar	2010
Vanuatu	11 Mar	2010

Note: The texts of the declarations and reservations are published after the list of Parties -- Les textes des déclarations et réserves sont réproduits après la liste des Parties.

Participant	**Ratification**	
Fidji	17 janv	2010
Îles Salomon	4 mars	2010
Papouasie-Nouvelle-Guinée	30 mai	2008
Vanuatu	11 mars	2010

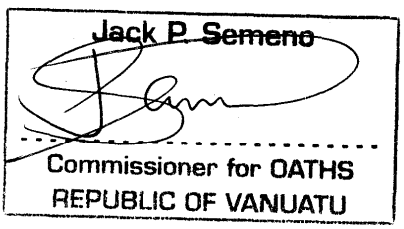
[ENGLISH TEXT – TEXTE ANGLAIS]

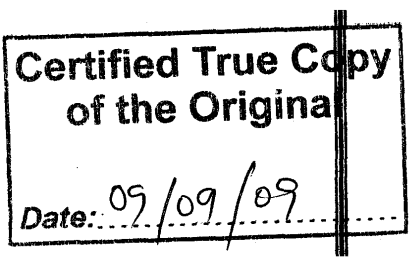
AGREEMENT

ESTABLISHING THE

MELANESIAN SPEARHEAD GROUP

M S G





AGREEMENT ESTABLISHING THE MELANESIAN SPEARHEAD GROUP

The Republic of the Fiji Islands, The Independent State of Papua New Guinea, Solomon Islands, The Republic of Vanuatu and Front de Liberation Nationale Kanak et Socialiste (hereinafter referred to as "FLNKS") of New Caledonia:

Believing the Melanesian region within the Pacific can be a region of solidarity and cooperation in accordance with shared national interest with the objective of strengthening wider institutions of regional and international cooperation;

Determined to have a region that is respected for the quality of its governance, the sustainable management of its resources, the respect for and promotion of its Melanesian cultures, traditions and values and for its defence and promotion of independence as the inalienable right of indigenous peoples of Melanesia and the promotion of their human rights;

Respecting the principles of international law governing relations between nations, such as principles of sovereignty, equality of independence of all states and non – interference in the domestic affairs of states;

Recalling the Agreed Principles of Co-operation Among Independent States of Melanesia signed by the parties in Port Vila in 1988 as well as the Agreed Principles of Co-operation Among Independent States in Melanesia signed by the parties at Kiriwina, Trobriand Island on 7th June, 1996 wherein the parties undertake inter alia to promote economic co-operation between States;

Convinced that the promotion of harmonious economic development of their States calls for effective economic co – operation largely through a determined and concerted policy of greater self reliance;

Desiring to further these goals through the strengthening and deepening of links between countries of the Pacific region including through the Revised Trade Agreement among the Melanesian Spearhead Group Countries.

Wishing formally to establish the Melanesian Spearhead Group as a sub – regional organization in its own right and to provide for its purpose and operation by means of a Secretariat;

Having previously consolidated as the "Melanesian Spearhead Group";

HAVE AGREED as follows:

ARTICLE 1

Melanesian Spearhead Group

1. The Melanesian Spearhead Group (hereinafter referred to as "the MSG") is hereby established as a sub - regional organization.

2. The MSG comprises the Republic of the Fiji Islands, Independent State of Papua New Guinea, Solomon Islands, the Republic of Vanuatu and FLNKS of New Caledonia.

3. The MSG Leader's summit (hereinafter referred to as "the Leaders' Summit") may determine from time to time, the criteria for observer and associate membership and the nature and extent of such rights and obligations or whereby other governments, territories or organizations may be admitted to observer and associate membership of the MSG.

4. The MSG Leaders may from time to time invite other countries, territories and intergovernmental organizations to be either MSG observers or Special Guests. The nature and extent of such rights and obligations of such observer status shall be determined by the MSG Leaders from time to time.

ARTICLE 2

Purpose

The purpose of the MSG is to promote and strengthen inter – membership trade, exchange of Melanesian cultures, traditions and values, sovereign equality, economic and technical cooperation between states and the alignment of policies in order to further MSG members' shared goals of economic growth, sustainable development, good governance and security.

ARTICLE 3

Establishment of the Melanesian Spearhead Group Secretariat

1. Pursuant to Article 19.5 of the Revised MSG Trade Agreement between the members thereto, it is hereby established a Secretariat for the MSG and which establishment is to be known as "the Secretariat".

2. The headquarters of the Secretariat shall be located in Port Vila, Efate in the Republic of Vanuatu.

3. The working languages of the Secretariat including all the constituent bodies of the MSG shall be English and French.

ARTICLE 4

Principle of Dialogue

1. The parties agree to adopt the principle of open dialogue as the means of engaging one with the other. They also agree to engage regularly in a balanced and comprehensive political dialogue leading to commitments by all parties.

2. The objective of the dialogue shall be to foster mutual understanding, exchange information and to facilitate the establishment of agreed priorities and common interests, in particular by recognizing existing links between the various aspects of relations between the parties and the various areas of cooperation laid down in the Agreement.

3. The dialogue shall cover all the aims and objectives laid down in this agreement. The parties shall contribute to a peaceful, secure and stable democratic political environment in the MSG region by pursuing broad based policies to promote peace and to prevent, manage and resolve conflicts, through dialogue.

4. The dialogue shall be conducted in a flexible manner either formally or informally according to the need, and conducted within and outside the institutional framework, including through the Melanesian culture, tradition and spirit of dialogue, mediation and consensus.

ARTICLE 5

Sustainable Development and Human Rights

1. The parties agree to direct their cooperation towards sustainable development centered on the human person, who is the main protagonist and beneficiary of development; this entails respect for and promotion of human rights, including communal rights and the rights of indigenous peoples and communities.

2. Respect for all human rights and fundamental freedoms, including respect for fundamental social, cultural and indigenous rights, democracy based on the rule of law and transparent and accountable governance shall be an integral part of sustainable development within the MSG region.

3. The parties affirm that democratization, development and the protection of fundamental freedoms and human rights and mutual reinforcing are interrelated. In addition thereto, the parties further affirm that, democratic principles are universally recognized principles underpinning the organization of the state to ensure the legitimacy of its authority, the legality of its actions reflected in its constitutional, legislative and regulatory system.

ARTICLE 6

Rule of Law and Good Governance

1. Except for parties which are otherwise not sovereign states, the parties agree that the provisions espoused in their respective national constitutions in relation to the prevalence of the rule of law and the prerogatives of the different powers therein and in particular for the effective and accessible means of legal redress, an independent judiciary and legal system guaranteeing equality before the law and an executive which is fully subject to the law, shall be upheld and observed.

2. Respect for human rights, democratic principles and the rule of law shall underpin the domestic and international policies of the parties and constitute the essential elements of the contractual nature of the relations between the parties to this Agreement.

3. The parties affirm that good governance is the transparent and accountable management of human, natural, economic and financial resources for the purpose of equitable and sustainable development. It entails clear decision-making procedures at the level of public authorities, the primacy of law in the management and distribution of resources and capacity building.

ARTICLE 7

Legal Status, Privileges and Immunities

1. For avoidance of doubt, this Agreement shall take precedence over the Revised MSG Trade Agreement previously entered into by the parties thereto.

2. The MSG shall have such legal personality as is necessary for it to carry out its functions and responsibilities and, in particular, shall have the capacity to contract, to acquire and dispose of movable and immovable property and to sue and be sued.

3. Except for Members which are otherwise not Sovereign States, the MSG shall enjoy in the territory of each Member of the MSG, such privileges and immunities as may be necessary to enable the MSG to fulfill its purpose and carry out its functions. The specific privileges and immunities referred to in this paragraph shall be defined in separate agreements to be entered into between the MSG and Members of the MSG when the prospect of activities of the MSG in the territory of such Members of the MSG makes such agreements appropriate.

ARTICLE 8

Organizational Structure

1. The Secretariat is the administrative arm of the MSG, based in Port Vila, Efate in the Republic of Vanuatu.

2. The MSG shall comprise:

   (a) A Leaders' Summit;

   (b) A Foreign Ministers' Meeting;

   (c) A Senior Officials' Meeting;

   (d) A Trade and Economic Officials' Meeting; and

   (e) Ministerial Meetings that may be held and such other technical advisory committees or groups as may be established from time to time.

3. The reporting structure of the MSG shall be as follows:

   (i) Technical Advisory Committees shall report either to the Trade and Economic Officials Meeting or the Senior Officials Meeting depending on their mandate;

   (ii) Trade and Economic Officials' Meeting shall report to the Senior Officials' Meeting;

   (iii) Senior Officials Meeting shall report to the Foreign Ministers' Meeting;

   (iv) Ministerial Committees shall provide the outcomes of their meetings to the Foreign Ministers' Meeting for transmission to the Leaders' Summit; and

   (v) The Foreign Ministers' Meeting shall report directly to the Leaders' Summit.

ARTICLE 9

The MSG Leader's Summit

1. The preeminent decision making body of the MSG shall be the Leaders' Summit.

2. The Leaders' Summit shall consist of the Heads of Government of each member country or the nominee; and in the case of a member organization, the Head or the duly authorized representative.

Powers and Responsibilities

3. The MSG Leaders' Summit shall be responsible for the:

(a) approval of the general policies of the MSG;

(b) appointment of the Director General including the termination of the Director General;

(c) establishment of Ministerial Committees as may be deemed necessary;

(d) making of decisions in accordance with the general principles of this Agreement and where necessary, directing the relevant constituent bodies of the MSG to undertake further action in relation thereto;

(e) approval of any proposed amendments to the Agreement from time to time;

(f) approval of the establishment of or any proposed amendments to the regulations or rules of procedure for the administration of the MSG and all its constituent bodies; and

(g) carrying out of such other functions as may be necessary to give effect to the purpose of this Agreement from time to time.

Sessions

4. The Leaders' Summit shall hold a regular biennial session to be known as the Leaders' Summit. In addition, a special session of the Leaders' Summit shall be held at any time upon the request of the Chair of the Leaders' Summit. Following such a request or decision, the Director General shall convene a special session of the Leaders' Summit as soon as is reasonably practicable and at any venue where it is most suitable.

5. The biennial session of the MSG Leaders' Summit shall be held, unless otherwise decided, in the countries of Members of the MSG on a rotational basis.

6. The MSG Leaders' Summit at its biennial or special session shall:

(a) adopt such further reports as it may require from time to time; and

(b) make such decisions as may be required.

Chairman

7. For purposes of a meeting of any of the constituent bodies of the MSG, the Chairman shall be referred to as "Chair".

8. The Leaders' Summit shall, by consensus appoint a Chair at each of its biennial sessions from among the Members. The Chair shall retain that office for a period of two years. In the event of the Chair resigning the office or is incapacitated in any manner from retaining the role of Chair, then his or her successor or representative as the case may be,

shall exercise all functions and powers of the Chair until the expiration of the Chair's term of office.

9. Subject to the preceding paragraph, the Chair of the Leaders' Summit shall be appointed on a rotational basis amongst the Members.

10. The Chair shall have the power to take decisions on behalf of the MSG between sessions of the Leaders' Summit on policy questions of urgency after consultation with the Members.

11. The Chairmanship at all meetings of the constituent bodies of the MSG shall be held by the Member that hosts the Leaders' Summit.

Decision Making

12. The Leaders' Summit shall take decisions at its sessions by consensus of all the Leaders present. If consensus cannot be achieved, further dialogue and consultation shall be encouraged and pursued until a decision is made.

Participation

13. The Chair of the Leaders' Summit may invite representatives of any Governments, international agencies, academic and research organizations, foundation, and private industry, or advisors to participate in meetings of any of the constituent bodies of MSG in a consultative capacity or otherwise whether in respect of specific agenda items or more generally, in accordance with such criteria as the Leaders' Summit may determine from time to time.

Procedures

14. All sessions of the Leaders' Summit shall be closed to the public unless the Leaders' Summit may decide otherwise.

ARTICLE 10

Foreign Ministers' Meeting

1 The Foreign Ministers' Meeting shall be held annually comprising of the Foreign Ministers of each Member country or in their stead, a representative who shall be an alternate Government Minister.

Powers and Responsibilities

2. The MSG Foreign Ministers' Meeting shall be responsible for the:

(a) determination of the general policies of the MSG;

(b) recommendation to the Leaders' Summit of a candidate for appointment as Director General;

(c) approval of the budget for the annual financial year;

(d) adoption of the annual report of the Director General;

(e) establishment of other Committees from time to time with such mandates as may be deemed necessary;

(f) performance of such functions which promote the general principles of this Agreement and where necessary, directing the relevant subsidiary MSG constituent bodies to undertake further action in relation thereto;

(g) endorsement of any proposed amendments to the regulations or rules of procedure for the administration of the MSG and all its constituent bodies; and

(h) carrying out of such other functions as may be directed by the Leaders' Summit from time to time.

Sessions

3. The Foreign Ministers shall hold an annual session to be known as the Foreign Ministers' Meeting. In addition, a special session of the Foreign Ministers' Meeting shall be held at any time upon the request of the Leaders' Summit or the Chair of the Foreign Ministers' Meeting. Following such a request or decision, the Director General shall convene a special session of the Foreign Ministers' Meeting as soon as is reasonably practicable and at any venue where it is most suitable.

4. The annual session of the Foreign Ministers' Meeting shall be held, unless otherwise decided, in the country of the current Chair.

5. The Foreign Ministers' Meeting at its annual or special session shall:

(a) consider the annual report of the Director General;

(b) consider the Budget for the succeeding year; and

(c) determine further reports as the MSG Leaders' Summit may require from time to time.

Chairman

6. Subject to Article 9.11 the Foreign Ministers' Meeting shall by consensus appoint a Chair at each of its annual session from among the Members. The Chair shall retain that office for a period of two years. In the event of the Chair resigning from office or is incapacitated in any manner from retaining the role of Chair, the successor or representative as the case may be, shall exercise all functions and powers of the Chair until the expiration of the Chair's term of office.

7. Subject to the preceding paragraph, the Chair of the Foreign Ministers' Meeting shall be appointed on a rotational basis amongst the Members.

8. The Chair shall have the power to take decisions on behalf of the MSG between sessions of the Foreign Ministers' Meeting on policy questions of urgency after consultation with the Members.

Decision Making

9. The MSG Foreign Ministers' Meeting shall take decisions at its sessions by consensus of all the Foreign Ministers present. If consensus cannot be achieved, further dialogue and consultation shall be encouraged and pursued until a decision is made.

Procedures

10. Subject to Article 9.3(f) the Foreign Ministers' Meeting may establish its own rules of procedure.

11. All sessions of the Foreign Ministers' Meeting shall be closed to the public unless the Leaders' Summit shall decide otherwise.

ARTICLE 11

Senior Officials' Meeting

1. The MSG shall have a Committee to be known as the Senior Officials' Meeting (hereinafter referred to as " SOM").

2. SOM shall comprise representatives of each Member of the MSG.

3. Meetings of the SOM shall be held annually in conjunction with the Foreign Ministers' meetings. SOM shall also be convened at such other times and places as the Leaders' Summit or the Foreign Ministers' Meeting may request or as circumstances may determine from time to time.

4. The SOM chair shall be as provided for in Article 9.11 of this Agreement.

5. The Director General shall, in consultation with or at the request of the SOM Chair, convene meetings of the SOM.

6. The SOM shall take decisions at its sessions by consensus of the member Heads of Delegations of Senior Officials present. If consensus cannot be achieved, further dialogue and consultation shall be encouraged and pursued until a decision is made.

7. Subject to Article 9.3(f) the SOM shall establish its own rules of procedure in consultation with the Secretariat.

8. The powers and functions of the SOM shall be to give policy directions to the Secretariat and to make reports and recommendations to the Leaders in accordance with Article 8.3 (iii). In addition to the foregoing, the SOM shall:

   (a) Consider the annual budget of the Secretariat and any interim budget and the annual work programme submitted by the Director General;

   (b) Receive, examine, comment and where necessary, make recommendations on the Annual Report of the Director General on the operations of the Secretariat; the Staff Establishment and the Remuneration Policy of the Secretariat and its Staff Regulations and Financial Regulations, including any subsequent amendments in relation thereto; and

   (c) Undertake all such tasks necessary for the recruitment of a candidate for the post of Director General and to make recommendations in relation thereto to the Foreign Ministers' Meeting.

ARTICLE 12

Trade and Economic Officials Meeting

1. The MSG shall have a Committee to be known as the Trade and Economic Officials' Meeting (hereinafter referred to as "TEOM").

2. TEOM shall comprise representatives of each Member of the MSG.

3. Meetings of the TEOM shall be held annually in conjunction with the SOM. TEOM may also be convened at such other times and places as the Leaders' Summit, the Foreign Ministers' Meeting or the SOM may request or as circumstances may determine from time to time.

4. The Committee Chair shall be as provided for in Article 9.11 herein.

5. The Director General shall, in consultation with or at the request of the TEOM Chair, convene meetings of the TEOM.

6. The TEOM shall take decisions at its sessions by consensus of the Member Heads of Delegations of Trade and Economic Officials present. If consensus cannot be achieved, further dialogue and consultation shall be encouraged and pursued until a decision is made.

7. Subject to Article 9.3(f) the TEOM shall establish its own rules of procedure in consultation with the Secretariat and which rules may provide but not limited to, matters such as the attendance of Special Guests or observers at the TEOM.

8. The powers and functions of the TEOM shall be to:

   (a) provide technical advise and assistance on the implementation of the MSG Revised Trade Agreement as well as any matters in relation thereto;

(b) recommend the establishment of sub-committees on specific issues relating to trade within the MSG sub-region; and

(c) make reports and recommendations to the SOM.

ARTICLE 13

Special Mission

1. The Chair of the Leaders' Summit, with the consent of the country concerned, may where and when necessary, appoint an eminent person or persons on a Special Mission to Member countries with respect to:

   (a) Mediation and promotion of reconciliation where dispute has arisen between Members of the MSG or between a Member of the MSG and a consenting third party; or

   (b) Undertake a good-will and solidarity mission to MSG countries.

2. When the Chair of the Leaders' Summit has agreed to dispatch a Special Mission and where it is relevant, the mission may for the time being, be guided by the Biketawa Declaration of the Pacific Islands Forum.

3. Any Special Mission appointed under paragraph 1 above, shall report to the Chair of the Leaders' Summit.

ARTICLE 14

Other Meetings

1. Other Ministerial Meetings may be established from time to time.

2. Pursuant to Article 8.2(e) of this Agreement, other technical and advisory committees or groups shall be referred to as "Sub-Committees".

3. A Ministerial Meeting may be established by the Leaders' Summit.

4. A Sub-Committee may be established on the recommendation of the Leaders' Summit, the Foreign Ministers' Meeting, SOM or TEOM.

5. A Ministerial Meeting and a Sub-Committee shall have such specific powers and functions as their mandate may provide from to time.

6. A Ministerial Meeting and a Sub-Committee shall by consensus, determine their own manner of conducting meetings, however they shall produce the outcomes of their meetings in written form.

7. A Ministerial Meeting and a Sub-Committee shall make all their decisions by consensus where a decision is required in the circumstances.

ARTICLE 15

The Secretariat

1. The Secretariat shall be headed by the Director General who shall be appointed by the Leaders' Summit.

Functions

2. The functions of the Secretariat shall be carried out by the staff.

3. The Secretariat shall be responsible for the administration and management of the affairs of the MSG, provision of policy advice, coordination and assistance in implementing the decisions of the constituent bodies of the MSG and such further functions consistent with its purpose that may be determined from time to time.

4. Subject to the paragraph Article 15.3, the Secretariat shall:

(a) promote, undertake and coordinate the implementation of the work programme;

(b) establish working arrangements with relevant regional and international organisations;

(c) promote manpower development and training;

(d) subject to appropriate authorization, disseminate relevant information and data to Members of the MSG in the interpretation and evaluation of technical data;

(e) advise Members of the MSG on problems and opportunities with regard to activities consistent with the purpose of the MSG;

(f) review and report regularly the progress made with all projects included in the work programme;

(g) undertake such other activities and follow such procedures as the Leaders' Summit may decide;

(h) work to advance the Agreed Principles of Co-operation Among Independent states in Melanesia as signed by the parties;

(i) provide technical advise on the Revised MSG Trade Agreement of 2005 among the members as well as provide avenue for resolution of conflicts among the members;

(j) promote the identity and activities of the Secretariat; and

(k) undertake such activities as are necessary for the attainment of the MSG's purpose.

4. The Secretariat shall provide support services to the MSG Leaders' Summit as well as meetings of other constituent bodies of the MSG.

5. The Secretariat shall communicate with Members through their Ministries of Foreign Affairs or such other contact points as may be nominated by the respective Members.

ARTICLE 16

Appointment of Secretariat Staff

1. The Secretariat staff (hereinafter referred to as "the staff") shall consist of a Director General, a Deputy Director General, professional staff and such other staff as may be appointed by the Director General in accordance with the corporate structure as well as the Staff Regulations as may be amended from time to time.

2. The Director General shall be appointed by the Leaders' Summit under such terms and conditions as the Leaders may determine. If for any reason the post of Director General is vacant, the Deputy Director General may be directed by the SOM Chairman at that time, to carry out the functions of the Director General on an interim basis until the position is filled.

3. The Director General shall upon consultation with the SOM Chair, appoint a Deputy Director General upon such terms and conditions, as shall be deemed fit.

4. The Director General shall appoint all other staff in accordance with the Staff Regulations, the Staff Establishment and the remuneration policy determined by the Leaders' Summit.

5. The Director General shall be appointed for a term of three years and shall be eligible for reappointment. The Director General's appointment shall however, not exceed two consecutive terms.

6 All professional staff including the Deputy Director General shall not be appointed for more than two terms.

ARTICLE 17

Director General

1. The Director General shall be the chief executive officer of the Secretariat.

Functions

2. The Director General shall be ex - officio member to meetings of the MSG Leaders' Summit, the Foreign Ministers' Meeting, the Senior Officials' Meeting, Trade and Economic Officials Meeting as well as such other technical advisory committees or groups.

3. The Director General shall:

   (a) be responsible for the administration of the work programme and other activities of the MSG;

   (b) prepare and submit to the Leaders' Summit for review and approval at its biennial Session, a report on the past and projected activities of the Secretariat, the annual budget and the accounts of the Secretariat;

   (c) make arrangements for meetings of the Leaders' Summit and the constituent bodies of the MSG;

   (d) arrange all matters relating to the publication of materials produced by the Secretariat;

   (e) appoint professional and administrative staff of the Secretariat on such terms and conditions as may be determined;

   (f) seek out and attract possible sources of financial and technical support for any secretariat projects; and

   (g) perform such other duties as may be required or delegated by the Leaders' Summit, Foreign Ministers' Meeting or the SOM from time to time.

ARTICLE 18

Budget

1. The annual budget of the MSG shall be prepared by the Director General for consideration and recommendations by the SOM as referred to in Article 11.8 (a) prior to final approval by the MSG Leaders.

2. The budget of the MSG and all issues related to it shall be approved by the MSG Foreign Ministers.

3. The budget shall be financed by:

   (a) assessed contributions from Governments and organization which are members of the MSG;

   (b) by extra budgetary support from Members of the MSG or other Governments, administration, organizations and institutions;

   (c) from investments, fees, grants and other sources as approved by the Leaders' Summit; and

4. In advance of the Leaders' Summit adopting the budget, the Director General shall be entitled to authorize expenditure up to a limit not exceeding one quarter of the previous year's actual expenditure.

5. The Leaders' Summit shall adopt financial regulations for the administration of its finances, including the administration of contributions received from Governments, interested organizations or institutions which are not members of the MSG.

ARTICLE 19

Signature, Ratification, Accession, Entry into Force

1. This Agreement shall be subject to ratification by the Parties and shall enter into force on the day following the day on which they deposit instruments of ratification.

2. The MSG Secretariat Headquarters in Port Vila, Efate, Vanuatu shall be the Depository of the instruments of ratification and the Director General shall retain the originals in the archives.

3. A copy of this agreement in the French language shall be taken to be authentic together with the original in the English language.

4. Subject to Article1.3, this Agreement shall enter into force for any such governments, territories or organizations thirty days after the date of deposit of its instrument of accession.

5. Reservations to the Agreement shall only be permitted for Members which are organizations or territories and not otherwise Sovereign States.

ARTICLE 20

Amendment

1. Only the MSG Members who are the original signatories to this Agreement may propose amendments to the agreement for consideration by the Leaders' Summit. The text of any amendment shall be circulated to members of the MSG no less than three months in advance of any session of the Leaders' Summit.

2. Any amendments to this Agreement proposed by a Member of the MSG shall only be adopted by a consensus of all Members of the MSG represented at the session and shall enter into force thirty days after receipt by the Depositary of instruments of acceptance from all Members of the MSG.

ARTICLE 21

Withdrawal

1. Any Member of the MSG may withdraw from this Agreement by giving written notice to the Depositary. The Depositary shall immediately inform all Members of the MSG of receipt of a withdrawal notice. Withdrawal shall take effect one year after receipt of such notice by the Depositary.

2. A withdrawing Member of the MSG shall remain liable for all obligations to the MSG to which it was subject at the date of receipt by the depositary of the withdrawal notice. If the withdrawal becomes finally effective, the Member of the MSG shall not incur any liability for obligations resulting from operation of the MSG effected after the date on which the withdrawal notice was received by the Depositary.

ARTICLE 22

Dissolution or Suspension

1. The Leaders' Summit may resolve that the MSG be dissolved or that its activities be suspended.

2. Such a resolution shall take effect immediately following the conclusion of the next biennial Session of the Leaders' Summit provided that it has at the time of the next biennial Session been ratified by two thirds of the Members of the MSG. The Leaders' Summit shall at that next biennial Session decide the manner in which the assets and obligations of the MSG should be liquidated, distributed or borne, prior to the dissolution or suspension of the MSG.

3. The Leaders' Summit shall also at that next biennial session adopt a declaration prescribing the date on which the MSG shall be deemed dissolved or suspended. The

declaration shall be communicated by the Chairman of the MSG to the Members and Associate Members of the MSG.

4. In the case of a resolution of suspension, the MSG shall in its declaration prescribe the procedure whereby the suspension may be terminated and the organization revived.

ARTICLE 23

Transition

Upon signing of this Agreement, the Officer In Charge (OIC) of the MSG Secretariat, in consultation with the Chair of SOM, is vested with the requisite powers to appoint appropriate professional staff to occupy certain posts within the Secretariat as well as to perform such other duties and responsibilities deemed necessary prior to the substantive position of Director General being occupied as provided for in Article 9.3(b) of this Agreement. Such appointments shall be deemed to have been made pursuant to the MSG Staff Regulations and Financial Regulations.

IN WITNESS WHEREOF the undersigned, being duly authorized by the respective Parties, have signed this Agreement this 23rd day of March, 2007.

.....

FOR THE REPUBLIC OF THE FIJI ISLANDS

.....

FOR THE INDEPENDENT STATE OF PAPUA NEW GUINEA

.....

FOR SOLOMON ISLANDS

.....

FOR THE REPUBLIC OF VANUATU

.....

FOR FRONT DE LIBERATION NATIONAL KANAK ET SOCIALISTE (FLNKS) OF NEW CALEDONIA

Pursuant to Article 19.5 hereof, on signing this Agreement, FLNKS makes Reservations in relation to Article 10, Article 11 and 12.

[FRENCH TEXT – TEXTE FRANÇAIS]

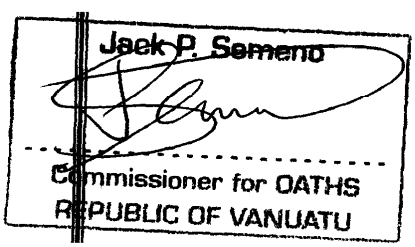
ACCORD

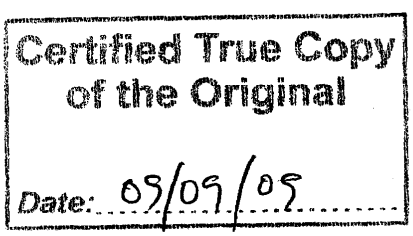
ETABLISSANT DU

GROUPE DE FER DE LANCE

MELANESIEN

G F L M





ACCORD
ETABLISSANT LE GROUPE DE FER DE LANCE MELANESIEN

La République des Iles Fidji, l'Etat indépendant de Papouasie Nouvelle-Guinée, les Iles Salomon, la République du Vanuatu et le Front de Libération Nationale Kanak et Socialiste (ci-après dénommé le "FLNKS") de Nouvelle-Calédonie :

Estimant que la région mélanésienne au sein du Pacifique peut être une région de solidarité et de coopération en conformité avec des intérêts nationaux communs, dans l'idée de renforcer des institutions de coopération régionale et internationale plus étendues ;

Déterminés à avoir une région qui soit respectée pour la qualité de sa gouvernance, la gestion durable de ses ressources, le respect et la promotion de ses cultures, traditions et valeurs mélanésiennes, et pour sa défense et sa promotion de l'indépendance comme droit inaliénable des peuples indigènes de Mélanésie et la promotion de leurs droits en tant qu'êtres humains ;

Respectant les principes de droit international régissant les relations entre les nations, tels que les principes de souveraineté, d'égalité d'indépendance de tous les états et de non-ingérence dans leurs affaires intérieures ;

Rappelant les principes de coopération entre les Etats indépendants de Mélanésie tels que convenus et signés par les parties contractantes à Port-Vila en 1988, ainsi que les principes de coopération entre les Etats indépendants en Mélanésie tels que convenus et signés par les parties contractantes à Kiriwina, Ile de Trobriand, le 7 juin 1996, aux termes desquels les parties contractantes s'engagent, entre autres, à encourager la coopération économique entre les Etats ;

Convaincus qu'un développement économique harmonieux de leurs Etats doit passer par une coopération économique concrète, essentiellement au moyen d'une politique ferme et concertée d'autonomie accrue ;

Désirant avancer vers ces buts en renforçant et en approfondissant les liens entre les pays de la région océanienne, notamment par le biais des Accords de Commerce revus et révisés entre les pays membres du Groupe de Fer de Lance Mélanésien ;

Souhaitant formellement établir le Groupe de Fer de Lance Mélanésien comme organisation sous-régionale à part entière et assurer sa finalité et son fonctionnement au moyen d'un Secrétariat ;

S'étant préalablement regroupés en tant que "Groupe de Fer de Lance Mélanésien" ;

SONT CONVENUS de ce qui suit :

ARTICLE 1
Groupe de Fer de Lance Mélanésien

1. Le Groupe de Fer de Lance Mélanésien (ci-après désigné "le GFLM") est, par les présentes, constitué en organisation sous-régionale.

2. Le GFLM est composé de la République des Iles Fidji, de l'Etat indépendant de Papouasie Nouvelle-Guinée, des Iles Salomon, de la République du Vanuatu et du FLNKS de Nouvelle-Calédonie.

3. Le sommet des dirigeants du GFLM (ci-après désigné "le Sommet des Dirigeants") peut déterminer ponctuellement les critères pour le statut d'observateur et de membre associé et la nature et l'étendue des droits et obligations y afférents, ou dans quelles conditions d'autres gouvernements, territoires ou organisations peuvent être admis au rang d'observateur ou de membre associé du GFLM.

4. Les dirigeants du GFLM peuvent inviter ponctuellement d'autres pays, territoires et organisations inter-gouvernementales à être soit des observateurs soit des invités spéciaux du GFLM. La nature et l'étendue des droits et obligations de tels observateurs seront décidées par les dirigeants du GFLM de manière ponctuelle.

ARTICLE 2
Objet

Le GFLM a pour objet de favoriser et de renforcer les échanges commerciaux entre ses membres, les échanges de cultures, de traditions et de valeurs mélanésiennes, l'égalité de la souveraineté, la coopération économique et technique entre Etats et l'harmonisation des orientations en vue d'avancer vers les buts que les membres du GFLM ont en commun, à savoir la croissance économique, le développement durable, la bonne gouvernance et la sécurité.

ARTICLE 3
Etablissement du Secrétariat du Groupe de Fer de Lance Mélanésien

1. Conformément à l'article 19.5 des Accords de commerce du GFLM, tels que revus et remaniés, entre les membres signataires, il est par les présentes constitué un secrétariat du GFLM, dénommé "le Secrétariat".

2. Le siège du Secrétariat sera situé à Port-Vila, Efate, en la République du Vanuatu.

3. Les langues de travail du Secrétariat, y compris de tous les organes constitutifs du GFLM, seront l'anglais et le français.

ARTICLE 4
Principe de dialogue

1. Les parties conviennent d'adopter le principe du dialogue ouvert comme moyen d'engager des pourparlers les unes avec les autres. Elles conviennent en outre d'engager régulièrement des dialogues politiques équilibrés et exhaustifs en vue d'aboutir à des engagements de la part de toutes les parties.

2. Le dialogue a pour objectif de favoriser l'entente mutuelle, d'échanger des informations et de faciliter la mise au point de priorités et d'intérêts communs d'accord parties, en particulier en faisant ressortir les rapports qui existent entre les divers aspects des relations entre les parties et les divers domaines de coopération consignés dans les accords entre elles.

3. Le dialogue portera sur tous les buts et objectifs énoncés dans le présent accord. Les parties contribueront à un environnement politique démocratique de paix, de sécurité et de stabilité dans la région du GFLM suivant des principes directeurs généraux pour favoriser la paix et prévenir, gérer et résoudre les différends par le dialogue.

4. Le dialogue se déroulera de manière flexible, soit officiellement soit officieusement, suivant les besoins, dans le cadre institutionnel et au dehors, en s'inspirant notamment de la culture, de la tradition et de l'esprit de dialogue, de médiation et de consensus propres à la Mélanésie.

ARTICLE 5
Développement durable et Droits de l'Homme

1. Les parties s'accordent pour orienter la coopération entre elles vers un développement durable axé sur l'être humain, principal protagoniste et bénéficiaire du développement ; ceci implique le respect et la préconisation des droits de l'homme, y compris les droits communaux et les droits des peuples et communautés indigènes.

2. Font partie intégrante du développement durable dans la région du GFLM le respect de tous les droits de l'homme et des libertés fondamentales, y compris le respect des droits fondamentaux sociaux, culturels et indigènes, la démocratie fondée sur la règle de droit et la gouvernance transparente et responsable.

3. Les parties affirment que la démocratisation, le développement et la protection des libertés et droits fondamentaux de l'homme et le renforcement mutuel sont étroitement liés. Qui plus est, les parties affirment en outre que les principes démocratiques sont des principes universellement reconnus qui sous-tendent l'organisation de l'Etat pour garantir la légitimité de son autorité et la légalité de ses actions reflétées dans son système constitutionnel, législatif et règlementaire.

ARTICLE 6
La règle de droit et la bonne gouvernance

1. Exception faite des parties qui ne sont pas par ailleurs des états souverains, les parties conviennent que les dispositions entérinées dans leurs constitutions nationales respectives relativement à la suprématie de la règle de droit et aux prérogatives des différents pouvoirs qui y sont visés, notamment en ce qui concerne les moyens de recours réels et accessibles à la réparation légale, l'indépendance de la magistrature et un système juridique qui garantit l'égalité devant la loi et un exécutif qui est totalement soumis à la loi, doivent être maintenues et observées.

2. Le respect des droits de l'homme, les principes démocratiques et la règle de droit doivent sous-tendre les politiques intérieures et internationales des parties et constituent les éléments essentiels des relations de nature contractuelle entre les parties au présent accord.

3. Les parties affirment que la bonne gouvernance consiste à gérer, de façon transparente et responsable, les ressources humaines, naturelles, économiques et financières pour assurer un développement durable et équitable. Ceci nécessite des procédures de prise de décision claires à l'échelon des autorités publiques, la primauté de la loi dans la gestion et la répartition des ressources, et un renforcement des capacités.

ARTICLE 7
Personnalité juridique, privilèges et immunités

1. Afin d'écarter tout doute, le présent accord l'emporte sur les Accords de commerce revus et remaniés du GFLM qui ont été conclus antérieurement par les parties contractantes.

2. Le GFLM jouit de la capacité juridique nécessaire à l'exercice de ses fonctions et responsabilités. Il a notamment la faculté d'établir des contrats, d'acquérir et de céder des biens meubles et immeubles et d'ester en justice.

3. En dehors des membres qui ne sont pas par ailleurs des Etats souverains, le GFLM jouit, dans le territoire de chaque membre du GFLM, des privilèges et immunités qui peuvent être nécessaires pour permettre au GFLM de répondre à son but et d'exercer ses fonctions. Les privilèges et immunités particuliers visés au présent paragraphe seront définis dans des accords distincts établis entre le GFLM et ses membres lorsque des activités éventuelles du GFLM dans le territoire desdits membres nécessitent de passer de tels accords.

ARTICLE 8
Structure organisationnelle

1. Le Secrétariat est l'organe administratif du GFLM, basé à Port Vila, sur l'île de Vaté (Efate), en la République du Vanuatu.

2. Le GFLM comprend :

   a) un Sommet des dirigeants ;

   b) une conférence des ministres des Affaires étrangères ;

   c) une commission des hauts fonctionnaires ;

   d) un comité des préposés au commerce et à l'économie ; et

   e) des réunions ministérielles qui peuvent être tenues ponctuellement, ainsi que des comités ou groupes consultatifs techniques qui peuvent être établis en tant que de besoin.

3. La structure hiérarchique du GFLM est la suivante :

   i) les comités consultatifs techniques rendent compte soit au Comité des préposés au commerce et à l'économie, soit à la Commission des hauts fonctionnaires, suivant leurs attributions ;

   ii) le Comité des préposés au commerce et à l'économie rend compte à la Commission des hauts fonctionnaires ;

   iii) la Commission des hauts fonctionnaires rend compte à la Conférence des ministres des Affaires étrangères ;

   iv) les commissions ministérielles soumettent les conclusions de leurs réunions à la Conférence des ministres des Affaires étrangères pour présentation au Sommet des dirigeants ; et

   v) la Conférence des ministres des Affaires étrangères rend compte directement au Sommet des dirigeants.

ARTICLE 9
Le Sommet des dirigeants du GFLM

1. Le Sommet des dirigeants est l'organe de prise de décision suprême du GFLM.

2. Le Sommet des dirigeants est composé des chefs de gouvernement de chaque pays membre ou son substitut ; dans le cas d'une organisation membre, le chef de cette organisation ou son mandataire.

Pouvoirs et responsabilités

3. Le Sommet des dirigeants du GFLM a pour responsabilités :

a) d'approuver les orientations générales du GFLM ;

b) de désigner le directeur général, ainsi que de le révoquer ;

c) d'établir des commissions ministérielles selon que de besoin ;

d) de prendre des décisions conformément aux principes généraux du présent accord et, s'il y a lieu, d'ordonner aux organes constitutifs pertinents du GFLM de prendre toute action utile y afférente ;

e) d'approuver toutes modifications proposées à l'accord de façon ponctuelle ;

f) d'approuver des règles ou des règlements intérieurs relativement à l'administration du GFLM ou de ses organes constitutifs, ou toutes modifications y afférentes , et

g) d'exercer ponctuellement toutes autres fonctions, selon que nécessaire, pour concrétiser l'objet du présent accord.

Réunions

4. Le Sommet des dirigeants tiendra des réunions régulièrement tous les deux ans, appelées Sommet des dirigeants. De plus, une session extraordinaire du Sommet des dirigeants pourra avoir lieu à tout moment à la demande du président du Sommet des dirigeants. Suite à une telle demande ou décision, le directeur général convoque une assemblée extraordinaire du Sommet des dirigeants aussitôt que praticable et en tout lieu qui convient le mieux.

5. La session biennale du Sommet des dirigeants du GFLM se tiendra, sauf décision contraire, dans un des pays membres du GFLM par rotation.

6. Lors de son assemblée biennale ou extraordinaire, le Sommet des dirigeants du GFLM :

a) adopte tous rapports qu'il peut exiger ponctuellement ; et

b) prend toutes décisions qui s'imposent.

Présidence

7. Aux fins d'une réunion de l'un quelconque des organes constitufs du GFLM, le Président sera dénommé "Président".

8. Le Sommet des dirigeants nomme, à chacune de ses assemblées biennales, par consensus, un président choisi parmi les membres. Celui-ci occupe cette fonction pour un mandat de deux ans. S'il démissionne de ses fonctions ou est, d'une manière ou d'une autre, inapte à exercer ses fonctions de président, son successeur ou représentant, selon le cas, exerce toutes les fonctions et les pouvoirs du président jusqu'à la fin de son mandat.

9. Sous réserve du paragraphe précédent, le président du Sommet des dirigeants est choisi à tour de rôle parmi les membres.

10. Le président est habilité à prendre des décisions pour le compte du GFLM entre deux assemblées du Sommet des dirigeants sur des questions de politique urgentes, après avis pris auprès des membres.

11. La présidence des réunions des organes constitutifs du GFLM est confiée au membre qui accueille le Sommet des dirigeants.

Prise de décision

12. Le Sommet des dirigeants prend des décisions lors de ses sessions à l'unanimité de tous les dirigeants présents. En l'absence de consensus, ils sont invités à poursuivre le dialogue et les entretiens jusqu'à ce qu'une décision soit prise.

Participation

13. Le Président du Sommet des dirigeants peut inviter des représentants d'autres gouvernements, d'agences internationales, d'organisations académiques et de recherche, de fondations et de l'industrie privée, ou des conseillers pour participer aux réunions de tous les organes constitutifs du GFLM, à titre consultatif ou autrement, que ce soit au sujet d'articles spécifiques à l'ordre du jour ou plus généralement, suivant les critères que le Sommet des dirigeants peut déterminer ponctuellement.

Délibérations

14. Toutes les réunions du Sommet des dirigeants se déroulent à huis clos, sauf décision contraire du Sommet des dirigeants.

ARTICLE 10
Conférence des Ministres des Affaires étrangères

1. La Conférence des Ministres des Affaires étrangères se réunit tous les ans, comprenant les ministres des Affaires étrangères de chaque pays membre ou à leur place, un représentant qui est un ministre substitut du gouvernement.

Pouvoirs et responsabilités

2. La Conférence des Ministres des Affaires étrangères a pour responsabilités :

   a) de décider des grandes orientations du GFLM ;

   b) de recommander au Sommet des dirigeants un candidat au poste de directeur général ;

   c) d'appouver le budget de l'exercice ;

d) d'adopter le rapport annuel du directeur général ;

e) d'établir d'autres comités ponctuellement, avec les attributions qu'elle juge utiles ;

f) d'exercer toutes fonctions permettant de faire avancer les principes généraux du présent accord et, en cas de besoin, d'ordonner aux organes constitutifs subsidiaires du GFLM, tels que compétents, de prendre d'autres actions à cette fin ;

g) de donner son aval à toute proposition de modification des règles ou du règlement intérieur pour l'administration du GFLM et de tous ses organes constitutifs ; et

h) d'exercer toutes autres fonctions qui peuvent lui être attribuées ponctuellement par le Sommet des dirigeants.

Réunions

3. Les ministres des Affaires étrangères se réunissent une fois par an en session appelée Conférence des ministres des Affaires étrangères. De plus, une session extraordinaire de la Conférence des ministres des Affaires étrangères pourra avoir lieu à tout moment à la demande du Sommet des dirigeants ou du président de la Conférence des ministres des Affaires étrangères. Suite à une telle demande ou décision, le directeur général convoque une assemblée extraordinaire de la Conférence des ministres des Affaires étrangères aussitôt que praticable et en tout lieu qui convient le mieux.

4. La session annuelle de la Conférence des ministres des Affaires étrangères se tiendra, sauf décision contraire, dans le pays du président en exercice.

5. Lors de son assemblée annuelle ou extraordinaire, la Conférence des ministres des Affaires étrangères :

a) examine le rapport annuel du directeur général ;

b) examine le budget de l'exercice suivant ; et

c) détermine les autres rapports que le Sommet des dirigeants du GFLM peut exiger ponctuellement.

Présidence

6. Sous réserve de l'article 9.11, la Conférence des ministres des Affaires étrangères nomme, par consensus, un président parmi ses membres à chacune de ses assemblées annuelles. Celui-ci occupe cette fonction pour un mandat de deux ans. S'il démissionne de ses fonctions ou est, d'une manière ou d'une autre, inapte à exercer ses fonctions de président, son successeur ou représentant, selon le cas, exerce toutes les fonctions et les pouvoirs du président jusqu'à la fin de son mandat.

7. Sous réserve du paragraphe précédent, le président de la Conférence des ministres des Affaires étrangères est choisi parmi les membres à tour de rôle.

8. Le président est habilité a prendre des décisions pour le compte du GFLM entre deux assemblées de la Conférence des ministres des Affaires étrangères sur des questions de politique urgentes après avis pris auprès des membres.

Prise de décision

9. La Conférence des ministres des Affaires étrangères prend des décisions lors de ses assemblées à l'unanimité de tous les ministres présents. En l'absence de consensus, ils sont invités à poursuivre le dialogue et les entretiens jusqu'à ce qu'une décision soit prise.

Délibérations

10. Sous réserve de l'article 9.3.(f), la Conférence des ministres des Affaires étrangères peut établir son propre règlement intérieur.

11. Toutes les réunions de la Conférence des ministres des Affaires étrangères se déroulent à huis clos, sauf décision contraire du Sommet des dirigeants.

ARTICLE 11
Commission des hauts fonctionnaires

1. Le GFLM est doté d'un comité appelé Commission des hauts fonctionnaires (ci-après désigné la "CHF").

2. La CHF est composée de représentants de chaque Membre du GFLM.

3. Les réunions de la CHF se déroulent tous les ans, en même temps que les réunions de la Conférence des ministres des Affaires étrangères. Des réunions de la CHF pourront aussi être convoquées ponctuellement à d'autres moments et lieux, à la demande du Sommet des dirigeants ou de la Conférence des ministres des Affaires étrangères, ou selon que les circonstances l'imposent.

4. La présidence de la CHF est comme prévu à l'article 9.11 du présent accord.

5. Le directeur général convoque des réunions de la CHF après avis du président du CHF ou à sa demande.

6. La CHF prend des décisions lors de ses réunions à l'unanimité des chefs de délégations des hauts fonctionnaires membres présents. En l'absence de consensus, ils sont invités à poursuivre le dialogue et les entretiens jusqu'à ce qu'une décision soit prise.

7. Sous réserve de l'article 9.3(f), la CHF établit son règlement intérieur après avis pris auprès du Secrétariat.

8. Les pouvoirs et fonctions de la CHF consistent à donner des directives de principe au Secrétariat et à soumettre des rapports et des recommandations aux dirigeants conformément à l'article 8.3(iii). Outre ce qui précède, la CHF :

   a) examine le budget annuel du Secrétariat et tout budget provisoire et le programme de travail annuel présentés par le directeur général ;

b) reçoit, examine, commente et s'il y a lieu, formule des recommandations concernant le rapport annuel du directeur général sur le fonctionnement du Secrétariat ; la politique de titularisation et de rémunération du personnel du Secrétariat et le Règlement du Personnel et les Règles de Finances, y compris toutes modifications ultérieures s'y rapportant ; et

c) entreprend toutes tâches nécessaires pour le recrutement d'un candidat au poste de directeur général et soumet des recommandations à ce sujet à la Conférence des ministres des Affaires étrangères.

ARTICLE 12
Comité des préposés au commerce et à l'économie

1. Le GFLM est doté d'un comité appelé Comité des préposés au commerce et à l'économie (ci-après désigné le CPCE).

2. Le CPCE est composé de représentants de chaque membre du GFLM.

3. Le CPCE se réunit tous les ans en même temps que la CHF. Une réunion du CPCE peut être convoquée ponctuellement à tout autre moment et lieu à la demande du Sommet des dirigeants, de la Conférence des ministres des Affaires étrangères ou de la CHF, ou selon que les circonstances l'imposent.

4. La présidence du comité est telle que prévue à l'article 9.11 des présentes.

5. Le directeur général convoque des réunions du CPCE après avis du président du CPCE ou à sa demande.

6. Le CPCE prend des décisions lors de ses réunions à l'unanimité des chefs de délégations des préposés au commerce et à l'économie présents. En l'absence de consensus, ils sont invités à poursuivre le dialogue et les entretiens jusqu'à ce qu'une décision soit prise.

7. Sous réserve de l'article 9.3)f), le CPCE établit son règlement intérieur après avis du Secrétariat. Ce règlement peut prévoir, sans s'y limiter, des questions telles que la présence d'invités spéciaux ou d'observateurs au CPCE.

8. Le CPCE a pour pouvoirs et fonctions :

a) d'apporter des conseils et une assistance techniques sur la mise en oeuvre des Accords commerciaux du GFLM tels que revus et remaniés, ainsi que sur toute question s'y rapportant ;

b) de recommander la création de sous-comités chargés de questions particulières se rapportant au commerce au sein de la sous-région du GFLM ; et

c) soumet des rapports et des recommandations à la CHF.

ARTICLE 13
Missions spéciales

1. Le président du Sommet des dirigeants peut, en tant que de besoin, avec le consentement du pays concerné, désigner une personne éminente et l'envoyer en mission spéciale auprès des pays membres pour :

   a) assurer la médiation et faciliter la réconciliation lorsqu'un différend oppose des membres du GFLM ou un membre du GFLM et une tierce partie consentante ; ou

   b) effectuer des missions de solidarité et d'entente cordiale auprès des pays du GFLM.

2. Lorsque le président du Sommet des dirigeants consent à envoyer une mission spéciale, et que tel est opportun, la mission peut, dans un premier temps, être guidée par la Déclaration de Biketawa du Forum des Iles du Pacifique.

3. Toute mission spéciale constituée en application du paragraphe 1 ci-dessus rend compte au président du Sommet des dirigeants.

ARTICLE 14
Réunions diverses

1. D'autres Conférences ministérielles peuvent être constituées ponctuellement.

2. En vertu de l'article 8.2(e) des présentes, tous autres comités ou groupes consultatifs et techniques sont désignés comme étant des 'sous-comités'.

3. Une conférence ministérielle peut être établie par le Sommet des dirigeants.

4. Un sous-comité peut être constitué sur recommandation du Sommet des dirigeants, de la Conférence des ministères des Affaires étrangères, de la CHF ou du CPCE.

5. Une conférence ministérielle et un sous-comité sont dotés des pouvoirs et fonctions spécifiques tels que prévus par leurs attributions ponctuellement.

6. Une conférence ministérielle et un sous-comité décident par consensus de leur propre façon de procéder aux réunions, mais en tout état de cause ils doivent consigner leurs délibérations par écrit.

7. Une conférence ministérielle et un sous-comité prennent leurs décisions à l'unanimité si une décision s'impose dans les circonstances.

ARTICLE 15
Le Secrétariat

1. Le Secrétariat est dirigé par le directeur général qui est désigné par le Sommet des dirigeants.

Fonctions

2. Les fonctions du Secrétariat sont exécutées par le personnel.

3. Le Secrétariat est chargé de l'administration et de la gestion des affaires du GFLM, de donner des conseils de principe, de coordonner et d'aider la mise en oeuvre des décisions des organes constitutifs du GFLM, et assume toutes autres fonctions compatibles avec son objet qui peuvent lui être attribuées ponctuellement.

4. Sous réserve de l'article 15.3, le Secrétariat :

   a) facilite, entreprend et coordonne la mise en oeuvre du programme de travail ;

   b) établit des relations de travail avec des organisations régionales et internationales pertinentes ;

   c) encourage le développement et la formation des employés ;

   d) sous réserve d'une autorisation appropriée, diffuse des informations et des données utiles aux membres du GFLM pour l'interprétation et l'évaluation de données techniques ;

   e) informe les membres du GFLM de problèmes et d'occasions eu égard à des activités compatibles avec l'objet du GFLM ;

   f) examine et rend compte régulièrement de l'état d'avancement de tous les projets prévus au programme de travail ;

   g) entreprend toutes autres activités et suit toutes procédures que le Sommet des dirigeants peut décider ;

   h) oeuvre pour faire avancer les Principes de coopération entre états indépendants de Mélanésie tels que convenus et signés par les parties ;

   i) fournit des conseils techniques sur les accords de commerce revus et remaniés du GFLM de 2005, liant les membres, et propose des moyens de résoudre des différends entre les membres ;

   j) favorise l'identité et les activités du Secrétariat ; et

   k) entreprend toutes activités utiles pour réaliser l'objet du GFLM.

4. Le Secrétariat fournit des services d'encadrement au Sommet des dirigeants du GFLM, de même qu'aux réunions des autres organes constitutifs du GFLM.

5. Le Secrétariat communique avec les Membres par le truchement de leur ministère des Affaires étrangères ou de tout autre point de contact désigné par les membres respectivement.

ARTICLE 16
Désignation du personnel du Secrétariat

1. Le personnel du Secrétariat (ci-après désigné "le personnel") est composé d'un directeur général, d'un directeur adjoint, de professionnels et d'autres effectifs que le directeur général peut nommer en fonction de la structure organisationnelle et conformément au règlement du personnel, tel que modifié ponctuellement.

2. Le directeur général est nommé par le Sommet des dirigeants aux conditions que les dirigeants décident. Si pour une raison quelconque, la fonction de directeur général est vacante, le président en exercice de la CHF peut ordonner au directeur adjoint d'exercer les fonctions de directeur général par intérim en attendant de pourvoir le poste.

3. Le directeur général, après avis du président de la CHF, nomme un directeur adjoint aux conditions qui sont jugées utiles.

4. Le directeur général nomme tous les autres effectifs suivant le règlement du personnel, la politique de titularisation et de rémunération du personnel arrêtée par le Sommet des dirigeants.

5. Le directeur général est nommé pour un mandat de trois ans, renouvelable le cas échéant. Par contre, la durée totale du mandat d'un directeur général ne doit pas dépasser deux mandats consécutifs.

6. Le personnel professionnel, ainsi que le directeur adjoint, ne sont nommés que pour deux mandats seulement.

ARTICLE 17
Directeur général

1. Le directeur général est l'administrateur délégué du Secrétariat.

Fonctions

2. Le directeur général est membre d'office aux réunions du Sommet des dirigeants du GFLM, de la Conférence des ministres des Affaires étrangères, de la Commission des hauts fonctionnaires et du comité des préposés au commerce et à l'économie, de même que de tous autres comités ou groupes consultatifs techniques.

3. Le directeur général :

   a) est responsable de l'administration du programme de travail et des autres activités du GFLM ;

   b) prépare et présente au Sommet des dirigeants pour examen et adoption, lors de sa réunion biennale, un rapport sur les activités passées et prévisionnelles du Secrétariat, le budget et les comptes annuels du Secrétariat ;

   c) prend les dispositions nécessaires pour les réunions du Sommet des dirigeants et des organes constitutifs du GFLM ;

d) s'occupe de toutes questions relatives à la publication de documents produits par le Secrétariat ;

e) nomme les membres professionnels et administratifs du personnel du Secrétariat aux conditions à convenir ;

f) recherche et attire des sources éventuelles de soutien technique et financier pour des projets du Secrétariat ; et

g) s'acquitte de toutes autres tâches qui lui sont attribuées ou déléguées ponctuellement par le Sommet des dirigeants, la Conférence des ministres des Affaires étrangères ou la CHF.

ARTICLE 18
Budget

1. Le budget de l'exercice du GFLM est préparé par le directeur général et soumis à la CHF pour examen et recommandations, comme visé à l'article 11.8.(a), avant d'être approuvé définitivement par les dirigeants du GFLM.

2. Le budget du GFLM et toutes questions y afférentes sont approuvés par le Sommet des dirigeants du GFLM.

3. Le budget est financé par :

   a) les contributions imposées aux gouvernements et organisations qui sont membres du GFLM ;

   b) un soutien budgétaire supplémentaire des membres du GFLM ou d'autres gouvernements, administrations, organisations et institutions ;

   c) des investissements, des droits, des subventions et d'autres sources tels qu'approuvés par le Sommet des dirigeants ;et

4. En attendant l'adoption du budget par le Sommet des dirigeants, le directeur général est habilité à autoriser des dépenses à concurrence d'un plafond qui ne doit pas dépasser un quart des dépenses réelles de l'exercice écoulé.

5. Le Sommet des dirigeants adopte des règles de finances pour l'administration de ses finances, y compris l'administration des contributions reçues de gouvernements, d'organisations ou d'institutions intéressées qui ne sont pas membres du GFLM.

ARTICLE 19
Signature, Ratification, Adhésion, Entrée en Vigueur

1. Le présent accord est soumis à la ratification des parties contractantes et entre en vigueur le lendemain du jour où elles déposent leur instrument de ratification.

2. Le siège du Secrétariat du GFML à Port Vila, Efate, Vanuatu, est le dépositaire des instruments de ratification et le directeur général en conserve les originaux dans les archives.

3. Un exemplaire du présent accord en langue française est réputé faire foi au même titre que l'original en langue anglaise.

4. Sous réserve de l'article 1.3, le présent accord entre en vigueur pour tout gouvernement, territoire ou organisation concerné trente jours après la date de dépôt de son instrument d'adhésion.

5. Des réserves à l'égard de cet accord peuvent être émises seulement par les membres qui sont des organisations ou des territoires et non pas par ailleurs des Etats souverains.

ARTICLE 20
Modification

1. Seuls les membres du GFLM qui sont les signataires d'origine du présent accord peuvent proposer des modifications pour soumission au Sommet des dirigeants. Le texte doit en être distribué aux membres du GFLM au plus tard trois mois avant une réunion du Sommet des dirigeants.

2. Une modification du présent accord proposé par un membre du GFLM requiert l'unanimité de tous les membres du GFLM représentés à la réunion correspondante pour être adoptée et entre en vigueur trente jours après réception par le dépositaire des instruments d'acceptation de tous les membres du GFLM.

ARTICLE 21
Retrait

1. Un membre du GFLM peut dénoncer le présent accord par préavis écrit au dépositaire. Celui-ci doit informer tous les membres du GFLM sur le champ de la réception d'un avis de dénonciation. Le retrait devient effectif un an après la réception d'un tel avis de dénonciation par le dépositaire.

2. Un membre sortant du GFLM reste tenu de toutes les obligations envers le GFLM auxquelles il était soumis à la date de réception de l'avis de dénonciation par le dépositaire. Si le retrait devient définitif, le membre du GFLM n'encourt aucune autre responsabilité pour des obligations résultant du fonctionnement du GFLM passé la date à laquelle l'avis de dénonciation a été reçu par le dépositaire.

ARTICLE 22
Dissolution ou suspension

1. Le Sommet des dirigeants peut adopter une résolution portant dissolution du GFLM ou suspension de ses activités.

2. Une telle résolution prend effet immédiatement après la clôture de la réunion biennale suivante du Sommet des dirigeants, à condition d'avoir été ratifiée au préalable par les deux-tiers des membres du GFLM. Le Sommet des dirigeants décide à cette réunion biennale suivante de la manière dont les actifs et les obligations du GFLM seront liquidés, distribués ou pris en charge avant la dissolution du GFLM ou la suspension de ses activités.

3. Le Sommet des dirigeants adopte, également à ladite réunion biennale suivante, une déclaration fixant la date à laquelle le GFLM sera réputé dissout ou ses activités seront réputées suspendues. La déclaration doit être communiquée par le président du GFLM aux membres et membres associés du GFLM.

4. Dans le cas d'une résolution en suspension des activités, le GFLM prescrit dans sa déclaration les modalités de levée de la suspension et de reprise des activités.

ARTICLE 23
Disposition transitoire

A la signature du présent accord, le haut responsable du Secrétariat du GFLM, après avis du président de la CHF, est investi des pouvoirs nécessaires pour nommer des effectifs professionnels compétents pour pourvoir certains postes au sein du Secrétariat ainsi que pour exécuter toutes tâches et responsabilités considérées nécessaires avant de pourvoir le poste de directeur général comme prévu à l'article 9.3b) des présentes. Ces nominations sont réputées avoir été effectuées en application du règlement du personnel du GFLM et des règles de finances.

EN FOI DE QUOI, les soussignés, dûment autorisés par les Parties respectives, ont apposé leur signature le ...23..... mars 2007.

POUR ET AU NOM
DE LA REPUBLIQUE DES ILES FIDJI

.....

POUR ET AU NOM
DE L'ETAT INDEPENDANT DE PAPOUASIE
NOUVELLE-GUINEE

.....

POUR ET AU NOM
DES ILES SALOMON

.....

POUR ET AU NOM
DE LA REPUBLIQUE DE VANUATU

.....

POUR ET AU NOM
DU FRONT DE
LIBERATION NATIONALE KANAK
ET SOCIALISTE (FLNKS) DE
NOUVELLE-CALEDONIE

.....

En application de l'article 19.5 des présentes, à la signature du présent accord, le FLNKS a émis des réserves relativement à l'article 10, l'article 11 et l'article 12.

Jack P. Semeno
.....
Commissioner for OATHS
REPUBLIC OF VANUATU

Certified True Copy
of the Original
Date: 09/09/09

Exhibit 2



AGREEMENT ESTABLISHING THE MELANESIAN SPEARHEAD GROUP (MSG)

(REVISED 2015)

ACCORD CONSTITUANT DU GROUPE FER DE LANCE MELANESIEN (GFLM)

(REVISION 2015)

Preamble

The Republic of Fiji, Front de Liberation Nationale Kanak et Socialiste (hereinafter referred to as "FLNKS") of New Caledonia, Independent State of Papua New Guinea, Solomon Islands and the Republic of Vanuatu:

Believing the Melanesian region within the Pacific can be a region of solidarity and cooperation in accordance with shared national interest with the objective of strengthening wider institutions of regional and international cooperation;

Determined to have a region that is respected for the quality of its governance, the sustainable management of its resources, the respect for and promotion of its Melanesian cultures, traditions and values and for its defence and promotion of independence as the inalienable right of indigenous peoples of Melanesia and the promotion of their human rights;

Respecting the principles of international law governing relations between nations, such as principles of sovereignty, equality of independence of all states and non – interference in the domestic affairs of states;

Recalling the Agreed Principles of Co-operation Among Independent States of Melanesia signed by the parties in Port Vila in 1988 as well as the Agreed Principles of Co-operation Among Independent States in Melanesia signed by the parties at Kiriwina, Trobriand Island on 7th June, 1996 wherein the parties undertake inter alia to promote economic co-operation between Sates;

Convinced that the promotion of harmonious economic development of their States calls for effective economic co – operation largely through a determined and concerted policy of greater self-reliance;

Desiring to further these goals through the strengthening and deepening of links between countries of the Pacific region including through the Revised Trade Agreement among the Melanesian Spearhead Group Countries.

Wishing formally to establish the Melanesian Spearhead Group as a regional organization in its own right and to provide for its purpose and operation by means of a Secretariat;

Préambule

La République des Fidji, le Front de Libération Nationale Kanak et Socialiste (ci-après dénommé "le FLNKS») de Nouvelle-Calédonie, l'État indépendant de Papouasie-Nouvelle-Guinée, les Îles Salomon et la République du Vanuatu:

Croyant que la région Mélanésienne dans le Pacifique, peut être une région de solidarité et de coopération, conformément à l'intérêt national partagé avec l'objectif de renforcer les institutions plus larges de coopération régionale et internationale;

Déterminés être les détenteurs d'une région qui est respecté pour la qualité de sa gouvernance, la gestion durable de ses ressources, le respect et la promotion de ses cultures, traditions et valeurs Mélanésiennes et pour sa défense et sa promotion de l'indépendance en tant que le droit inaliénable des peuples autochtones de la Mélanésie et sa promotion de leurs droits fondamentaux;

En respectant les principes du droit international régissant les relations entre les nations, tels que les principes de la souveraineté, de l'égalité d'indépendance de tous les Etats et la non - ingérence dans les affaires intérieures des Etats;

Rappelant les Principes Agréés de la Coopération entre les États Indépendants de la Mélanésie signés par les partis à Port Vila en 1988 ainsi que les Principes Agréés de la Coopération entre les États Indépendants en Mélanésie signés par les partis à Kiriwina, île Trobriand le 7 Juin 1996, dans laquelle les partis s'engagent notamment à promouvoir la coopération économique entre les Etats;

Convaincue que la promotion d'un développement économique harmonieux de leur Etats appelle à une coopération économique efficace – une opération en grande partie réalisée par une politique résolue et concertée d'une plus grande autonomie;

Désireux de promouvoir ces objectifs par le renforcement et l'approfondissement des liens entre les pays de la région Pacifique, y compris par le biais de l'Accord Commercial révisée entre les pays du Groupe Fer de Lance Mélanésien.

Souhaitant formellement établir le Groupe Fer de Lance Mélanésien comme une organisation régionale dans son propre droit et pour assurer son but et son fonctionnement au moyen d'un Secrétariat;

Having previously consolidated as the "Melanesian Spearhead Group";

HAVE AGREED as follows:

ARTICLE 1

Definition

In this Agreement:

"Associate member" means countries or territories who may have obtained associate membership status to the MSG;

"Member" means the members as provided for under Article 2 of this agreement;

"MSG Region" means the region in which the members are situated;

"*Observer"* means countries, territories or intergovernmental organizations who may have obtained Observer status to the MSG;

"Parties" mean the signatories to this Agreement.

"Rotational basis" means alphabetical order;

"Secretariat" means the Secretariat established under Article 4 of this agreement;

"Special Guest" means a special guest provided for under Article 9 (10);

"Territory" means a non-self-governing territory whose people have not yet attained a full measure of self-government.

ARTICLE 2

Melanesian Spearhead Group

1. The Melanesian Spearhead Group (hereinafter referred to as "the MSG") is hereby established as a regional organization.

Ayant auparavant été consolidé comme le «Groupe Fer de Lance Mélanésien";

ONT CONVENUS tel que s'en suit:

ARTICLE 1

Définition

Dans le présent Accord:

«*Membre associé*» signifie les pays ou territoires qui peuvent avoir obtenu le statut de membre associé à la GFLM;

«*Membre*» désigne les membres, comme prévu à l'article 2 de cet accord;

"*Région GFLM*» désigne la région dans laquelle les éléments sont situés;

"*Observateur*" signifie que les pays, territoires ou organisations intergouvernementales qui peuvent avoir obtenu le statut d'observateur du GFLM;

"*Partis*" désigne les signataires du présent accord.

"*Base de rotation*" signifie l'ordre alphabétique;

«*Secrétariat*» désigne le Secrétariat établi en vertu de l'article 4 de cet accord;

"*Invité* Spécial" désigne un invité spécial prévu à l'article 9 (10);

«*Territoire*» désigne un territoire non autonomes où les populations n'ont pas encore atteint la pleine mesure de l'autonomie

ARTICLE 2
Groupe Mélanésien Fer de lance

1. Le Groupe Fer de Lance Mélanésien (ci-après dénommé «le GFLM") est institué en tant

Membership

2. The MSG comprises the Republic of Fiji, Independent State of Papua New Guinea, Solomon Islands, the Republic of Vanuatu and FLNKS of New Caledonia.

New Membership

3 The Membership of MSG can expand in accordance to the criteria and procedure for membership approved by the MSG Leader's Summit (hereinafter referred to as "the Leaders' Summit")

Associate Membership

4. The Leaders' Summit may from time to time, determine and approve the process of admission and qualification, for an associate member and nature and extent of any rights or privileges, of an associate member.

Observers

5. The Leaders' Summit may determine from time to time, the criteria for observer and the nature and extent of such rights and obligations or whereby other governments, territories or organizations may be admitted to observer membership of the MSG.

ARTICLE 3

Purpose

1. The purpose of the MSG is to promote, coordinate and strengthen inter – membership trade, exchange of Melanesian cultures, traditions and values, sovereign equality, economic and technical cooperation between states and the alignment of policies in order to further MSG members' shared goals of economic growth, sustainable development, good governance, peace and security.

qu'organisation régionale.

Adhésion

2. Le GFLM comprend la République de Fidji, l'État indépendant de Papouasie-Nouvelle-Guinée, les îles Salomon, la République de Vanuatu et le FLNKS de Nouvelle-Calédonie.

Nouvelle adhésion.

3. L'adhésion de GFLM peut s'étendre conformément aux critères et la procédure d'adhésion approuvés par le Sommet des Leaders du GFLM (ci-après dénommée «Sommet des Leaders ou Sommet des Dirigeants»)

Membre associé

4. Le Sommet des Leaders peut, de temps à autre, déterminer et approuver le processus d'admission et de qualification d'un membre associé et la nature et l'étendue des droits ou des privilèges dont bénéficie un membre associé.

Observateurs

Le Sommet des Dirigeants peut déterminer de temps à autre, les critères d'Observateur et la nature et l'étendue de leurs droits et obligations ou la mesure par laquelle d'autres gouvernements, territoires ou organisations peuvent être admis à l'adhésion en tant qu'Observateur du GFLM.

ARTICLE 3

But

1. Le but du GFLM est de promouvoir, de coordonner et de renforcer le commerce entre les membres, l'échange des cultures, des traditions et valeurs Mélanésiennes, l'égalité souveraine, la coopération économique et technique entre les Etats et l'harmonisation des politiques en vue de favoriser les objectifs partagés de croissance économique, développement durable, bonne gouvernance, paix et sécurité des membres du GFLM.

ARTICLE 4

The Establishment of the Secretariat

1. It is hereby established, a Secretariat which shall be known as the MSG Secretariat and is the administrative arm of the MSG.

2. The headquarters of the Secretariat shall be located in Port Vila, Efate in the Republic of Vanuatu.

3. The Secretariat may establish supporting offices in member countries to assist in the implementation of decision by Leaders.

4. The working languages of the Secretariat including all the constituent bodies of the MSG shall be English and French.

Roles and Functions of the Secretariat

5. The Secretariat has the following functions and responsibilities:

   (i) administration and management of the affairs of the MSG;

   (ii) provision of policy advice to members and to constituent bodies;

   (iii) coordination and assistance in implementing the decisions of the constituent bodies;

   (iv) establish working arrangements with relevant regional and international organizations;

   (v) promote capacity development and training;

   (vi) subject to appropriate authorization, disseminate relevant information and data to Members in the interpretation and evaluation of technical data;

ARTICLE 4

La Création du Secrétariat

1. Est donc institué un Secrétariat, connu comme le Secrétariat du GFLM et étant le bras administratif du GFLM.

2. Le siège du Secrétariat sera situé à Port Vila, Efaté dans la République de Vanuatu.

3. Le Secrétariat pourra établir des bureaux d'appui dans les pays membres pour aider à la mise en œuvre des décisions des Dirigeants.

4. Les langues de travail du Secrétariat, y compris tous les Corps Constituants du GFLM sont l'anglais et le français.

Rôles et fonctions du Secrétariat

5. Le Secrétariat a les fonctions et responsabilités suivantes:

   (i) l'administration et la gestion des affaires du GFLM;

   (ii) la fourniture de conseils de politique générale aux membres et aux corps constituants;

   (iii) la coordination et l'assistance dans l'application des décisions des corps constituants;

   (iv) établir des accords de travail avec les organisations régionales et internationales compétentes;

   (v) promouvoir le développement des compétences et la formation ;

   (vi) sous réserve de l'autorisation appropriée, diffuser des informations et des données pertinentes aux Membres dans l'interprétation et l'évaluation de données techniques;

(vii) advise Members on problems and opportunities with regard to activities consistent with the purpose of the MSG;

(viii) review and report regularly the progress made with all projects included in the work programme;

(ix) provide technical advice on the Revised MSG Trade Agreement of 2005 among the members as well as provide avenue for resolution of conflicts among the members;

(x) promote the identity and activities of the MSG and the Secretariat;

(xi) promote, undertake and coordinate the implementation of the work program, in consultation with members; and

(xii) such other functions consistent with its purpose that may be determined from time to time.

6. The Secretariat shall provide support services to the MSG Leaders' Summit as well as meetings of other constituent bodies of the MSG.

7. The Secretariat shall communicate with Members through their Ministries of Foreign Affairs or such other contact points as may be nominated by the respective Members.

(vii) conseiller les membres sur les problèmes et les possibilités en ce qui concerne les activités compatibles avec l'objectif du GFLM;

(viii) examiner et rendre compte régulièrement des progrès réalisés dans tous les projets inclus dans le programme de travail;

(ix) fournir des conseils techniques sur l'Accord Commercial du GFLM révisé de 2005 parmi les membres ainsi que de fournir des avenues pour la résolution des conflits entre les membres;

(x) promouvoir l'identité et les activités du GFLM et le Secrétariat;

(xi) promouvoir, entreprendre et coordonner la mise en œuvre du programme de travail, en consultation avec les membres; et

(xii) les autres fonctions compatibles avec l'objectif qui peut être déterminé de temps à autre.

6. Le Secrétariat doit fournir des services de soutien au Sommet des Leaders GFLM ainsi que des réunions d'autres organes du GFLM.

7. Le Secrétariat communique avec les membres à travers leurs Ministères des Affaires Etrangères ou de tous autres points de contact qui peuvent être désignées par les Membres respectifs.

ARTICLE 5

Guiding Principles

Principles of Cooperation

1 The parties agree to embrace the Agreed Principles of Cooperation signed in 1988.

2. The parties agree to commit themselves to the principles of respect for and promotion of Melanesia cultures and values, engage in arrangements to facilitate regular high level and wide ranging consultations, national independence and sovereign equality, territorial integrity and non-interference with internal affairs of any member, encourage economic and technical cooperation and support independence as the inalienable right of colonized countries and peoples.

Principle of Dialogue

3. The parties agree to adopt the principle of open dialogue as the means of engaging one with the other. They also agree to engage regularly in a balanced and comprehensive political dialogue leading to commitments by all parties.

4. The objective of the dialogue shall be to foster mutual understanding, exchange information and to facilitate the establishment of agreed priorities and common interests, in particular by recognizing existing links between the various aspects of relations between the parties and the various areas of cooperation laid down in the Agreement.

ARTICLE 5

Des Principes Directeurs

Principes de coopération

1. Les partis conviennent d'adopter les Principes Agréés de coopération signé en 1988.

2. Les partis conviennent de se engager sur les principes de respect et de promotion des cultures et des valeurs Mélanésie, conclure des ententes pour faciliter le niveau élevé et régulier et des consultations de grande envergure, l'indépendance nationale et de l'égalité souveraine, l'intégrité territoriale et de non-ingérence dans les affaires intérieures d'un membre, d'encourager la coopération économique et technique et de l'indépendance de l'appui que le droit inaliénable des pays et des peuples colonisés.

Principe du Dialogue

3. Les partis conviennent d'adopter le principe d'un dialogue ouvert comme moyen d'engagement les uns avec les autres. Ils conviennent également de façon régulière, un dialogue de politique global et équilibré conduisant à des engagements par tous les partis.

4. L'objectif du dialogue sera de favoriser la compréhension mutuelle, l'échange d'informations et de faciliter l'établissement des priorités agréées et des intérêts communs, en particulier en reconnaissant les liens existant entre les différents aspects des relations entre les partis et les différents domaines de coopération prévus dans l'accord.

5. The dialogue shall cover all the aims and objectives laid down in this agreement. The parties shall contribute to a peaceful, secure and stable democratic political environment in the MSG region by pursuing broad based policies to promote peace and to prevent, manage and resolve conflicts, through dialogue.

6. The dialogue shall be conducted in a flexible manner either formally or informally according to the need, and conducted within and outside the institutional framework, including through Melanesian culture, forms of customary dispute resolution tradition and spirit of dialogue, mediation and consensus.

Sustainable Development and Human Rights

7. The parties agree to direct their cooperation towards sustainable development centered on the human person, who is the main protagonist and beneficiary of development; this entails respect for and promotion of human rights, including communal rights and the rights of indigenous peoples and communities.

8. Respect for all human rights and fundamental freedoms, including respect for fundamental social, cultural and indigenous rights, democracy based on the rule of law and transparent and accountable governance shall be an integral part of sustainable development within the MSG region.

9. The parties affirm that democratization, development and the protection of fundamental freedoms and human rights and mutual reinforcing are interrelated. In addition thereto, the parties further affirm that, democratic principles are universally recognized principles underpinning the organization of the state to ensure the legitimacy of its authority, the legality of its actions reflected in its constitutional, legislative and regulatory system.

5. Le dialogue doit couvrir tous les buts et les objectifs fixés dans cet accord. Les partis doivent contribuer à un environnement politique démocratique et pacifique, sûr et stable dans la région GFLM en poursuivant des politiques fondées large pour promouvoir la paix et pour prévenir, gérer et résoudre les conflits, à travers le dialogue.

6. Le dialogue est mené d'une manière souple de manière formelle ou informelle selon le besoin, et a mené à l'intérieur et à l'extérieur du cadre institutionnel, y compris à travers la culture Mélanésienne, les formes de la tradition coutumière de règlement des différends et l'esprit de dialogue, la médiation et le consensus.

Développement durable et de Droits de l'Homme

7. Les partis conviennent de diriger leur coopération en faveur du développement durable centré sur la personne humaine, qui est le principal protagoniste et bénéficiaire du développement; postulent le respect et la promotion des droits de l'homme, y compris les droits collectifs et les droits des peuples et communautés autochtones.

8. Le respect de tous les droits humains et des libertés fondamentales, y compris le respect des droits sociaux, culturels et autochtones fondamentaux, la démocratie basée sur la règle de droit et une gouvernance transparente et responsable doit être une partie intégrante du développement durable dans la région GFLM.

9. Les partis affirment que la démocratisation, le développement et la protection des libertés fondamentales et des droits de l'homme et de renforcement mutuel sont interdépendants. En plus de cela, les partis affirment en outre que, les principes démocratiques sont universellement principes qui sous-tendent l'organisation de l'État pour assurer la légitimité de son autorité reconnus, la légalité de ses actions qui se reflète dans son

système constitutionnel, législatif et réglementaire.

Rule of Law, Democratic Principles and Good Governance

10. Except for parties which are otherwise not sovereign states, the parties agree that the provisions espoused in their respective national constitutions in relation to the prevalence of the rule of law and the prerogatives of the different powers therein and in particular for the effective and accessible means of legal redress, an independent judiciary and legal system guaranteeing equality before the law and an executive which is fully subject to the law, shall be upheld and observed.

11. Respect for human rights, democratic principles and the rule of law shall underpin the domestic and international policies of the parties and constitute the essential elements of the contractual nature of the relations between the parties to this Agreement.

12. The parties affirm that good governance is the transparent and accountable management of human, natural, economic and financial resources for the purpose of equitable and sustainable development. It entails clear decision-making procedures at the level of public authorities, the primacy of law in the management and distribution of resources and capacity building.

Etat de droit, les principes démocratiques et la bonne gouvernance

10. Sauf pour les partis qui ne sont par ailleurs pas des États souverains, les partis conviennent que les dispositions épousé dans leurs constitutions nationales respectives par rapport à la prévalence de la règle de droit et les prérogatives des différents pouvoirs qui y sont et en particulier pour l'efficace et accessible des moyens de recours légal, un système judiciaire indépendant et un système juridique garantissant l'égalité devant la loi et un exécutif qui est pleinement soumis à la loi, doivent être respectés et observés.

11. Le respect des Droits de l'Homme, les principes démocratiques et l'Etat de droit inspirent les politiques internes et internationales des partis et constituent les éléments essentiels de la nature contractuelle des relations entre les partis au présent Accord.

12. Les partis affirment que la bonne gouvernance est la gestion transparente et responsable des ressources humaines, naturelles, économiques et financières dans le but d'un développement équitable et durable. Elle implique des procédures de prise de décision claires au niveau des pouvoirs publics, la primauté du droit dans la gestion et la distribution des ressources et le renforcement des capacités.

ARTICLE 6

Legal Status, Privileges and Immunities

1. For avoidance of doubt, this Agreement shall take precedence over the Revised MSG Trade Agreement previously entered into by the parties thereto.

ARTICLE 6

Statut juridique, privilèges et immunités

1. Pour éviter tout doute, le présent accord prime l'Accord commercial GFLM révisée précédemment conclus par les partis.

2. The Secretariat shall have such legal personality as is necessary for it to carry out its functions and responsibilities and, in particular, shall have the capacity to contract, to acquire and dispose of movable and immovable property and to sue and be sued.

3. Except for Members which are otherwise not Sovereign States, the Secretariat shall enjoy in the territory of each Member of the MSG, such privileges and immunities as may be necessary to enable the MSG to fulfill its purpose and carry out its functions. The specific privileges and immunities referred to in this paragraph shall be defined in separate agreements to be entered into between the Secretariat and Members of the MSG.

ARTICLE 7

Decision making process

1. The constituent bodies of the MSG are as follows:

   (i) A Leaders' Summit;

   (ii) A Foreign Ministers' Meeting (FMM)

   (iii) Other Ministerial Meetings;

   (iv) Senior Officials' Meeting (SOM)

   (v) Senior Technical Officials Meetings (STOM);

   (vi) Other sub-committees and working groups.

2. The reporting structure of the MSG shall be as follows:

   (i) The working groups shall report to the sub-

2. Le Secrétariat aura la personnalité juridique qui est nécessaire pour lui permettre de mener à bien ses fonctions et responsabilités et, en particulier, doit avoir la capacité de contracter, d'acquérir et d'aliéner des biens mobiliers et immobiliers et d'ester en justice.

3. Sauf pour les membres qui sont par ailleurs pas des États souverains, le Secrétariat jouiront sur le territoire de chaque membre du GFLM, des privilèges et immunités qui peuvent être nécessaires pour permettre au GFLM pour atteindre son but et exercer ses fonctions. Les privilèges et immunités spécifiques visés au présent paragraphe sont définis dans des accords séparés à conclure entre le Secrétariat et les membres du GFLM.

ARTICLE 7

Processus de prise de décision

1. Les corps constituants du GFLM sont tels que s'en suit:

   (i) Le Sommet des Leaders;

   (ii) Une réunion des Ministres des Affaires Etrangères (RMAE/FMM)

   (iii) Autres Réunions Ministérielles;

   (iv) la Réunion des Hauts Fonctionnaires (RHF/SOM)

   (v) Réunions des Officiels Technique (ROT/STOM);

   (vi) D'autres Commissions et Groupes de Travail.

2. La structure de rapport du GFLM sera tel que s'en suit:

committees;

(ii) The Sub-Committees shall report to the STOM or the SOM depending on their mandate;

(iii) The STOM may report to the SOM or to their respective Ministerial Meetings;

(iv) The SOM shall report to the Foreign Ministers' Meeting;

(v) Other Ministerial Meetings shall report to the Leaders' Summit through the FMM;;

(vi) The Trade Ministers Meeting (TMM) shall report to the Leaders' Summit;

(vii) The FMM shall report to the Leaders' Summit.

(i) Les groupes de travail feront rapport aux commissions;

(ii) Les commissions font rapport à la ROT ou la RHF en fonction de leur mandat;

(iii) La ROT peut signaler à la RHF/SOM ou à leurs réunions ministérielles respectives;

(iv) La RHF rendra compte à l'assemblée des ministres des affaires étrangères;

(v) Autres réunions ministérielles font rapport au Sommet des Leaders à travers la RMAE;

(vi) La Réunion des Ministres du Commerce (RMC) rend compte au Sommet des Leaders;

(vii) La RMAE fait rapport au Sommet des Leaders.

ARTICLE 8

The MSG Leader's Summit

1. The pre-eminent decision making body of the MSG is the Leaders' Summit.

2. The Leaders' Summit consists of the Heads of Government of each member country or the nominee; and in the case of a member organization, the Head or the nominee.

Powers and Responsibilities

3. The Leaders' Summit is responsible for the:

(i) approval of the general policies of the MSG;

(ii) appointment of the Director General including the

ARTICLE 8

Sommet des Dirigeants GFLM

1. L'organe de décision prééminent du GFLM est le Sommet des Dirigeants.

2. Le Sommet des Dirigeants se compose des chefs de gouvernement de chaque pays membre ou du candidat; et dans le cas d'une organisation membre, le chef ou le candidat.

Pouvoirs et responsabilités

3. Le Sommet des Leaders est responsable de:

(i) l'approbation des politiques générales du GFLM;

termination of the Director General;

(iii) establishment of Ministerial Committees as may be deemed necessary;

(iv) making of decisions in accordance with the general principles of this Agreement and where necessary, directing the relevant constituent bodies of the MSG to undertake further action in relation thereto;

(v) approval of any proposed amendments to the Agreement from time to time;

(vi) approval of the establishment of or any proposed amendments to the regulations or rules of procedure for the administration of the MSG and all its constituent bodies; and

(vii) carrying out of such other functions as may be necessary to give effect to the purpose of this Agreement from time to time.

(ii) la nomination du Directeur Général, y compris la résiliation du Directeur Général ;

(iii) la création de comités ministériels qui peuvent être jugées nécessaires;

(iv) la prise de décisions en conformité avec les principes généraux du présent Accord et, si nécessaire, de diriger les organes constituants pertinents du GFLM à prendre de nouvelles mesures à cet égard;

(v) l'approbation de toute proposition d'amendement à l'Accord de temps à autre;

(vi) l'approbation de l'établissement ou des modifications proposées aux règlements ou règles de procédure pour l'administration du GFLM et tous ses corps constituants; et

(vii) la mise en œuvre des autres fonctions qui peuvent être nécessaires pour donner effet à l'objet du présent accord de temps à autre.

Sessions

4. The Leaders' Summit shall hold biennial session to be known as the Leaders' Summit. The Leaders' Summit shall be held in the countries of Members of the MSG on a rotational basis, unless otherwise decided. Rotational means alphabetical.

5. A special session(s) of the Leaders' Summit may be held at any time upon the request of the Chair of the Leaders' Summit. Following such a request or decision, the Director General shall convene a special session of the Leaders' Summit as soon as is reasonably practicable.

Sessions

4. Les Leaders du GFLM tiennent session de façon biennale à être connu comme les Leaders de Sommet. Le Sommet des Dirigeants doit être tenue dans les pays des membres du GFLM sur une base de rotation, sauf décision contraire. Des moyens de rotation alphabétique.

5. Une session spéciale des Dirigeants de la Sommet peut avoir lieu à tout moment à la demande du Président du Sommet des Leaders. Suite à une telle demande ou décision, le Directeur Général convoque une session extraordinaire du Sommet des Leaders dès qu'il est raisonnablement possible.

6. The Leaders' Summit at its biennial or special session(s) shall:

   (i) adopt such further reports as it may require from time to time; and

   (ii) make such decisions as may be required.

Chairperson

7. The Chair of the Leaders' Summit shall be held by the member hosting the biennial session of the Leaders' Summit on a rotational basis amongst the Members. The Chair shall retain that office for a period of two years.

   In the event of the Chair resigning the office or is incapacitated in any manner from retaining the role of the Chair, then his or her representative as the case maybe, shall exercise all functions and powers of the Chair until the expiration of the Chair's term of office or as further determined by the Leaders.

8. The Chair after consultation with MSG Leaders shall have the power to take decisions on behalf of the MSG between sessions of the Leaders' Summit on policy issues of urgency of which the decision shall be in the best overall interests of the members in accordance with the objectives of this Agreement.

Decision Making

9. The Leaders' Summit shall take decisions at its sessions by consensus. If consensus cannot be achieved, further dialogue and consultation shall be encouraged and pursued until a decision is made.

6. Le Sommet des Leaders durant sa session biennale ou spéciale doit:
   (i) adopter les autres rapports tel que requis de temps à autre; et

   (ii) prendre les décisions qui peuvent être nécessaires.

Présidence

7. La Présidence du Sommet des Leaders doit être exercée par le membre qui accueille la session biennale des Dirigeants de Sommet sur une base de rotation parmi les membres. Le Président doit conserver ce bureau pour une période de deux ans.

   Dans le cas où le Président venait à démissionner du bureau ou être incapable d'une manière quelconque de conserver le rôle du président, alors son représentant selon le cas, doit exercer toutes les fonctions et pouvoirs du président jusqu'à l'expiration du mandat du président du bureau ou autant que déterminé par les Dirigeants.

8. Le Président, après consultation avec les Leaders GFLM aura le pouvoir de prendre des décisions au nom du GFLM entre les sessions du Sommet des Leaders sur les questions de politiques d'urgence dont la décision doit être dans les meilleurs intérêts généraux de ses membres en conformité avec les objectifs du présent Accord.

Prise De Décision

9. Le Sommet des Dirigeants prend des décisions à ses sessions par consensus. Si le consensus ne peut être atteint, la poursuite du dialogue et de la consultation doivent être encouragées et poursuivies jusqu'à ce qu'une décision soit prise.

Special Guest

10 The Chair of the Leaders' Summit may, after consultation with other Members, invite representatives of any Governments, international agencies, academic and research organizations, foundation, and private industry, or advisors to participate in the Leaders' Summit as special guests.

Procedures

11. All sessions of the Leaders' Summit shall be closed to the public unless the Leaders' Summit decides otherwise.

ARTICLE 9

Foreign Ministers' Meeting

1. The Foreign Ministers' Meeting consists of the Foreign Ministers of each Member country or a nominee and in the case of a member organization, a representative.

Powers and Responsibilities

2. The Foreign Ministers' Meeting is responsible for the:

(i) determination of the general policies of the MSG;

(ii) recommendation to the Leaders' Summit of a candidate for appointment as Director General;

(iii) approval of the budget for the annual financial year;

(iv) adoption of the annual report of the Director General;

(v) establishment of other Committees from time to

Invité Spécial

10. Le président du Sommet peut, après consultation avec les autres membres, inviter des représentants de tous gouvernements, institutions internationales, organisations universitaires et de recherche, fondations, et du secteur privé, ou conseillers à participer du Sommet des Leaders comme Invités Spéciaux.

Procédures

11. Toutes les séances des Leaders du Sommet doivent être à huis-clos à moins que le Sommet des Dirigeants n'en décide autrement.

ARTICLE 9

Réunion des Ministres des Affaires étrangères

1. La Réunion des Ministres des Affaires étrangères se compose des Ministres des Affaires Etrangères de chaque pays membre ou d'un candidat et dans le cas d'une organisation membre, un représentant.

Pouvoirs et responsabilités

2. La Réunion des Ministres des Affaires Etrangères est responsable de :

(i) la détermination des politiques générales du GFLM;

(ii) la recommandation au Sommet des Dirigeants d'un candidat au poste de Directeur Général;

(iii) l'approbation du budget pour l'exercice financier annuel;

(iv) l'adoption du rapport annuel du Directeur Général;

(v) la création d'autres comités de temps en temps

time with such mandates as may be deemed necessary;

(vi) perforce of such functions which promote the general principles of this Agreement and where necessary, directing the relevant subsidiary MSG constituent bodies to undertake further action in relation thereto;

(vii) endorsement of any proposed amendments to the regulations or rules of procedure for the administration of the MSG and all its constituent bodies;

(viii) carrying out of such other functions as may be directed by the Leaders' Summit from time to time.

Sessions

3. Meetings of the FMM shall be held annually.

4. A special session(s) of the Foreign Ministers' Meeting may be held at any time upon the request of the Leaders' Summit or the Chair of the Foreign Ministers' Meeting. Following such a request or decision, the Director General may convene a special session of the Foreign Ministers' Meeting as soon as is reasonably practicable and at any venue where it is most suitable.

5. The annual session of the Foreign Ministers' Meeting shall be held in the country of the current Chair, unless otherwise decided.

6. The Foreign Ministers' Meeting at its annual or special session shall:

(i) consider the annual report of the Director General;

avec ces mandats qu'il le jugera nécessaire;

(vi) forcément de telles fonctions qui favorisent les principes généraux du présent Accord et, si nécessaire, de diriger les organes constituants de GFLM subsidiaires pertinents à prendre de nouvelles mesures à cet égard;

(vii) l'approbation des modifications proposées aux règlements ou règles de procédure pour l'administration du GFLM et tous ses corps constituants;

(viii) la mise en œuvre de ces autres fonctions qui peuvent être dirigées par le Sommet des Dirigeants de temps à autre.

Sessions

3. Les réunions de la RMAE se tiennent chaque année.

4. Une session spéciale de la Réunion des Ministres des Affaires Etrangères peut avoir lieu à tout moment à la demande des Dirigeants de la Sommet ou le président de la réunion de ministres des Affaires étrangères. Suite à une telle demande ou de la décision, le Directeur Général peut convoquer une session extraordinaire de la Réunion des Ministres des Affaires Etrangères dès que cela est raisonnablement possible et en tout lieu où il est le plus approprié.

5. La session annuelle de la Réunion des ministres des Affaires étrangères se tiendra dans le pays de l'actuel président, sauf décision contraire.

6. Réunion des Ministres des Affaires Etrangères Les à sa session annuelle ou spéciale doit:

(i) examiner le rapport annuel du Directeur

(ii) consider the Budget for the succeeding year; and

(iii) determine further reports as the MSG Leaders' Summit may require from time to time.

Chairperson

7. The Chair of the Foreign Minister Meeting shall be held by a member hosting the biennial session of the Leaders Summit on a rotational basis amongst the Members. The Chair shall retain that office for a period of two years.

8. The Chair may make decisions on behalf of the MSG between sessions of the Foreign Ministers' Meeting on policy questions of urgency, after consultation with the Members.

Decision Making

9. The Foreign Ministers' Meeting shall take decisions at its sessions by consensus. If consensus cannot be achieved, further dialogue and consultation shall be encouraged and pursued until a decision is made.

Procedures

10. A session of the Foreign Ministers' Meeting shall be a closed session unless decided otherwise by the Foreign Ministers' Meeting.

Général;

(ii) considérer le budget pour l'année suivante; et

(iii) déterminer les autres rapports que le Sommet des Dirigeants GFLM peuvent exiger de temps à autre.

Présidence

7. La Présidence de la Réunion des Ministres des Affaires Etrangères doit être tenue par un membre qui accueille la session biennale de Sommet des Leaders sur une base de rotation parmi les membres. Le président doit conserver ce bureau pour une période de deux ans.

8. Le Président peut prendre des décisions au nom du GFLM entre les sessions de la réunion des Ministres des Affaires Etrangères sur les questions de politiques d'urgence, après consultation avec les membres.

Prise De Décision

9. La Réunion des Ministres des Affaires Etrangères prend des décisions durant ses sessions par consensus. Si le consensus ne peut être atteint, la poursuite du dialogue et de la consultation doivent être encouragées et poursuivies jusqu'à ce qu'une décision soit prise.

Procédures

10. Une session des ministres des Affaires étrangères de l'Assemblée doit être une séance à huis clos, sauf décision contraire par les ministres des Affaires étrangères de l'Assemblée.

ARTICLE 10

Other Ministerial Meetings

1. Other Ministerial Meetings may be established from time to time by the Leaders Summit to address specific matters.

2. A Ministerial Meeting shall consist of Ministers of each Member country or a nominee and in the case of a member organization, a representative.

Powers and Responsibilities

3. The Ministerial Meeting is responsible for:

   (i) providing guidance and direction on issues in relation to its mandate;

   (ii) recommending the establishment of sub-committees/working groups on specific issues within the MSG region;

   (iii) considering reports by respective Senior Technical Officials Meetings (STOMs) and where necessary make recommendations directly to the Leaders or through the FMM where necessary; and

   (iv) carrying out of such other functions as may be directed by the Leaders' Summit from time to time.

Sessions

4. A special session(s) of a Ministerial Meeting may be held at any time upon the request of the Leaders' Summit, the Chair of the Ministerial Meeting or upon request at least by two (2) of the members. Following such a request or decision, the Director General may convene a special session of the Ministerial Meeting as soon as is reasonably practicable and at any venue where it is most suitable.

ARTICLE 10

Autres Réunions Ministérielles

1. Les Réunions Ministérielles peuvent être établis de temps à autre par les Dirigeants du Sommet pour traiter des questions spécifiques.

2. Une Réunion Ministérielle est composé des Ministres de chaque pays membre ou d'un candidat et dans le cas d'une organisation membre, un représentant.

Pouvoirs et responsabilités

3. La Réunion Ministérielle est responsable de:

   (i) fournir des conseils et une orientation sur les questions relatives à son mandat;

   (ii) de recommander la création de commissions / groupes de travail sur des questions spécifiques au sein de la région GFLM;

   (iii) l'examen des rapports par respectives Réunions officiels techniques (ROT) et lorsque nécessaire, formuler des recommandations nécessaires directement aux Dirigeants ou à travers la FMM, si nécessaire; et

   (iv) la mise en œuvre de ces autres fonctions qui peuvent être dirigées par le Sommet des Dirigeants de temps à autre.

Sessions

4. Une session spéciale d'une réunion ministérielle peut avoir lieu à tout moment à la demande du Sommet des Leaders, le président de la réunion ministérielle ou sur demande au moins par deux (2) des membres. Suite à une telle demande ou de la décision, le Directeur Général peut convoquer une session extraordinaire de la Réunion ministérielle dès que cela est raisonnablement possible et en

Chairperson

5. The Chair of the other Ministerial Meetings shall be held by the member hosting the biennial session of the Leaders' Summit on a rotational basis amongst the Members. The Chair shall retain that office for a period of two years.

Decision Making

6. A Ministerial Meeting shall take decisions at its sessions by consensus. If consensus cannot be achieved, further dialogue and consultation shall be encouraged and pursued until a decision is made.

Procedures

7. A session of a Ministerial Meeting shall be a closed session unless decided otherwise by the Leaders' Summit.

ARTICLE 11

Senior Officials' Meeting

1. The SOM consists of the heads of Ministries/Department of Foreign Affairs of each Member country or a nominee and in the case of a member organization, a representative.

2. Meetings of the SOM shall be held annually.

3. A special session(s) of the SOM may be held at any time upon the request of the FMM or the Chair of the SOM. . Following such a request or decision, the Director General may convene a special session of the SOM as soon as is reasonably practicable.

tout lieu où il est le plus approprié.

Présidence

5. La Présidence des autres Réunions Ministérielles sera tenue par le membre qui accueille la session biennale de Sommet des Leaders sur une base de rotation parmi les membres. Le président doit conserver ce bureau pour une période de deux ans.

Prise De Décision

6. Une Réunion Ministérielle doit prendre des décisions à ses sessions par consensus. Si le consensus ne peut être atteint, la poursuite du dialogue et de la consultation doivent être encouragées et poursuivies jusqu'à ce qu'une décision soit prise.

Procédures

7. Une session d'une Réunion Ministérielle sera une séance à huis clos, sauf si décidé autrement par les Dirigeants du Sommet.

ARTICLE 11

Réunion des Hauts Fonctionnaires

1. Le RHF comprend les chefs des Ministères / Ministère des Affaires Etrangères de chaque pays membre ou d'un candidat et dans le cas d'une organisation membre, un représentant.

2. Les réunions du SOM se tiennent chaque année.

3. Une session spéciale (s) de la RHF peut avoir lieu à tout moment à la demande de la RMAE ou le président du RHF. Suite à une telle demande ou de la décision, le Directeur Général peut convoquer une session extraordinaire de la RHF dès qu'il est raisonnablement possible.

4. The Chair of the SOM shall be held by a member hosting the biennial session of the Leaders' Summit on a rotational basis amongst the Members. The Chair shall retain that office for a period of two years.

5. The SOM shall take decisions at its sessions by consensus.. If consensus cannot be achieved, further dialogue and consultation shall be encouraged and pursued until a decision is made.

6. The powers and functions of the SOM shall be to:

   (i) make reports and policy recommendations to the Leaders through FMM;

   (ii) Consider the annual budget of the Secretariat and any interim budget and the annual work programme submitted by the Director General;

   (iii) Receive, examine and comment on the Annual Report of the Director General on the operations of the Secretariat and where necessary may make recommendations to the FMM;

   (iv) make recommendations to the FMM on the policies and regulations of the Secretariat;

   (v) Undertake such tasks necessary for the recruitment of a candidate for the post of Director General and to make recommendations to leaders through the FMM; and

   (vi) carry out such other functions as may be directed by the FMM from time to time.

4. Le président de la RHF doit être détenu par un membre qui accueille la session biennale du Sommet des Dirigeants sur une base de rotation parmi les membres. Le président doit conserver ce bureau pour une période de deux ans.

5. Le RHF prend ses décisions à ses sessions par consensus. Si le consensus ne peut être atteint, la poursuite du dialogue et de la consultation doit être encouragé et poursuivi jusqu'à ce qu'une décision soit prise.

6. Les pouvoirs et les fonctions du RHF sont les suivantes:
   (i) faire des rapports et des recommandations politiques aux Dirigeants par le biais de RMAE;

   (ii) examiner le budget annuel du Secrétariat et de tout budget provisoire et le programme de travail annuel présenté par le Directeur Général;

   (iii) recevoir, examiner et de commenter le rapport annuel du Directeur Général sur les activités du Secrétariat et, si nécessaire peut faire des recommandations à la RMAE;

   (iv) faire des recommandations à la RMAE sur les politiques et les règlements du Secrétariat;

   (v) Entreprendre ces tâches nécessaires pour le recrutement d'un candidat pour le poste de Directeur Général et de faire des recommandations aux Dirigeants par le biais du FMM; et

   (vi) exercer les autres fonctions qui peuvent être prescrites par le FMM de temps à autre.

ARTICLE 12

Senior Technical Officials Meeting (STOM)

1. In line with the purpose of the Agreement, a STOM may be established by the FMM to address technical issues where necessary.

2. A STOM consists of the representatives at the Departmental/Agency Head level of the respective Department/Agency of each Member of the MSG and in the case of a member organization, a representative.

3. Meetings of the STOM shall be held annually or as and when the need arises.

4. The Chair of a STOM shall be held by the member hosting the biennial sessions of the Leaders' Summit on a rotational basis amongst the Members.

5. A STOM shall take decisions at its sessions by consensus. If consensus cannot be achieved, further dialogue and consultation shall be encouraged and pursued until a decision is made.

6. The powers and functions of a STOM shall be to:

   (i) provide advice and assistance on technical issues in relation to its mandate;

   (ii) recommend the establishment of sub-committees/working groups on specific issues within the MSG region; and

   (iii) provide reports and recommendations to appropriate Ministerial Meetings and/or the SOM.

ARTICLE 12

Réunion des Officiels Techniques (ROT)

1. Conformément à l'objectif de l'accord, un ROT peuvent être établis par la FMM pour aborder des questions techniques si nécessaire.

2. Un ROT se compose des représentants au niveau ministériel / Agence Chef du Département / Agence respective de chaque membre du GFLM et dans le cas d'une organisation membre, un représentant.

3. Les réunions du ROT se tiennent chaque année ou comme et quand le besoin se fait sentir.

4. Le président d'un ROT doit être tenu par le membre accueillant les sessions biennales du Sommet des Dirigeants sur une base de rotation parmi les membres.

5. Un ROT doit prendre des décisions à ses sessions par consensus. Si le consensus ne peut être atteint, la poursuite du dialogue et de la consultation doivent être encouragées et poursuivies jusqu'à ce qu'une décision soit prise.

6. Les pouvoirs et les fonctions d'un ROT sont les suivantes:

   (i) fournir conseils et assistance sur les questions techniques relatives à son mandat;

   (ii) recommander la création de commissions / groupes de travail sur des questions spécifiques au sein de la région GFLM; et

   (iii) fournir des rapports et des recommandations aux réunions ministérielles appropriées et / ou du SOM.

ARTICLE 13

Special Mission

1. The Leaders with the consent of the country concerned may where and when necessary, appoint an eminent person or persons or a high level representative on a Special Mission to Member countries with respect to:

   (i) Mediation and promotion of reconciliation where dispute has arisen between Members of the MSG or between a Member of the MSG and a consenting third party; or

   (ii) Undertake a good-will and solidarity mission to MSG countries.

2. With the agreement of the Leaders, the Chair shall dispatch a Special Mission and where it is relevant, the mission may be guided by approved terms of reference agreed by the members according to the principles of the Agreement.

3. Any Special Mission appointed under paragraph 1 above, shall report to the Leaders.

ARTICLE 13

Mission Spéciale

1. Les Dirigeants, avec le consentement du pays concerné peut, en cas de besoin, désigner une personne ou des personnes éminent ou d'un représentant de haut niveau sur une Mission spéciale aux pays membres en ce qui concerne:

   (i) La médiation et la promotion de la réconciliation là où différend a surgi entre les membres du GFLM ou entre un membre du GFLM et une troisième partie consentante; ou

   (ii) Entreprendre une bonne volonté et de la mission de solidarité aux pays GFLM.

2. Avec l'accord des Dirigeants, le président doit envoyer une mission spéciale et lorsque cela est pertinent, la mission peut être guidée par des termes de référence approuvée convenu par les membres selon les principes de l'Accord.

3. Toute Mission spéciale nommée en vertu du paragraphe 1 ci-dessus, doit faire rapport aux Dirigeants.

ARTICLE 14

Director General

1. The Director General is the chief executive officer of the Secretariat.

2. The Director General shall be appointed by the Leaders' Summit under such terms and conditions as the Leaders may determine.

3. If for any reason the position of Director General is vacant, the Deputy Director General assumes the management of the Director General's Office until such time a permanent appointment is made.

ARTICLE 14

Directeur Général

1. Le Directeur Général est le Chef de Direction du Secrétariat.

2. Le Directeur Général est nommé par le Sommet des Dirigeants en vertu de ces termes et conditions que les Dirigeants peuvent déterminer.

3. Si, pour une raison quelconque, le poste de Directeur Général est vacant, le Directeur Général adjoint assume la gestion du Bureau du Directeur Général jusqu'au moment d'un engagement permanent est faite.

4. The Director General shall be appointed for a term of three (3) years and shall be eligible to serve another term on a non-competitive basis subject to satisfactory performance. The incumbent is eligible to apply for a third term and will be considered on a competitive basis.

Functions

5. The Director General can attend meetings of the MSG Leaders' Summit, the Foreign Ministers' Meeting, Other Ministerial Meetings, the Senior Officials' Meeting, Technical Officials Meetings as well as such other technical advisory committees or groups.

6. The Director General shall:

(i) be responsible for the administration of the work programme and other activities of the Secretariat;

(ii) prepare and submit to the Leaders' Summit for review and approval at its biennial or special Session, a report on the past and projected activities of the Secretariat, the annual budget and the accounts of the Secretariat;

(iii) make arrangements for meetings of the Leaders' Summit and the constituent bodies of the MSG;

(iv) arrange all matters relating to the publication of materials produced by the Secretariat;

(v) appoint professional and administrative staff of the Secretariat on such terms and conditions as may be determined;

(vi) seek out and attract possible sources of financial and technical support for any Secretariat projects;

4. Le Directeur Général est nommé pour un mandat de trois (3) ans et sont éligibles pour servir un autre mandat sur une base non-concurrentiel réserve de résultats satisfaisants. Le titulaire est admissible à un troisième mandat et sera considéré sur une base concurrentielle.

Fonctions

5. Le Directeur Général peut assister aux réunions du Sommet des Dirigeants du GFLM, de la Réunion des Ministres des Affaires Etrangères, d'autres réunions ministérielles, de la Réunion des Hauts Fonctionnaires, des Réunions Responsables Techniques ainsi que les autres comités ou groupes consultatifs techniques.

6. Le Directeur Général devra être responsable:

(i) de l'administration du programme de travail et d'autres activités du Secrétariat;

(ii) de préparer et soumettre au Sommet des Leaders pour examen et approbation à sa biennale ou spéciale session, un rapport sur les activités passées et projetées du Secrétariat, le budget annuel et les comptes du Secrétariat;

(iii) de prendre des dispositions pour les réunions du Sommet des Dirigeants et les corps constituants du GFLM;

(iv) d'organise toutes les questions relatives à la publication des documents produits par le Secrétariat;

(v) de nommer le personnel professionnel et administratif du Secrétariat sur les termes et conditions qui peuvent être déterminées;

(vi) de chercher et attirer des sources possibles de soutien financier et technique pour tous les projets du Secrétariat;

(vii) by virtue of his/her authority as the Director General of the Secretariat use his/her good offices to take appropriate actions to respond to impeding emergencies on the welfare of the organization. Such actions must be reported immediately to Leaders; and

(viii) perform such other duties as may be required or delegated by the Leaders' Summit, Foreign Ministers' Meeting, Other Ministerial Meetings or the SOM from time to time.

7. In addition, the leaders may instruct the Director General to use his/her good offices to pursue specific responsibilities on behalf of the members such as discussing relationship issues, funding or to seek to resolve any issues between members.

8. The Director General may request leaders to use his/her good offices for promoting MSG interests at the regional and international fora.

9. Notwithstanding Article 14 (6), (7), (8), the Director General shall not use his/her good offices for any other purposes without the express approval of the Leaders.

ARTICLE 15

Appointment of Secretariat Staff

1. The Secretariat staff (hereinafter referred to as "the staff") shall consist of a Director General, a Deputy Director General, professional staff and such other staff as may be appointed by the Director General in accordance with the corporate structure as well as the Staff Regulations as may be amended from time to

(vii) en vertu de sa / son autorité en tant que Directeur Général du Secrétariat, d'utiliser son / ses bons offices pour prendre les mesures appropriées pour répondre aux situations d'urgence entravant le bien-être de l'organisation. Ces actions doivent être signalés immédiatement aux Dirigeants; et

(viii) d'exercer les autres fonctions qui peuvent être nécessaires ou délégués par le Sommet de, ministres des Affaires étrangères des Dirigeants de la Réunion, d'autres réunions ministérielles ou de la SOM de temps à autre.

7. En outre, les Dirigeants peuvent charger le Directeur Général d'utiliser ses bons offices / ses à poursuivre des responsabilités spécifiques pour le compte des membres tels que de discuter des questions de relation, de financement ou de chercher à résoudre les problèmes entre les membres.

8. Le Directeur Général peut demander les Dirigeants à utiliser ses bons offices / ses pour la promotion des intérêts GFLM sur les forums régionaux et internationaux.

9. En dérogation à l'article 14 (6), (7), (8), le Directeur Général ne doit pas utiliser son / ses bons offices à d'autres fins sans l'approbation expresse des Dirigeants.

ARTICLE 15

Nomination du personnel du Secrétariat

1. Le personnel du Secrétariat (ci-après dénommé «le personnel») se compose d'un Directeur Général, un Directeur Général Adjoint, le Personnel Professionnel et du Personnel qui peut être nommé par le Directeur Général conformément à la

time.

2. The Director General shall upon consultation with the SOM Chair, appoint a Deputy Director General upon such terms and conditions, as shall be deemed fit.

3. The Director General shall appoint all other staff in accordance with the Staff Regulations, the Staff Establishment and the remuneration policy determined by the FMM.

4. All professional staff including the Deputy Director General shall be appointed for a term of three (3) years and shall be eligible to serve another term on a non-competitive basis subject to satisfactory performance. Professional Staff are eligible to apply for a third term and will be considered on a competitive basis.

ARTICLE 16

Budget

1. The annual budget of the Secretariat shall be submitted by the Director General for consideration and recommendations by the SOM as referred to in Article 11 (6) (ii) prior to final approval by the Foreign Ministers Meeting.

2. The annual budget session shall be held before the first day of the financial period to which it relates.

3. The budget of the Secretariat and all issues related to it shall be approved by the MSG Foreign Ministers.

4. The budget shall be financed by:

   (i) assessed contributions from members of the MSG;

   (ii) extra budgetary support from Members of the MSG

structure de l'entreprise ainsi que Statut du personnel qui peut être modifiée de temps à autre.

2. Le Directeur Général en consultation avec le président de la RHF, choisissent un Directeur Général Adjoint en de tels termes et conditions, que seront jugé opportun.

3. Le Directeur Général nomme tous les autres membres du personnel conformément au statut du personnel, la mise en place du personnel et la politique de rémunération déterminée par le RMAE.

4. Tout le personnel professionnel, y compris le Directeur Général Adjoint est nommé pour un mandat de trois (3) ans et sont éligibles pour servir un autre mandat sur une base non-concurrentiel réserve de résultats satisfaisants. Le personnel professionnel est admissible à un troisième mandat et sera considéré sur une base concurrentielle.

ARTICLE 16

Budget

1. Le budget annuel du Secrétariat sera soumis par le Directeur Général pour examen et recommandations par le SOM que visée à l'article 11 (6) (ii) avant l'approbation finale par l'Assemblée ministres des Affaires étrangères.

2. La session annuelle du budget aura lieu avant le premier jour de l'exercice auquel il se rapporte.

3. Le budget du Secrétariat et toutes les questions liées à elle doit être approuvée par les ministres des Affaires étrangères GFLM.

4. Le budget est financé par:

   (i) des contributions des membres du GFLM;

or other Governments, administration, organizations and institutions; and

(iii) investments, fees, grants and other sources as approved by the FMM.

5. In the event the scheduled FMM cannot be held to adopt the annual budget, the Director General shall be entitled to authorize expenditure up to a limit not exceeding one quarter of the previous year's actual expenditure.

6. The FMM shall adopt financial regulations of the Secretariat for the administration of its finances, including the administration of contributions received from Governments, interested organizations or institutions which are not members of the MSG.

ARTICLE 17

Signature, Ratification, Accession, Entry into Force

1. This Agreement shall be subject to ratification by the Parties and shall enter into force on the day following the day on which they deposit instruments of ratification.

2. The MSG Secretariat Headquarters in Port Vila, Efate, Vanuatu shall be the Depository of the instruments of ratification and the Director General shall retain the originals in the archives.

3. A copy of this agreement in the French language shall be taken to be authentic together with the original in the English language.

4. Subject to Article 2, this Agreement shall enter into force for any such governments, territories thirty (30) days after the date of deposit of its instrument of accession.

(ii) un soutien budgétaire supplémentaire de membres du GFLM ou autres gouvernements, l'administration, les organisations et les institutions; et

(iii) investissements, d'honoraires, de subventions et d'autres sources approuvées par le FMM.

5. Dans le cas de la FMM programmée ne peut être tenu d'adopter le budget annuel, le Directeur Général a le droit d'autoriser des dépenses jusqu'à une limite ne dépassant pas un quart des dépenses effectives de l'année précédente.

6. La FMM doit adopter un règlement financier du Secrétariat pour l'administration de ses finances, y compris l'administration des contributions reçues des gouvernements, les organisations intéressées ou des institutions qui ne sont pas membres du GFLM.

ARTICLE 17

Signature, Ratification, Adhésion, Entrée en Vigueur

1. Le présent Accord est soumis à ratification par les Partis et entrera en vigueur le jour suivant la date à laquelle ils déposer leurs instruments de ratification.

2. Le siège du Secrétariat GFLM à Port Vila, Efate, Vanuatu est le dépositaire des instruments de ratification et le Directeur Général doit conserver les originaux dans les archives.

3. Une copie de cet accord dans la langue française doit être prise pour être authentique avec l'original en langue anglaise.

4. Sous réserve de l'article 2, le présent Accord entrera en vigueur pour toutes ces gouvernements, territoires trente (30) jours après la date du dépôt de son instrument

5. Reservations to the Agreement shall only be permitted for Members which are organizations or territories and not otherwise Sovereign States.

ARTICLE 18

Review and Amendment

Review

1. This Agreement may be reviewed every five (5) years or whenever the FMM decides upon recommendations by the SOM. Where a review has been endorsed, the FMM may appoint a committee to undertake the review.

2. The committee may take whatever steps necessary, such as consultation with Members, to thoroughly review the Agreement, having due regard to the needs of the MSG and the circumstances prevailing at the time.

3. After completion of a review the committee shall submit its report to the FMM through SOM for consideration. Such a report may recommend and provide draft proposed amendments to the Agreement.

Amendment

4. Subject to the succeeding sub-articles, where a report referred to in sub-article (3) contains proposed amendments to this Agreement, the FMM may consider such proposed amendments and recommend to the Leaders Summit who may then consider and, if appropriate, endorse the amendments.

5. Notwithstanding Articles 18 (1), (2), (3) and (4), a Member may propose amendments to the FMM

d'adhésion.

5. Réservations à l'Accord ne seront autorisées pour les membres qui sont des organisations ou des territoires et des États souverains pas autrement.

ARTICLE 18

Examen et modification

Examen

1. Le présent Accord peut être révisé tous les cinq (5) ans ou chaque fois que la FMM décide recommandations du SOM. Lorsque l'examen a été approuvé, la FMM peut nommer un comité pour procéder à l'examen.

2. La commission peut prendre toutes les mesures nécessaires, telles que la consultation avec les membres, de réexaminer attentivement l'accord, en tenant compte des besoins du GFLM et les circonstances qui prévalaient à l'époque.

3. Après l'achèvement d'un examen, le comité soumet son rapport à la FMM par SOM pour examen. Un tel rapport peut recommander et de fournir un projet de modification de l'accord.

Amendement

4. Sous réserve des futures sous-articles, où un rapport visé à l'alinéa (3) contient des propositions de modifications au présent accord, la FMM peut examiner les amendements proposés et de recommander au Sommet des Leaders qui peuvent alors examiner et, le cas échéant, approuver les amendements.

5. Par dérogation aux articles 18 (1), (2), (3) et (4), un membre peut proposer des

through SOM for consideration by the Leaders' Summit.

6. The text of any proposed amendment(s) must be circulated to the Members no less than three (3) months before a session of the Leaders' Summit.

7. Amendments to this Agreement shall only be adopted by a consensus and shall enter into force upon signing by Leaders.

ARTICLE 19

Withdrawal

1. Any Member of the MSG may withdraw from this Agreement by giving written notice to the Depositary. The Depositary shall immediately inform all Members of the MSG of receipt of a withdrawal notice. Withdrawal shall take effect one year after receipt of such notice by the Depositary.

2. A withdrawing Member of the MSG shall remain liable for all obligations to the MSG to which it was subject at the date of receipt by the depositary of the withdrawal notice. If the withdrawal becomes finally effective, the Member of the MSG shall not incur any liability for obligations resulting from operation of the MSG effected after the date on which the withdrawal notice was received by the Depositary.

ARTICLE 20

Dissolution

1. The Leaders' Summit may resolve that the MSG be dissolved.

amendements à la FMM par SOM pour examen par le Sommet des Dirigeants.

6. Le texte de tout amendement (s) proposé doit être distribué aux Membres pas moins de trois (3) mois avant une session du Sommet des Dirigeants.

7. Les amendements au présent Accord ne seront adoptés que par un consensus et entreront en vigueur lors de la signature par les Dirigeants.

ARTICLE 19

Retrait

1. Tout Membre de l'GFLM peut se retirer du présent accord par notification écrite au dépositaire. Le dépositaire informe immédiatement tous les membres du GFLM de réception d'un avis de retrait. Le retrait prend effet un an après réception de la notification par le dépositaire.

2. Un retrait de membres du GFLM doit rester responsable de toutes obligations envers le GFLM auquel il était soumis à la date de réception par le dépositaire de la notification de retrait. Si le retrait ne devienne effectif, le membre du GFLM ne contractera aucune responsabilité pour les obligations résultant de l'exploitation du GFLM effectuée après la date à laquelle la notification de retrait a été reçue par le dépositaire.

ARTICLE 20

Dissolution

1. Le Sommet des Leaders peut décider que le GFLM être dissoute.

2. Such a resolution shall take effect immediately following the conclusion of the next biennial Session of the Leaders' Summit. The Leaders' Summit shall at that next biennial Session decide the manner in which the assets and obligations of the MSG should be liquidated, distributed or borne, prior to the dissolution or suspension of the MSG.

3. The Leaders' Summit shall also at that next biennial session adopt a declaration prescribing the date on which the MSG shall be deemed dissolved. The declaration shall be communicated by the Chairperson of the MSG to the Members and Associate Members of the MSG.

2. Une telle résolution prend effet immédiatement après la fin de la prochaine session biennale du Sommet des Dirigeants. Le Sommet des Dirigeants est à la prochaine session biennale décider de la manière dont les actifs et les obligations du GFLM doivent être liquidés, distribués ou la charge, avant la dissolution ou la suspension du GFLM.

3. Le Sommet des Dirigeants est également à la prochaine session biennale adopter une déclaration prescrire la date à laquelle le GFLM est réputée avoir été dissoute. La déclaration doit être communiquée par le Président du GFLM pour les membres et membres associés du GFLM.

IN WITNESS WHEREOF the undersigned, being duly authorized by the respective

Parties, have signed this Agreement this 26 day of June 2015.

.....
FOR THE REPUBLIC OF FIJI

EN FOI DE QUOI, les soussignés, dûment autorisés par les Partis respectifs, ont signé le présent Accord en ce jour de 26 de June 2015.

.....
POUR LA REPUBLIQUE DE FIDJI

.....
FOR FRONT DE LIBERATION NATIONAL KANAK ET SOCIALISTE (FLNKS) OF NEW CALEDONIA

.....
POUR LE FRONT DE LIBERATION NATIONALE KANAK ET SOCIALISTE (FLNKS) DE NOUVELLE-CALEDONIE

.....
FOR THE INDEPENDENT STATE OF PAPUA NEW GUINEA

.....
POUR L'ETAT INDEPENDANT DE PAPOUASIE NOUVELLE-GUINEE

.....
FOR THE SOLOMON ISLANDS

.....
POUR LES ILES SALOMON

.....
FOR THE REPUBLIC OF VANUATU

.....
POUR LA REPUBLIQUE DU VANUATU

Pursuant to Article 17.5 hereof, on signing this Agreement, FLNKS makes Reservations in relation to Article 11, Article 12 and 13.

En accord avec l'Article 17.5 ci-présenté, concernant la signature de cet Accord, le FLNKS se Réserve concernant l'Article 11, l'Article 12 et l'Article 13

Exhibit 3

UDAUNE DECLARATION

ON

CLIMATE CHANGE BY MEMBERS OF THE MELANESIAN SPEARHEAD GROUP (MSG)

PREAMBLE

The Members of the Melanesian Spearhead Group (MSG), consisting of Fiji, Front de Liberation Nationale Kanak Socialiste (FLNKS), Papua New Guinea, Solomon Islands and Vanuatu, at the 22nd MSG Leaders' Retreat held on 24th August 2023 at the Havannah Boat House, North Efate, in the Republic of Vanuatu:

RECALLING the 1988 Agreed Principles of Cooperation among Independent States in Melanesia, and the objects and purposes of the MSG enunciated in the Agreement Establishing the Melanesian Spearhead Group (MSG);

REAFFIRMING the principles of respect for the territorial integrity and sovereignty of all States, non-interference in the domestic affairs of States;

BELIEVING in the need to change the security narrative that is being imposed on the region due to the intensification of geostrategic competition, and to focus the security conversation on Climate Change and the vulnerability and special needs of the Small Island Developing States (SIDS) in particular, Melanesian Countries and call for international support to take full and concrete action to address these vulnerabilities and needs through international, sub regional and bilateral cooperation;

NOTE with serious concern the current low global climate ambition under the Paris Agreement further accelerating the vulnerability of the Pacific in particular, the Melanesian sub-region which is located in the climate hotspot;

RECALLING Pacific Islands Leaders identifying climate change as the single greatest existential threat facing the Blue Pacific Continent and subsequent Declaration that the Pacific is in a state of Climate emergency;

RECALLING their commitments to strong regional action, harnessing shared stewardship of the Blue Pacific Continent, through such Regional Agreements as the 1986 Convention for the Protection of the Natural Resources and Environment in the South Pacific, the Noumea Protocol concerning Cooperation in Combating Pollution Emergencies in the South Pacific, the Rarotonga South Pacific Nuclear Free Zone Treaty, the Lakatoro Declaration on Oceania Cooperation regarding Denuclearisation in the South Pacific, the Waigani Convention on the ban on importation into Forum Island countries of radioactive wastes and to control the trans-boundary movement of hazardous wastes, and the Boe Declaration, the Blue Pacific's Call for Urgent Global Climate Change Action through the Kainaki II Declaration for Urgent Climate Action Now, the 2010 Framework for Pacific Oceanscape, the Pacific Islands Framework for Nature Conservation and Protected Areas, the Cleaner Pacific 2025 Strategy;

RECALLING also their international commitments under such International Agreements as the United Nations (UN) Charter, the United Nations Convention on the Law of the Sea (UNCLOS) – Part XII on

RECALLING also their international commitments under such International Agreements as the United Nations (UN) Charter, the United Nations Convention on the Law of the Sea (UNCLOS) – Part XII on Protection and Preservation of the Marine Environment, the International Convention for the Prevention of Pollution from Ships (MARPOL), the IMO 2020 Regulations on Sulphur content of marine fuels, the 1972 London Dumping Convention, the 1989 Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal, the Kyoto Protocol (reduction of emissions of greenhouse gases) , the Paris Climate Accords/Paris Agreement;

COGNISANT of the ongoing efforts that are being made under the auspices of UNEP, COP, Our Oceans Conference, the International Maritime Organisation (IMO);

DESIRING to bolster efforts and raise ambitious actions under the Paris Agreement and the commitments made at COP 27 to limit temperature rise to 1.5 degrees Celsius below the pre-industrial level, to encourage further radical Nationally Determined Contributions (NDCs) in particular greenhouse gas reduction targets, to hold businesses and institutions to account on their climate change actions, to pursue efforts towards 30X30 conservation goals;

DETERMINED to insist at the COP28 on developed countries responsibility to mobilise more financial support for developing countries towards such funding arrangements as Green Climate Fund (GCF), the Adaptation Fund, the LDC Fund, Special Climate Change Fund and Loss and Damage Fund;

ASPIRING to achieve carbon neutrality by 2050 as agreed to in the 51st PIF Leaders Meeting in Suva in 2022;

DETERMINED to collectively refocus the security narrative and draw attention towards our real security threat of Climate change and environmental degradation;

CONSCIOUS of their responsibility to improve the environment of present and future generations of the people of Melanesia;

AWARE that their responsibilities to preserve and improve the environment can be met only by cooperative effort among regional players based on the understanding of the needs and capacities of all parties;

RECOGNISING the interconnectivity of the world's oceans means that marine pollution requires the involvement of all countries and peoples to be effectively addressed;

NOTING with deep concern the proposal by Japan to discharge Advanced Liquid Processing System (ALPS) Treated Nuclear Water at Tokyo Electric Power Company's (TEPCO's) damaged Fukushima Daiichi Nuclear Power Station into the Pacific Ocean;

ACKNOWLEDGING the ongoing constructive dialogue between the Japanese Authorities, IAEA Authorities and Pacific Islands Forum (PIF);

AWARE of the desire by countries to engage in seabed mining, the ongoing discussions at the ISA on the appropriate mining code for seabed mining, and the focus of interest in the Clarion-Clipperton Zone;

ACKNOWLEDGING that very little is known of the effects of seabed mining to the ecosystems of the oceans and sensitive to the ways in which initiatives by one country can affect development prospects, including the natural environment beyond national boundaries, including the common heritage of humanity;

APPRECIATIVE of the support rendered by the UN membership on the UN General Assembly Resolution for an Advisory Opinion of the International Court of Justice (ICJ) on the obligations of States in respect of Climate Change;

BELIEVING that serious consideration of a Non-Proliferation Treaty on Fossil Fuel would precipitate serious investment and efforts towards alternative green energy sources;

DETERMINED to undertake actions nationally and collectively as MSG to demonstrate leadership and collective resolve to protect our environment;

DO HEREBY AGREE TO:

RECOMMIT themselves towards undertaking robust actions, legislatively and politically, to address the Climate Change issue, and undertake review of their NDCs with a view to upscaling their commitments, including concrete REDD plus initiatives;

PURSUE the International Court of Justice (ICJ) Advisory Opinion on Responsibility of States vis-à-vis Climate Change to its conclusion;

UNDERTAKE to make national submissions to the ICJ on the nefarious impact and effect of climate change;

ENCOURAGE work to be undertaken collectively in earnest on the Non-Proliferation Treaty on Fossil Fuel initiative on the basis of the principle and approach of ***just transition*** as part of the Port Vila Call for a Just Transition to a Fossil Fuel Free Pacific;

URGE Japan not to discharge the treated water into the Pacific Ocean until and unless the treated water is incontrovertibly proven scientifically to be safe to do so and seriously consider other options like use in concrete;

REGRETS DEEPLY the decision by Japan to dump ALPS in the Pacific Ocean, which has inter-generational and transboundary impact on our ocean, economy, livelihood, and future and on the basis of improved science and technology urged Japan to consider other options for disposal of ALPS;

UNDERTAKE not to allow Underwater Seabed Mining to be carried out in their jurisdictions;

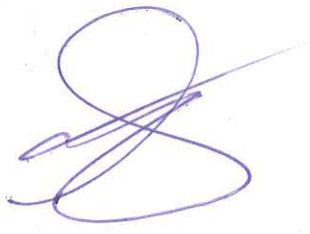
CALL for more rigorous and transparent environmental scientific research on seabed mining and call for a Pacific region wide moratorium;

CALL on developed countries to submit more ambitious climate targets and additional measures at COP 28 towards limiting temperature rise to below 1.5 Degrees Celsius levels through making bold and practical solutions based on the NDCs;

COMMIT themselves to aggressively pursue at COP and the UNFCCC discussions and practical commitments towards greater focus on Adaptation and Mitigation measures with their attendant financial requirements;

REAFFIRM STRONGLY their commitments to further take actions in support of their current ban of single use plastic products.

CALL on Industrial States and Large Emitters to take lead in undertaking concrete ambitious action proprammes on Mitigation and avoid "green-washing" schemes;



DEMAND that developed countries demonstrate more urgency and increased commitment to mobilize requisite financial support for developing countries, including the promised US$100 billion per year by 2020 that remains unfulfilled; and

DEMAND that the international community in particular, developed countries take lead in providing and mobilizing support for greater resources and finances on Loss and Damage, GCF, Adaptation Fund, LDC Fund and Special Climate Change Fund that is easily accessible to those most affected, such as the Small Island States; and urge Parties to the UNFCCC to conclude at the COP28, the discussions on the funding arrangements to assist developing countries in responding to loss and damage.

DONE AT HAVANNAH BOAT HOUSE, NORTH EFATE IN THE REPUBLIC OF VANUATU, this 24th day of August in 2023.

.....

FOR THE REPUBLIC OF FIJI

.....

FOR THE FRONT DE LIBERATION NATIONALE KANAK SOCIALISTE (FLNKS) OF NEW CALEDONIA

.....

FOR THE INDEPENDENT STATE OF PAPUA NEW GUINEA

.....

FOR THE SOLOMON ISLANDS

.....

FOR THE REPUBLIC OF VANUATU

Exhibit 4

MELANESIAN SPEARHEAD GROUP (MSG)

FRAMEWORK TREATY

ON THE

PROTECTION OF TRADITIONAL KNOWLEDGE

AND EXPRESSIONS OF CULTURE

MSG Secretariat
Secretariat du GFLM
Melanesian Spearhead Group | Le Groupe Fer de Lance Mélanésien

GROUPE FER DE LANCE MELANESIEN (GFLM)

TRAITE CADRE

RELATIF À

LA PROTECTION DES SAVOIRS TRADITIONNELS
ET
DES EXPRESSIONS CULTURELLES

MSG FRAMEWORK TREATY ON THE

PROTECTION OF TRADITIONAL KNOWLEDGE AND EXPRESSIONS OF CULTURE

The Republic of Fiji, the Independent State of Papua New Guinea, Solomon Islands, the Republic of Vanuatu and the Front de Liberation National Kanak et Socialiste (hereinafter referred to as "FLNKS") of New Caledonia:

Determined to have a region that is respected for the quality of its governance, the sustainable management of its resources, the respect for and promotion of its Melanesian cultures, traditions and values and for its defence and promotion of independence as the inalienable right of indigenous peoples of Melanesia and the promotion of their human rights;

Recognizing the intrinsic value of traditional knowledge and expressions of culture, including their social, cultural, spiritual, economic, intellectual, scientific, ecological, agricultural, medical, technological, commercial and educational value;

Mindful of the need to respect traditional knowledge and expressions of culture, as well as the dignity, cultural integrity and intellectual and spiritual values of traditional, indigenous and local communities; to recognize and reward the contributions made by such communities to the conservation of the environment, to food security and sustainable agriculture, to the improvement in the health of populations, to the progress of science and technology, to the preservation and safeguarding of cultural heritage, to the development of artistic skills, and to enhancing a diversity of cultural contents and artistic expressions;

Recognizing that protection must reflect the need to maintain an equitable balance between the rights and interests of those who develop, preserve and maintain traditional knowledge and expressions of culture and those who use and benefit from such knowledge and such culture;

Affirming the requirement to meet the needs of the owners and holders of traditional knowledge and expressions of culture, in particular by empowering them to exercise due control over their knowledge and expressions of culture;

Desiring to encourage and reward authentic creativity and innovation resulting from traditional knowledge and expressions of culture systems and to promote innovation, creativity and the transfer of technology to the mutual benefit of society, owners, holders and users of traditional knowledge and expressions of culture;

Concerned at the gradual disappearance, erosion, misuse, unlawful exploitation and misappropriation of traditional knowledge and expressions of culture;

Recognizing the right of owners and holders of traditional knowledge and expressions of culture to protection against all acts of misuse, unlawful exploitation or misappropriation of their knowledge and expressions of culture;

Desiring to preclude the grant and exercise of improper intellectual property rights in traditional knowledge and expressions of culture, associated genetic resources and derivatives thereof, and in traditional cultural expressions and works and productions derived therefrom;

Desiring to foster closer cooperation and collaboration in the recognition, protection, preservation, promotion and safeguarding of traditional knowledge and expressions of culture in order to provide a firm basis for the cultural integrity of the Members of the MSG;

Recognising the need to promote closer cooperation and understanding among the Members of the MSG in relation to traditional knowledge and expressions of culture and to contribute to regional peace, dynamism, synergy and growth;

HAVE AGREED AS FOLLOWS:

Article 1 Objectives

1.1 MSG Members shall strengthen their cooperation and collaboration in the field of traditional knowledge and expressions of culture with a view to promote sustainable development and contribute to the improvement of livelihoods in the MSG and the smooth and gradual integration into the world economy.

1.2 MSG Members shall explore the setting up of appropriate intra-MSG cooperation and collaboration arrangements in the field of traditional knowledge and expressions of culture for its protection, preservation, safeguarding and promotion that will consist of a mutual recognition and enforcement regime founded on uniform national legal systems of protection.

1.3 MSG Members shall promote cooperation in the field of traditional knowledge and expressions of culture among government agencies as well as among the private sector.

1.4 MSG Members shall have consultations on the development of their traditional knowledge and expressions of culture with a view to creating standards and practices which are consistent with international standards.

Article 2 Principles

2.1 The purpose of this Treaty is:

(a) to protect traditional knowledge holders and owners against any infringement of their rights as recognized by this Treaty; and

(b) to protect expressions of culture against misappropriation, misuse and unlawful exploitation.

Traité Cadre du Groupe de Fer de Lance Mélanésien (GFLM) relatif à la Protection des Savoirs Traditionnels et des Expressions Culturelles

La République de Fidji, l'état indépendant de Papouasie-Nouvelle-Guinée, les Iles Salomon, la République de Vanuatu et le Front de Libération Nationale Kanak et Socialiste (FLNKS) de Nouvelle Calédonie

Déterminés d'avoir une région qui est respectée pour la qualité de sa gouvernance, la gestion durable de ses ressources, le respect et la promotion de ses cultures mélanésiennes, ses traditions et ses valeurs, et pour sa défense et la promotion de l'indépendance comme droit inaliénable des peuples autochtones de la Mélanésie et la promotion de leurs droits de l'homme ;

Reconnaissant la valeur intrinsèque du savoir traditionnel et de l'expression des cultures, comprenant leurs valeurs sociale, culturelle, spirituelle, économique, intellectuelle, scientifique, écologique, agricole, médicale, technologique, commerciale et pédagogique ;

Conscients de la nécessité de respecter le savoir traditionnel et l'expression des cultures aussi bien que la dignité, l'intégrité culturelle et les valeurs intellectuelles et spirituelles des communautés traditionnelles, autochtones et locales ; de reconnaître et récompenser les contributions faites par ces communautés à la préservation de l'environnement, à la sécurité alimentaire, et à l'agriculture durable, à l'amélioration de santé des populations, au progrès des sciences et technologies, à la conservation et à la sauvegarde du patrimoine culturel, au développement des savoir-faire artistiques et à l'accroissement de la diversité des contenus culturels et des expressions artistiques.

Reconnaissant que la préservation doit refléter la nécessité de maintenir un équilibre entre les droits et intérêts de ceux qui développent, préservent et entretiennent les savoirs traditionnels et expressions culturelles et ceux qui les utilisent et en bénéficient ;

Affirmant la nécessité de répondre aux besoins des propriétaires et détenteurs de savoirs traditionnels et expressions culturelles, en particulier en leur permettant de maîtriser leurs savoirs traditionnels et expressions culturelles ;

Désirant encourager et récompenser la créativité et l'innovation authentiques issues des savoirs traditionnels et expressions culturelles et promouvoir la créativité et l'innovation et le transfert des technologies dans l'intérêt mutuel des sociétés, des propriétaires, détenteurs et utilisateurs des savoirs traditionnels et expressions culturelles ;

2.2 This Treaty shall not be interpreted as limiting or tending to define the very diverse holistic conceptions of:

(a) traditional knowledge; or

(b) expressions of culture.

2.3 This Treaty shall be interpreted and enforced taking into account the dynamic and evolving nature of traditional knowledge and expressions of culture as frameworks of ongoing innovation.

Article 3 Definitions

3.1 In this Treaty, unless the contrary intention appears:

customary use means the use of traditional knowledge or expressions of culture in accordance with the customary laws and practices of the traditional owners.

derivative work means any intellectual creation or innovation based upon or derived from traditional knowledge or expressions of culture.

derogatory treatment, in relation to traditional knowledge or expressions of culture, includes any act or omission that results in a material distortion, mutilation or alteration of the traditional knowledge or expressions of culture that is prejudicial to the honour or reputation of the traditional owners, or the integrity of the traditional knowledge or expressions of culture.

expressions of culture mean any way in which traditional knowledge appears or is manifested, irrespective of content, quality or purpose, whether tangible or intangible, and, without limiting the preceding words, includes:
(a) names, stories, chants, riddles, histories and songs in oral narratives, words, signs, names, and symbols; and
(b) productions of art, in particular, drawings, designs, paintings (including body-painting and tatooing), carvings, sculptures, pottery, terracotta, mosaic, sculpture, woodwork, metal ware, jewelry, basketry, weaving, needlework, shell work, rugs, costumes and textiles, glassware, carpets, costumes; handicrafts; musical instruments; and architectural forms;
(c) other, including cuisines and medicines.

sacred-secret means any traditional knowledge or expressions of culture that have a secret or sacred significance according to the customary law and practices of the traditional owners concerned.

traditional knowledge shall refer to any knowledge originating from a local, indigenous and traditional community that is the result of intellectual activity and insight in a traditional context, including know-how, skills, innovations, practices and learning, where the knowledge is embodied in the traditional lifestyle of a community, or contained in the codified knowledge systems passed on from one generation to another. The term shall not

Soucieux de la disparition progressive, de l'érosion, du mauvais usage, de l'exploitation illégale et du détournement des savoirs traditionnels et expressions culturelles ;

Reconnaissant le droit des propriétaires et détenteurs de savoirs traditionnels et expressions culturelles à la protection contre tout acte de mauvais usage, de l'exploitation illégale ou du détournement des savoirs traditionnels et expressions culturelles ;

Désirant exclure toute attribution et tout exercice inappropriés de droits de propriété intellectuelle des savoirs traditionnels et des expressions culturelles, de ressources génétiques associées et de leurs dérivés, et de toutes expressions culturelles traditionnelles ainsi que des œuvres et autres productions qui en dérivent;

Désirant renforcer une coopération étroite et la bonne collaboration dans la reconnaissance, la protection, le préservation, la promotion et la sauvegarde des savoirs traditionnels et expressions culturelles afin de donner une base solide à l'intégrité culturelle des membres du GFLM;

Reconnaissant la nécessité de promouvoir une coopération étroite et une meilleure compréhension entre les membres du GFLM relatives aux savoirs traditionnels et expressions culturelles et de contribuer à la paix, au dynamisme, à la synergie et la croissance dans la région;

ONT DECIDE CE QUI SUIT:

Article 1 : Objectifs

1.1 Les membres du GFLM s'engagent à renforcer leur coopération et leur collaboration dans le domaine des savoirs traditionnels et expressions culturelles dans le but de promouvoir le développement durable et de contribuer à l'amélioration des conditions de vie dans les pays du GFLM, et l'intégration adaptée mais progressive dans l'économie mondiale.

1.2 Les membres du GFLM s'engagent à étudier la mise en place de dispositions de coopération et de collaboration internes au sein des pays du GFLM dans les domaines de savoirs traditionnels et d'expressions culturelles pour leur protection, leur préservation, leur promotion et leur sauvegarde et ainsi constituer un régime de reconnaissance mutuelle et de renforcement fondé sur des systèmes juridiques de protection nationale, mais uniformisé.

1.3 Les membres du GFLM s'engagent à promouvoir la coopération dans le domaine des savoirs traditionnels et expressions culturelles au sein des institutions gouvernementales aussi bien que dans le secteur privé.

1.4 Les membres du GFLM s'engagent à mener des consultations sur le développement de leurs savoirs traditionnels et expressions culturelles dans le but de créer des normes et des pratiques conformes aux normes internationaux.

Article 2 : Principes

2.1 L'objet de ce Traité est :

be limited to a specific technical field, and may include agricultural, environmental or medical knowledge, and knowledge associated with genetic resources.

traditional owners or holders of traditional knowledge or expressions of culture means:

(a) the group, clan or community of people; or
(b) the individual who is recognized by a group, clan or community of people as the individual;
in whom the ownership, custody and protection of the traditional knowledge or expressions of culture are entrusted in accordance with the customary law and practices of that group, clan or community.

3.2 The specific choice of terms to denote the protected subject matter falling under traditional knowledge and expressions of culture may be determined at the national level of a signatory.

Article 4 National Competent Authority

The signatories shall designate or establish a national competent authority which shall implement the provisions of this Treaty.

Article 5 Protection of traditional knowledge and expressions of culture

Protection shall be extended to traditional knowledge and expressions of culture that are:

a. generated, preserved and transmitted in a traditional and intergenerational context;

b. distinctively associated with a traditional, indigenous or local community; and

c. integral to the cultural identity of a traditional, indigenous or local community that is recognized as holding the knowledge through a form of collective and cultural ownership or responsibility. Such a relationship may be established formally or informally by customary practices, laws or norms.

Article 6 Formalities relating to protection of traditional knowledge and expressions of culture

6.1 Protection of traditional knowledge and expressions of culture shall not be subject to any formality.

6.2 In the interests of transparency, evidence and the preservation of traditional knowledge and expressions of culture, the relevant national competent authorities of signatories and the MSG Secretariat may maintain registers or other records of the knowledge, where appropriate and subject to relevant policies, laws and procedures, and the needs and aspirations of the traditional knowledge and expressions of culture owners and holders concerned.

(a) de protéger les propriétaires et détenteurs de savoirs traditionnels contre toute usurpation de leurs droits tels que reconnus dans ce traité ;

(b) de protéger les expressions culturelles de tout usage frauduleux, abus ou exploitation illégale.

2.2 Ce traité ne doit pas être interprété comme limitant ou tendant de définir les concepts élargis et très variés liés aux:

(a) Savoirs traditionnels

(b) Expressions culturelles

2.3 Ce traité doit être interprété et appliqué en prenant compte de la nature dynamique et évolutive des savoirs traditionnels et expressions culturelles comme cadres d'une innovation constante.

Article 3 : Définitions

3.1 Dans ce traité, sauf indication contraire :

Usage coutumier signifie l'usage des savoirs traditionnels et expressions culturelles en accord avec les lois coutumières et les pratiques des propriétaires traditionnels.

Œuvre dérivée signifie une création intellectuelle ou une innovation basée sur ou dérivée de savoirs traditionnels ou expressions culturelles.

Traitement dérogatoire, dans le contexte des savoirs traditionnels ou expressions culturelles inclut tout acte ou omission qui a pour conséquence la déformation physique, la mutilation ou l'altération de savoirs traditionnels ou expressions culturelles qui seraient préjudiciable à l'honneur ou à la réputation des propriétaires traditionnels, ou à l'intégrité des savoirs traditionnels ou expressions culturelles.

Expressions culturelles signifie toute manière dont le savoir traditionnel apparaît ou est manifesté, quelque soit le contenu, la qualité ou le but, tangible ou intangible, et, sans limiter ce qui précède, incluent:

(a) Des noms, des contes et récits, des chants, des proverbes, des devinettes, des histoires et chants contés, des mots, des signes, des symboles ; et

(b) Des productions artistiques, en particulier les dessins, les motifs, les peintures (dont les peintures corporelles et tatouages), les sculptures, les poteries, mosaïques, bijoux, tressage, travail de bois, des coquillages et du verre, la couture, la broderie, la fabrication de couvertures, costumes et textiles, artisanat, instruments de musique, et les formes d'architecture ;

(c) Autres, tels que l'art culinaire et la médecine.

Sacré-secret signifie tout savoir traditionnel ou expression culturelle qui a une signification secrète ou sacrée selon la loi et la pratique coutumières des propriétaires traditionnels concernés.

6.3 The registers maintained under article 6.2 may be associated with specific forms of protection, and shall not compromise the status of hitherto undisclosed traditional knowledge or the interests of the owners and holders of traditional knowledge and expressions of culture in relation to undisclosed elements of their knowledge.

6.4 Where two or more communities in the same or different countries share the same traditional knowledge and expressions of culture, the relevant national competent authority of the signatory and the MSG Secretariat shall register the owners and holders of the traditional knowledge and expressions of culture and maintain relevant records.

Article 7 Beneficiaries of protection of traditional knowledge and expressions of culture

The owners of the rights shall be the holders and owners of traditional knowledge and expressions of culture, namely the traditional and indigenous communities, and recognized individuals within such communities, who create, preserve and transmit knowledge in a traditional and intergenerational context in accordance with the provisions of article 5.

Article 8 Rights conferred on holders of traditional knowledge and expressions of culture

8.1 This Treaty shall confer on the owners and holders of rights referred to in article 5 the exclusive right to authorize the exploitation of their traditional knowledge and expressions of culture.

8.2 In addition, owners and holders shall have the right to prevent anyone from exploiting their traditional knowledge and expressions of culture without their free, prior informed and full consent.

8.3 For the purposes of this Treaty, the term "exploitation" with reference to traditional knowledge, shall refer to any of the following acts:

(a) Where the traditional knowledge is embodied in a product:

(i) manufacturing, importing, exporting, offering for sale, resale, selling or using the product;

(ii) being in possession of the product for the purposes of offering it for sale, resale, selling it or using it;

(b) Where the traditional knowledge is a process:

(i) making use of the process beyond the traditional context;

(ii) carrying out the acts referred to under paragraph (a) of this subsection with respect to a product that is a direct result of the use of the process.

8.4 For the purposes of this Treaty the term "exploitation" with reference to expressions of culture, shall refer to any of the following acts:

(a) reproduction;

(b) publication;

Savoir traditionnel se réfère à tout savoir issu d'une communauté locale, autochtone et traditionnelle qui résulte d'une activité intellectuelle et de la connaissance d'un contexte traditionnel y compris le savoir-faire, les talents, les créations innovatrices, les pratiques et l'apprentissage, où la connaissance prend corps dans le style de vie d'une communauté, ou est contenue dans le système de connaissances codifié transmis de génération en génération. Le terme ne doit pas être limité à un domaine technique particulier, et peut inclure la connaissance en agriculture, en environnement ou en médecine, ou toute connaissance associée aux ressources génétiques.

Propriétaires ou détenteurs coutumiers de savoirs traditionnels et expressions culturelles signifie :

(a) Le groupe, le clan ou une communauté de personnes ; ou

(b) L'individu reconnu par le groupe, le clan ou la communauté de personnes comme étant la personne ;

Sur qui la propriété, la garde et la protection de savoirs traditionnels et expressions culturelles est léguée conformément aux lois, règlements et pratiques coutumières de ce groupe, ce clan ou cette communauté.

3.2 Le choix spécifique de termes désignant la matière faisant l'objet de protection dans les savoirs traditionnels et expressions culturelles peut être déterminé au niveau national d'un membre signataire.

Article 4 : Autorité compétente nationale

Les signataires vont désigner ou établir une autorité nationale compétente qui mettra en œuvre les dispositions de ce traité.

Article 5 : Protection des savoirs traditionnels et expressions culturelles

La protection sera étendue aux savoirs traditionnels et expressions culturelles qui sont:

a. générés, préservés et transmis dans un contexte traditionnel et intergénérationnel;

b. distinctement associés à une communauté traditionnelle, autochtone ou locale ; et qui

c. font partie intégrante de l'identité culturelle d'une communauté traditionnelle autochtone ou locale qui est reconnue comme détenant la connaissance sous une forme collective et culturelle de propriété et de responsabilité. Une telle relation peut être établie de manière formelle ou informelle par les pratiques, lois ou normes coutumières.

Article 6 : Formalités liées à la protection des savoirs traditionnels et expressions culturelles

6.1 La protection de savoirs traditionnels et des expressions culturelles ne devra être soumise à aucune formalité.

6.2. Dans l'intérêt de la transparence, du témoignage avec preuve et de la préservation de savoirs traditionnels et des expressions culturelles, les autorités nationales compétentes des signataires et le Secrétariat du GFLM peuvent, en cas de nécessité et conformément aux politiques et directives en vigueur, développer et maintenir des registres ou autres enregistrements sur le savoir, les lois

(c) performance or display in public;

(d) broadcasting to the public by radio, television, satellite, cable or any other means of communication;

(e) translation, adaptation, arrangement, transformation or modification;

(f) fixation through any process such as making a photograph, film or sound recording;

(g) making available online or electronically transmitting to the public (whether over a path or a combination of paths, or both);

(h) creation of derivative works;

(i) making, using offering for sale or resale, selling, importing or exporting expressions of culture or products derived therefrom;

(j) using in any other material form, if such use is a non-customary use (whether or not of a commercial nature).

8.5 Articles 8.3 and 8.4 do not apply to the exploitation of traditional knowledge or expressions of culture for any of the following:

(a) face to face teaching;

(b) criticism or review;

(c) reporting news or current events;

(d) judicial proceedings;

(e) incidental use.

8.6 In addition to all other rights, remedies and action available to them, the owners and holders shall have the right to institute legal proceedings against any person who carries out any of the acts mentioned in article 8.3 without the owners and holders permission.

Article 9 Assignment and user agreements

9.1 Owners of traditional knowledge and expressions of culture shall have the right to conclude user agreements.

9.2 If traditional knowledge, expressions of culture, or a derivative work are to be used for a commercial purpose, the user agreement must:

(a) contain a benefit sharing arrangement providing for equitable monetary or non-monetary compensation to the traditional owners; and

(b) provide for identification of the traditional knowledge or expressions of culture on which the derivative work is based in an appropriate manner in connection with the exploitation of the derivative work by mentioning the traditional owners and/or the geographical place from which it originated; and

(c) provide that the traditional knowledge or expressions of culture in the derived work will not be subject to derogatory treatment.

et procédures et les besoins et souhaits des propriétaires et détenteurs de savoirs traditionnels et des expressions culturelles concernés.

6.3. Les registres conservés sous l'égide de l'article 6.2 peuvent être liés aux formes de protection spécifiques, et ne doivent en aucun cas compromettre le statut jusqu'ici resté non-révélé des savoirs traditionnels ou les intérêts des propriétaires et détenteurs de savoirs traditionnels et des expressions culturelles vis-à-vis les éléments non-divulgués de leur connaissance et savoir.

6.4. Là où deux communautés ou plus de même ou différents pays partagent les mêmes savoirs traditionnels et les mêmes expressions culturelles, l'autorité nationale habilitée et compétente du signataire et le Secrétariat du GFLM devront enregistrer les propriétaires et détenteurs de savoirs traditionnels et des expressions culturelles et conserver les registres correspondants.

Article 7 : Bénéficiaires de la protection des savoirs traditionnels et expressions culturelles

Les propriétaires des droits devront être les détenteurs et propriétaires de savoirs traditionnels et des expressions culturelles, à savoir, les communautés autochtones et traditionnelles et les individus reconnus par ces communautés, qui créent, préservent et transmettent la connaissance et le savoir à la manière traditionnelle et dans un contexte intergénérationnel conformément aux clauses définies dans l'article 5.

Article 8 : Droits conférés aux détenteurs de savoirs traditionnels et expressions culturelles

8.1. Ce traité doit conférer aux propriétaires et détenteurs des droits cités dans l'article 5, le droit exclusif d'autoriser l'exploitation de leur savoir traditionnel et des expressions culturelles.

8.2. De plus, les propriétaires et détenteurs doivent avoir le droit d'empêcher à quiconque d'exploiter leurs savoirs traditionnels et expressions culturelles sans leur consentement préalable, libre et informé.

8.3. Dan le cadre de ce Traité, le terme "exploitation" mis en relation avec les savoirs traditionnels sera associé à chacun des actes suivants :
(a) Lorsque le savoir traditionnel est incarné ou matérialisé dans un produit:
(i) la fabrication, l'importation, l'exportation, le don ou solde visant la commercialisation, la revente, la vente ou l'utilisation du produit;
(ii) être en possession du produit dans le but de le solder pour commercialisation, le vendre, le revendre ou l'utiliser;
(b) Lorsque le savoir traditionnel est un procédé:
(i) utiliser le procédé en dehors du contexte traditionnel;
(ii) commettre les actes énumérés en alinéas du paragraphe (a) ci-dessus portant sur un produit qui résulte directement de l'utilisation du procédé.

8.4. Pour les buts de ce Traité, le terme "exploitation" mis en relation avec les expressions culturelles, se réfèrera à chacun des actes suivants :

(a) la reproduction;

9.3 All access, authorizations, assignments or user agreements granted in respect of protected traditional knowledge or expressions of culture shall be granted in writing, otherwise they shall be of no force or effect.

9.4 A document drawn up for the purpose of article 9.3 shall be approved by the national competent authority, failing which the document shall be void.

Article 10 Equitable benefit-sharing

10.1 The protection to be extended to owners and holders of traditional knowledge and expressions of culture shall include the fair and equitable sharing of benefits arising from the commercial use of their knowledge and expressions of culture, to be determined by mutual understanding between the Signatories.

10.2 The national competent authority shall, in the absence of such mutual agreement, mediate between the concerned parties with a view to arriving at an agreement on the fair and equitable sharing of benefits.

10.3 The right to equitable remuneration might extend to non-monetary benefits , depends on the needs and preferences expressed by the traditional, indigenous or local communities themselves.

Article 11 Recognition of owners and holders of traditional knowledge and expressions of culture

Any person using traditional knowledge or expressions of culture shall acknowledge the owners and holders of that knowledge or those expressions, indicate the source and, where possible, the origin, and use of such knowledge and expressions of culture in a manner that respects the cultural values of its owners and holders.

Article 12 Exceptions and limitations applicable to the protection, preservation, promotion and safeguarding of traditional knowledge and expressions of culture

The protection of traditional knowledge and expressions of culture under this Treaty shall not be prejudicial to the continued availability of traditional knowledge and expressions of culture for the practise, exchange, use and transmission of the knowledge and expressions of culture by its owners and holders.

Article 13 Duration of protection of traditional knowledge and expressions of culture

Traditional knowledge and expressions of culture shall be protected for so long as they fulfil the protection criteria referred to under article 5.

Article 14 Administration and enforcement of protection of traditional knowledge and expressions of culture

14.1 To ensure the effectiveness of the protection of traditional knowledge and expressions of culture, the national competent authority and MSG Secretariat acting on behalf of the Signatories shall be entrusted with the tasks of awareness-raising, education, guidance,

(b) la publication;

(c) l'interprétation ou l'exposition en public;

(d) la diffusion publique à la radio, à la télévision, par satellite, câble ou autres moyens de communication ;

(e) la traduction, l'adaptation, l'arrangement, la transformation ou la modification ;

(f) l'immortalisation à travers n'importe quel processus comme la photographie, film ou bande sonore;

(g) mettre en ligne ou faire une transmission électronique au public, soit par l'un ou l'autre moyen, une combinaison des deux moyens ou par les deux moyens;

(h) la création d'œuvres dérivées ;

(i) faire, utiliser les dons ou soldes pour la vente ou la revente, vendre, importer ou exporter les expressions culturelles ou leurs produits dérivés ;

(j) l'usage en toute autre forme matérielle, si tel usage n'est pas dans un but coutumier (qu'il soit ou non de nature commerciale).

8.5 Les articles 8.3 et 8.4 ne s'appliquent pas à l'exploitation des savoirs traditionnels ou des expressions culturelles dans les cas suivants:

(a) l'enseignement et l'apprentissage spontané;
(b) La critique ou la revue;
(c) les reportages informatifs ou l'actualité;
(d) les poursuites judiciaires;
(e) l'utilisation fortuite.

8.6 En plus de tous les autres droits, recours et actions qui leurs sont accordées, les propriétaires et détenteurs possèdent le droit d'instaurer des procédures judiciaires contre toute personne responsable de tout acte cité a l'article 8.3 sans l'accord des propriétaires et détenteurs.

Article 9 : Accords d'attribution et d'usage

9.1. Les propriétaires de savoirs traditionnels et des expressions culturelles possèdent le droit d'entrer en accord ou contrat d'usage.

9.2 Si les savoirs traditionnels, les expressions culturelles ou leurs œuvres dérivées sont destinées à l'usage pour des fins commerciales, l'accord ou le contrat d'usage doit :

a. contenir un accord or arrangement sur la distribution des bénéfices, en tenant compte de la nécessité de reconnaître et compenser équitablement les propriétaires traditionnels ou coutumiers, soit en forme monétaire ou non-monétaire ; et

b. pourvoir à l'identification des savoirs traditionnels ou des expressions culturelles sur lesquelles l'œuvre est basée, de manière appropriée dans le cadre de l'exploitation de l'œuvre dérivée en faisant mention des propriétaires traditionnels et/ou l'origine géographique de l'œuvre; et

monitoring, registration, dispute resolution, enforcement and other activities related to the protection of traditional knowledge and expressions of culture .

14.2 National competent authorities shall be entrusted, in particular, with the task of advising and assisting owners and holders of traditional knowledge and expressions of culture in defending their rights and instituting civil and criminal proceedings, where appropriate and when requested by them.

14.3 Where two or more communities in different countries share the same traditional knowledge and expressions of culture, the MSG Secretariat shall be responsible for raising awareness, education, guidance, monitoring, dispute resolution and other activities relating to the protection, preservation, safeguarding and promotion of traditional knowledge and expressions of culture of those communities.

Article 15 Scope of cooperation and collaboration

15.1 Cooperative and collaborative activities under this Treaty shall aim to enhance collaboration and co-operation in the protection, management and enforcement of the rights of the owners and holders of traditional knowledge and expressions of culture.

15.2 Cooperative and collaborative activities under this Treaty shall include, inter alia:

15.2.1 Activities to enhance the protection and enforcement of traditional knowledge and expressions of culture, including:

a. Cross border measures cooperation;

b. Networking of judicial authorities and enforcement agencies.

15.2.2 Activities to strengthen the administration of traditional knowledge and expressions of culture such as:

a. automation to improve the administration of traditional knowledge and expressions of culture; and
b. the creation of a databases on traditional knowledge and expressions of culture.

15.2.3 Activities to strengthen legislation on traditional knowledge and expressions of culture such as: activities related to the implementation of the international intellectual property conventions, the WTO TRIPS Agreement and conventions dealing with traditional knowledge and expressions of culture.

15.2.4 Activities to promote human resource development such as:

a. Networking of traditional knowledge and expressions of culture training facilities or centres of excellence and to explore the possibility of establishing a regional training institute or other appropriate structures; and
b. Exchange of personnel and experts.

15.2.5 Activities to promote public awareness of traditional knowledge and expressions of culture.

c. assurer que les savoirs traditionnels ou expressions culturelles dans l'œuvre dérivée ne soient pas assujettis aux traitements dérogatoires.

9.3. Tout accès, toute autorisation ou tout contrat d'attribution ou d'usage accordé dans le cadre de savoirs traditionnels et expressions culturelles protégés, doivent être conclus par écrit, sans quoi, ils n'auront ni pouvoirs ni effets.

9.4. Un document proposé dans le but énoncé par l'article 9.3. doit être approuvé par l'autorité compétente nationale, sinon le document sera déclaré nul.

Article 10 : Le partage équitable des bénéfices

10.1. La protection qui doit être étendue aux propriétaires et détenteurs de savoirs traditionnels ou expressions culturelles doit inclure la juste et équitable répartition des bénéfices générés par l'usage commercial de leur savoir traditionnel ou expressions culturelles; les conditions de laquelle doit être déterminées à la base d'une entente mutuelle entre les Signataires.

10.2. L' autorité compétente nationale devra, en l'absence d'une telle entente, œuvrer pour une médiation entre les parties concernées dans le but d'aboutir à un accord de partage juste et équitable des bénéfices.

10.3. Le droit à la rémunération ou récompense équitable peut être étendu à des bénéfices non-monétaires, selon les besoins et préférences exprimés par les communautés traditionnelles, autochtones, ou locales elles-mêmes.

Article 11 : Reconnaissance des propriétaires et détenteurs de savoirs traditionnels et des expressions culturelles.

Toute personne utilisant les savoirs traditionnels ou expressions culturelles devra reconnaître les propriétaires et détenteurs de ces savoirs traditionnels ou de ces expressions culturelles, indiquer la source et, si possible l'origine, et utiliser de tels savoirs traditionnels et expressions culturelles dans le respect des valeurs culturelles de ses propriétaires et détenteurs.

Article 12: Exceptions et limites applicables à la protection, la préservation, la promotion et la sauvegarde des savoirs traditionnels et des expressions culturelles.

La protection de savoirs traditionnels et des expressions culturelles définie dans ce Traité ne doit pas porter préjudice à la pratique continue de l'échange, l'utilisation et la transmission des savoirs traditionnels et des expressions culturelles par les propriétaires et les détenteurs.

Article 13 : Durée de protection des savoirs traditionnels et des expressions culturelles.

Les savoirs traditionnels et les expressions culturelles seront protégés aussi longtemps qu'ils rempliront les critères cités par l'article 5.

15.2.6 Activities to promote private sector cooperation in traditional knowledge and expressions of culture such as to explore the possibility of providing alternative dispute resolution mechanisms for the resolution of traditional knowledge and expressions of culture disputes.

15.2.7 Information exchange on traditional knowledge and expressions of culture issues.

15.2.8 Sharing of the traditional knowledge and expressions of culture for the public interest.

15.2.9 Other cooperative and collaborative activities as determined by Signatories.

Article 16 Access to traditional knowledge associated with genetic resources

Authorization under this Treaty to access protected traditional knowledge associated with genetic resources shall not imply authorization to access the genetic resources derived from the traditional knowledge.

Article 17 Sanctions, remedies and enforcement

17.1 The Signatories shall ensure that accessible and appropriate enforcement and dispute resolution mechanisms, sanctions and remedies are available where there is a breach of the provisions relating to the protection of traditional knowledge and expressions of culture.

17.2 The national competent authority shall be entrusted with the task of advising and assisting owners and holders of protected traditional knowledge and expressions of culture in protecting and enforcing their rights and instituting civil and criminal proceedings, where appropriate and when requested by the owners and holders concerned.

Article 18 Regional protection

18.1 Eligible owners and holders of traditional knowledge and expressions of culture of MSG members shall enjoy benefits of protection to the same level as owners and holders of traditional knowledge and expressions of culture who are nationals of the country of protection, taking into account as far as possible the customary laws and norms applicable to traditional knowledge and expressions of culture.

18.2 Measures should be established by the national competent authority and MSG Secretariat to facilitate as far as possible such protection for the benefit of the holders of traditional knowledge and expressions of culture from non-MSG Members.

18.3 The MSG Secretariat may be entrusted with the task of settling cases of concurrent claims from communities of different countries with regard to traditional knowledge and expressions of culture; to this end, the MSG Secretariat shall make use of customary law, local information sources, alternative dispute resolution mechanisms, and any other practical mechanism of this kind, which might prove necessary.

18.4 Judgements of courts of competent authority of a MSG Member shall be enforceable in all signatory countries.

Article 14 : Administration et mise en vigueur de la protection des savoirs traditionnels et des expressions culturelles.

14.1. Pour assurer l'efficacité de la protection de savoirs traditionnels et des expressions culturelles, l'autorité compétente nationale et le Secrétariat de GFLM agissant pour le compte des Signataires seront investis par les tâches d'information et de sensibilisation, d'éducation, de conseil, de contrôle, d'enregistrement, de résolution de conflit, de mise en vigueur et de tout autre activité liée à la protection de savoirs traditionnels et d'expressions culturelles.

14. 2. Les autorités compétentes nationales auront, en particulier, la tâche de conseiller et d'assister les propriétaires et les détenteurs de savoirs traditionnels et des expressions culturelles dans la défense de leurs droits ; et dans l'administration des poursuites judiciaires et civiles nécessaires, et à leurs demandes.

14.3. Lorsque deux communautés ou plus de même ou différent pays partagent les mêmes savoirs traditionnels et les mêmes expressions culturelles, le Secrétariat du GFLM sera responsable de la sensibilisation, l'éducation, du conseil, contrôle, recensement, la résolution de conflits, et autres activités en relation avec la protection, préservation, sauvegarde et la promotion des savoirs traditionnels et des expressions culturelles de ces communautés.

15 : Portée de la coopération et de collaboration

15.1 Les activités de coopération et de collaboration dans le cadre de ce Traité devront avoir pour but d'améliorer la collaboration et la coopération pour la protection, la gestion et la mise en application des droits des propriétaires et détenteurs de savoirs traditionnels et des expressions culturelles.

15.2. Les activités de coopération et de collaboration dans le cadre de ce Traité devront inclure, entre autre:

15.2.1. Des activités pour mettre en valeur la protection et mise en vigueur des savoirs traditionnels et des expressions culturelles, y compris:

a. Des mesures de coopérations transfrontalières ;

b. Des réseaux de contacts et de communication entre les autorités judiciaires et les agences chargées de la mise en vigueur des lois.

15.2.2. Des activités pour renforcer la gestion de savoirs traditionnels et des expressions culturelles, telles:

a. une automatisation pour améliorer l'administration de savoirs traditionnels et des expressions culturelles; et

b. la création de bases de données sur les savoirs traditionnels et les expressions culturelles.

Article 19 Guidelines

19.1 The MSG Secretariat shall make Guidelines for the implementation of this Treaty and may amend them where necessary.

19.2 The Guidelines shall, in particular,

a. stipulate any administrative requirements, or any necessary details for the implementation of the provisions of this Treaty;

b. prescribe the procedure for applications of authorization to exploit traditional knowledge and expressions of culture;

c. prescribe fees to be charged by the MSG Secretariat and the details of the distribution of fees among Signatories; and

d. provide forms to be used for matters requiring forms under this Treaty.

Article 20 Review of cooperative activities

20.1 A MSG mechanism shall be established, comprising representatives from Members, to review the cooperative and collaborative activities under this Treaty. It shall meet on a regular basis to review the progress of these activities and any arrangement arising therefrom and to submit its findings and recommendations to the MSG Council of Arts and Culture, MSG Ministers of Arts and Culture and the constituent bodies of the MSG. The MSG Secretariat shall give necessary administrative support to the mechanism.

20.2 Any differences between the MSG Members concerning the interpretation or application of this Treaty shall, as far as possible, be settled amicably between the Signatories.

Article 21 Amendment

21.1 Only the MSG Members who are the original signatories to this Treaty may propose amendments to the Treaty for consideration by the Leaders' Summit. The text of any amendment shall be circulated to Members of the MSG no less than three months in advance of any session of the Leaders' Summit.

21.2 Any amendments to this Treaty proposed by a Member of the MSG shall only be adopted by a consensus of all Members of the MSG represented at the session and shall enter into force thirty days after receipt by the MSG Secretariat of instruments of acceptance from all Members of the MSG.

Article 22 Withdrawal

Any Member of the MSG may withdraw from this Treaty by giving written notice to the MSG Secretariat. The MSG Secretariat shall immediately inform all Members of the MSG of its receipt of a notice of withdrawal. Withdrawal shall take effect one year after receipt of such notice by the MSG Secretariat.

15.2.3. Des activités pour renforcer la législation sur les savoirs traditionnels et les expressions culturelles comme : des activités liées à la mise en application de conventions internationales sur la propriété intellectuelle, l'Accord « WTO TRIPS » et autres conventions qui traitent de savoirs traditionnels et des expressions culturelles.

15.2.4. Des activités pour promouvoir le développement des ressources humaines comme:

a. La création de réseaux de centres de formation et d'apprentissage de savoirs traditionnels et des expressions culturelles ou des centres d'excellence, et étudier la possibilité d'établir un institut régional d'apprentissage ou autres structures appropriées ; et

b. Des échanges de personnel et d'experts.

15.2.5. Des activités pour sensibiliser le public sur les savoirs traditionnels et les expressions culturelles.

15.2.6. Des activités pour promouvoir la coopération du secteur privé dans le domaine de savoirs traditionnels et des expressions culturelles tels que mener une étude sur des mécanismes alternatifs de résolution de conflits, pour la bonne résolution de conflits inhérents aux savoirs traditionnels et aux expressions culturelles.

15.2.7. Des échanges d'information sur les problématiques liés aux savoirs traditionnels et expressions culturelles.

15.2.8. Partage d'information sur les savoirs traditionnels et expressions culturelles dans l'intérêt du public.

15.2.9. Tout autre activité de coopération et de collaboration définies par les Signataires.

Article 16 : Accès aux savoirs traditionnels associés aux ressources génétiques.

L'autorisation accordée par ce Traité d'accéder aux savoirs traditionnels protégés associés aux ressources génétiques n'implique en aucun cas l'autorisation d'accéder aux ressources génétiques dérivées des savoirs traditionnels.

Article 17: Sanctions, recours et application

17.1. Les Signataires doivent s'assurer que pour toute violation des articles relatifs a la protection de savoirs traditionnels et des expressions culturelles, les mesures de résolution de conflits, les sanctions et recours sont accessibles et mis en vigueur.

17.2. L'autorité compétente nationale se verra confiée la tâche de conseiller et d'assister les propriétaires et détenteurs de savoirs traditionnels et des expressions culturelles protégés, dans la protection et l'exercice de leurs droits, et dans la conduite de procédures judiciaires et civiles en cas de nécessité et à la demande des propriétaires et détenteurs concernés.

Article 18: Protection régionale

Article 23 Entry into force

23.1 Any State which is a member of the MSG may become party to this Treaty by signature followed by the deposit of an instrument of ratification.

23.2 Reservations to the Treaty shall only be permitted for Members which are organizations or territories and not otherwise Sovereign States.

23.3 Instruments of ratification shall be deposited with the MSG Secretariat.

23.4 This Treaty shall come into force three months after two States have deposited their instruments of ratification.

18.1. Les propriétaires et détenteurs éligibles de savoirs traditionnels et des expressions culturelles membres du GFLM jouiront de mêmes droits de protection que les propriétaires et détenteurs de savoirs traditionnels et des expressions culturelles qui sont originaires du pays où la protection est appliquée, prenant en considération le plus possible, les lois coutumières et les normes applicables aux savoirs traditionnels et aux expressions culturelles.

18.2. Des mesures doivent être établies par l'autorité compétente nationale et le Sécrétariat du GFLM pour assurer autant que possible une telle protection au bénéfice des détenteurs de savoirs traditionnels et expressions culturelles originaires de pays non-membres du GFLM.

18.3. Le Secrétariat du GFLM peut être confiée la tâche de résoudre des cas de conflits concurrentiels provenant des communautés de différents pays portant sur les savoirs traditionnels et expressions culturelles. A cette fin, le Secrétariat du GFLM doit faire usage de la loi coutumière, des sources d'information locales, de mécanismes alternatifs de résolution de conflits, et de tout autre mécanisme pratique de même genre, qui peut s'avérer utile.

18.4 Les verdicts des cours de l'autorité compétente d'un membre du GFLM seront applicables dans tous les pays et membres signataires.

Article 19: Critères

19.1. Le Secrétariat du GFLM définira les critères de mise en application de ce Traité, et peut les amender en cas de nécessité.

19.2. Les critères devront, en particulier:

a. stipuler les procédures administratives requises, ou tout autre détail nécessaire visant la mise en application des articles de ce Traité ;

b. prescrire la procédure de demandes d'autorisation d'exploiter les savoirs traditionnels et les expressions culturelles ;

c. prescrire les charges à prélever par le Secrétariat du GFLM et le détail de la distribution des charges parmi les Signataires ; et

d. fournir des formulaires à utiliser pour toute matière dans ce Traité nécessitant l'usage de formulaire.

Article 20 : Révision des activités de coopération

20.1. Un mécanisme interne au GFLM doit être établi, comprenant des représentants des Membres, pour évaluer et réviser les activités de coopération et de collaboration encadrées par ce Traité. Il se réunira de façon régulière pour revoir et rendre compte du progrès de ces activités et de tous les arrangements résultants de ce Traité et soumettre les résultats et recommandations au

Conseil des Arts et de la Culture du GFLM, aux Ministres des Arts et de la Culture du GFLM et aux instances constituantes du GFLM.
Le Secrétariat du MSG apportera le soutien administratif nécessaire au mécanisme établi.

20.2. Tout différend émergeant entre les Membres du GFLM suite à l'interprétation ou l'application de ce Traité devra, autant que possible, être réglé à l'amiable entre les Signataires.

Article 21: Amendement

21.1. Seuls les Membres du GFLM qui sont les signataires originaux de ce Traité ont la capacité de proposer des amendements au Traité qui seront ensuite portés à l'attention du Sommet des Dirigeants (Leaders). Tout projet d'amendement doit être distribué auprès des Membres du GFLM pas moins de 3 mois avant toute session de Sommet des Dirigeants.

21.2. Tout amendement de ce Traité proposé par un Membre du GFLM ne sera adopté que par consensus de tous les Membres du GFLM présents à la session, et n'entrera en vigueur que trente jours après réception par le Secrétariat du GFLM des instruments d'acceptation déposés par tous les Membres du GFLM.

Article 22 : Désengagement

Tout Membre du GFLM peut se désengager de ce Traité en faisant parvenir au Secrétariat du GFLM, un courrier écrit. Le Secrétariat du GFLM devra immédiatement informer tous les Membres du GFLM de la réception de la lettre de désengagement. Le retrait prendra effet un an après réception d'un tel courrier par le Secrétariat du GFLM.

Article 23: Entrée en vigueur

23.1. Tout Etat membre du GFLM peut faire partie du Traité après signature, suivie d'une déposition d'un document de ratification.

23.2. Toute réserve sur le Traité ne sera autorisée qu'aux Membres qui sont des organisations ou territoires et non des Etats Souverains.

23.3. Les documents de ratification doivent être déposés au Secrétariat du GFLM.

23.4. Ce Traité entrera en vigueur trois mois après déposition de documents de ratification par deux Etats.

IN WITNESS WHEREOF the undersigned, being duly authorised by the respective Parties have signed this Treaty this **2nd day of September 2011**

EN TÉMOIGNAGE DE QUOI les soussignés, étant dûment autorisé par les Parties respectives ont signé ce Traité ce **2e jour de Septembre 2011.**

.....

FOR THE REPUBLIC OF FIJI
POUR LA REPUBLIQUE DE FIJI

.....

FOR THE INDEPENDENT STATE OF PAPUA NEW GUINEA
POUR L'ETAT INDEPENDANT DE PAPOUASIE NOUVELLE-GUINEE

.....

FOR SOLOMON ISLANDS
POUR LES ILES SALOMONS

.....

FOR THE REPUBLIC OF VANUATU
POUR LA REPUBLIQUE DU VANUATU

.....

FOR FRONT DE LIBERATION NATIONAL KANAK ET SOCIALISTE (FLNKS) OF NEW CALEDONIA
POUR LE FRONT DE LIBERATION NATIONAL KANAK ET SOCIALISTE (FLNKS) DE NOUVELLE-CALEDONIE

Pursuant to Article 23.2 of the treaty, on the signing of the treaty, the FLNKS makes Reservations in relation to Article 6 (sections 6.1 & 6.2), Article 9 (section 9.2 a), Article 17 (section 17.1) and Article 18 (section 18.4).

Conformément à l'Article 23.2 du Traité, à la signature du Traité le FLNKS émet des Réserves sur les Articles 6 (alinéas 6.1 &6.2), Article 9 (alinéa 9.2), Article 17 (alinéa 17.1), et Article 18 (alinéa 18.4).

Exhibit 5

Statement of Penioni Soqovata

I, Penioi Soqovata, from Vunidogoloa Village, Vanua Levu, Cakaudrove Province, Republic of Fiji, solemnly affirm and declare:

Background

1. My name is Penioni Soqovata. I am 44 years old, and I come from Vunidogoloa village. I am the current head man in the Village. Vunidogoloa is the name of the old village at the sea. Vunidogoloa means mangrove trees. The village is named after mangrove trees. However, when we relocated to where we live now, we retained the name of our old village Vunidogoloa, but have a new reference for the new site. We call it Kenani. Kenani is the bible name

2. In my role as the village head man, I am the official vocal point of the government within the village setting. If the government or any institution and NGO wishes to visit the village, and engage in any activity, they will have to liaise with me. I will then consult the village chief, which is a traditional role, to get his opinion, before, I facilitate any activities of which, those institutions may wish to engage the participation of the villagers.

3. My testimony is based on my direct knowledge and experience in relation to the relocation of the village from the coast right up into the interior land.

Relocation

4. During ancient times, our ancestors used to live up in the interior part of the land. However, due to massive flooding issues, they moved down wards and spread themselves along the coasts. Some of them started the settlement in Vunidogoloa. At the beginning there were only a few families, but the village started to grow when more relatives started to come in during the Christmas season, and wedding ceremonies, and stayed for a longer period of time. The coastal Families then allocated a piece of land to them to settle. That is how the coastal village of Vunidogoloa was established.

5. Over the years, we have been experiencing rising seas. It got worse and worse and then around 2013, during high tide, the saltwater would come up into the middle of the village. Half of the village will be under water.

6. After 14 years of discussions, we decided to relocate to our current location. It was an arrangement done within the Mataqali system of customary land management rights. The traditional customary system of Mataqali has enabled us to move in peacefully and settle in this current location. The reason why it took us that long period of relocating to our new settlement was due to the fact, that some all people did not want to relocate. This old people are born and were being raised and grown up in the old village. It is really hard for them to relocate. However, the old people then finally agree for us to relocate to the new village.

7. The Fiji Government did not provide support to us in this relocation exercise. It was the mataqali land owning group that, identified this location, and allowed us to settle here. The

land owning mataqali then helped us to cut logs and mill them into timber. We used the timbers to build our houses in our new relocation site. We a grateful for this arrangement, as it enabled us to have a new place to live and enjoy peace.

Effects of the relocation on the life of the villagers

8. The big emotional effect that, we have in relation to this relocation exercise was in relation to the fact that, most of our parents, and grandparents that have passed away were left behind at the old village site. Some of their graves are under the water during high tide. This situation has caused us to be emotionally distressed.

9. We are coastal villagers, the sea and the river have always been a part of our lives. When we left the sea coast, we really missed the fishing activities that, we used to engage in. We used to fish at night and during the day time. One source of our income is fish. We engaged in fishing activities, and sell our catch at the market to earn an income.

10. There is one traditional knowledge that, we were not able exercise anymore in our new location. That traditional knowledge is the ability to predict the weather of the day. There is a specific sound of the waves. If we hear that, specific sound, then it tells us that, there will a bad weather on the next day. But if we don't hear that, sound, then it tells us that, tomorrow will be a fine day. In our new location, we could no longer hear the sound of the waves, and so we cannot predict the weather according to our traditional method of weather forecast.

11. Down at the sea coast, we have a lot of space for recreational activities. Our children have a lot of space to play games, and we also have a lot of space to play rugby. When we moved to the new site, we live in a sloppy area. There is not much space for the kids to play, and we don't have the leisure activities that we used to enjoy when we were at the sea coast.

12. When we were at our old site, we had an income from three commodities. These commodities are Yagona (Kava), Fish, and Copra. Yagona is 20$ per KG, Fish is 3$ per KG, and Copra is 56 cent per KG. When we engage in these three activities, we generate good income for our house hold. We were abundantly rich, we had lot of food, and so we always had extra money with us. When we moved to the new site, we only engaged in planting one commodity, and that is Dalo (Taro). The price of Dalo is 4$ per KG. We sell Dalo in the market but, due to the conditions of our new living environment, we spend most of the money in almost all of the items that we consume every day. All the money is gone, and we don't have extra money. Life is different compared to our living in the old village. In the old village, we had extra money. In the new village, we are always short of money, because we're only involve in selling one commodity to earn an income.

13. Another effect of the relocation is in regards to the fact, that, three families have to dwell in one house. It is a very crowded situation in one house. We live in this type of condition until such time when all the construction of houses were complete and families could move in. We now have 33 houses with a population of 157 people.

14. We haven't lost our traditional knowledge. It is still there in our blood. We exercise this knowledge when ever we interact with the environment.

15. This is my statement.



Signed: Penioni Soqovata



Witness: Britten Yosef
Lawyer for the Melanesian Spearhead Group
Date: 28 February 2024

Signed: Penioni Soqovata

Prepared at Vunidogoloa Village on 28th February 2024

Witness: Brittien Yosef

Lawyer for the
Melanesian Spearhead Group

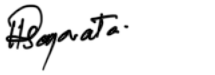




Exhibit 6

Vunidogoloa Village, Cakaudrove Province, Republic of the Fiji Islands

I, Simione Botu, from Vunidogoloa Village, Viti Levu, Fiji solemnly affirms and declare:

Background

1. My name is Simione Botu. I am a citizen of Fiji. I am the Chief of Vunidogoloa Village which was relocated from the coast to inland in 2014 to where we are today. I am 65 years old.
2. I was born in the original Vunidogoloa Village and I have spent the rest of my life growing up in the village.
3. I have been asked to provide a testimony to the International Court of Justice on the impacts of climate that led to the relocation of my village.
4. I speak my native Fijian language but I also understand English. I have given this testimony in English and through an interpreter to explain certain aspects of the climate change impacts in more detail to make sure nothing gets lost.
5. The interpreter read this statement to me and it was also read to me in English and I agree and confirm its content.
6. In my statement, I will talk about the factors that led to the relocation of our village to higher land and the changes to the weather I have observed. My testimony is based on my direct knowledge and experience growing up in the Village.

Flooding

7. Over the years, I have witnessed significant changes in the weather. The changes in weather patterns started when I was still living in our original Vunidogoloa Village and continues now even after we move to our new location. Rainfall patterns have changed drastically.
8. We have experienced frequent and heavy rainfall every year. Some areas including where my village is located, we experienced rain that sometimes continues for several days.
9. The frequent heavy rainfall has caused the rivers and water holes and catchments to fill up quickly causing flooding. Whenever it rains, the river is flooded.
10. The flooding always causes significant destruction to our gardens, destroying our root crops, dalo (Taro) and vegetables making it difficult to maintain our gardens to feed our families.
11. Due to all these impacts, the entire village was relocated on a higher land.

Signed: Chief Simione Botu

Prepared at Vunidogoloa Village, Vanua Levu, Fiji on 28th February 2024

Witness: Brittien Yosef
Lawyer,
Melanesian Spearhead Group

Saltwater

12. My house is near the sea. I have witnessed sea level rise drastically over the years.
13. The situation got worse for us when it started to flood from the river and when saltwater also came further inshore and those two things washed through our village.
14. My house is near the sea so when sea level rose and flooding occurred at the same time, the water washed into my house and destroying everything including our personal property.

Difficulty with transportation

15. Transportation became challenging during flooding events which limited our access to much needed goods and services. Clearing of debris after flooding events took time and made it even more difficult to access goods from store and services medical and health service.

Difficult to access school

16. Sea level rise and flooding in the previous location of Vunidogoloa near the beach made it challenging for our children to gain access to school on a regular basis. Flooding brought debris that made it challenging to get to school, and, also resulted in damages in the road infrastructure. After these flooding events, clearing and removal of debris, normally took up to two weeks, further disrupting access to schools especially when these events happen in a frequent basis. These impacts continue to affect the children. on to this day

Difficult to access hospital

17. Salt water inundation and flooding made it difficult for the sick to access medical care. During flooding events and inundation, there needed to be clearing of debris. This further hampered access to much needed medical care.

Washing Graveyards

18. The rising sea level had completely washed our graveyard. The cemetery where our ancestors are buried is sacred to us as it is their final resting place. Saltwater intrusion and inundation posed challenges in relation to keeping these sacred places intact. This has further disrupted our link with our ancestors, a loss that will be difficult to quantify, as it is part of our identity. In the past, there were customary rituals involving the visiting of

graves, lighting of lights at the graves and performing rituals. We are now unable to carry out these rituals as the graves have been damaged by saltwater inundation and flooding.

19. In the process of relocating to our new location, we had to leave a lot of our memories and cultural history behind. This caused emotional stress among those who realized the magnitude of the loss. Our younger generation will never have the opportunity to experience life as it was and to know about their origin.

Moving for us

20. It was hard to move away from our village on the coast because this is where we lived. We identify ourselves with the land. Our land is our Vanua which provides links to your ancestors and form the basis of identity and relationship amongst our people and our surrounding environment.

Signed: _____

Chief Simione Botu

Witness: _____

Brittien Yosef

Lawyer, Melanesian Spearhead Group

Date: 28 February 2024

Exhibit 7

Vunidogoloa Village, Cakaudrove Province, Republic of the Fiji Islands

I, Adi Sivo Yabakitolu, from Vunidogoloa Village, Fiji, solemnly affirm and declare:

Background

1. My name is Adi Sivo Yabakitolu. I am a Fijian and I live in the relocated village of Vunidogoloa. Vunidogoloa is situated on the Island of Vanua Levu in the province of Cakaudrove in Fiji.
2. I have been asked to give a statement to the International Court of Justice about the impacts of climate change that forced my Matagali to relocate from the coast to a location further inland. Matagali is a word in my iTaukei language which means clan in English.
3. I speak fluent English and have given this statement in English without the need for an interpreter.
4. My testimony is based on my lived experience with my Mataqali before and after we were relocated inland.

Relocation

5. In 2014, my village moved from our traditional home on the coast near the sea inland to where we are today. Prior to 2014, we faced a lot of challenges staying in our home as the seas where we live were rising and we experienced increased flooding.
6. Families were getting bigger but we had limited usable land on the coast to build new homes as rising sea levels and flooding made it challenging to build new houses. This resulted in us having to accommodate more than one family in one household. Our village had 11 households at that time. These 11 households accommodated 33 families. It was difficult to build new houses because the land was being flooded by the rising sea. When it rained, the entire village would be flooded and it was difficult for us to move around in the flooded waters. We were already experiencing sea level rise where the salt water would come up onto the village grounds and flood the community. The heavy rains we experienced added to the flooding from the salt water. We got water from rainwater harvesting. However, we could not plant our food where we used to plant food. We had to move our gardens inland so we spent more time walking to the gardens.
7. Our situation was such that relocation was our only solution. Relocation was a topic of discussion for quite some time and our Mataqali had discussions with the government on the challenges we faced and how the entire village was willing to relocate.

Land Tenure

8. The land we lived on was owned by the Mataqali. This means that our clan owned the land and decisions were made according to the customary hierarchical practice. The land we opted to relocate to which was situated inland and is where our village is today, is also owned by our Mataqali. The land where our village is now situated was previously used by our Mataqali for gardening when we were still living on the coast and unable to plant our food there. We are now living on land that was once used for gardening so we have had to move our gardens further up the mountain. It takes time for us to get to the garden.

Signed by Adi Sivo Yabakitolu

Witness: Brittien Yosef
Lawyer for the Melanesian Spearhead Group

Prepared at Vunidogoloa Village, Cakaudrove, Fiji on 28 February 2024

One of the reasons why it was possible for us to relocate was that the land we opted to relocate to is Mataqali owned land, hence, the government only had to build homes for us and not engage in land acquisition, a process which would have taken many more years. Land is important as it sustain daily living through the provision of food and water. Owning land means we are more secure as we have space to plant and feed our families.

Culture

9. When we relocated to our new home where we are living now, we relocated together as a Mataqali. The Chief gave instructions for us to relocate and we acted accordingly. When we first moved here, the land was bare. The houses were newly built at that time and of the 11 households on the coast, we were able to separate the extended families and fit them into 33 new homes. This was a new arrangement for us, one that we welcomed. The land, however was bare. One of our biggest fears was getting trapped in a landslide should the heavy rains come when we still had not planted any fruit trees and flowers to hold the soil in place. We immediately started planting fruit trees and flowers and were relieved when the grass started to grow. Landslides are common in Fiji because of the type of soil we have here and we knew that if we encountered heavy rains while the land was still bare, we would be at risk of being caught in a landslide.
10. The first night that we moved here was very different for us. It was a new location, one that we were not used to. My aunt went back to the site where our old village was situated the very next morning after our first night in the new village. She could not bear the thought of leaving her parents who were buried in the cemetery on the coast. She went down to the old village and spent the day there crying and talking to her parents. This happened for some time before she was able to accept that we would never be able to bring our ancestors with us to the new village. Many of us had to endure these emotions. We knew relocation to our new village meant we would have to leave our ancestors buried on the coast and to this day, we are still trying to come to terms with that reality. Every so often, we go down to the coast to fish and when we do so, we visit the graves of our ancestors.

Traditional Economies

11. When we relocated to where our village is today, there were quite a few changes in relation to our environment. Initially, when we were living on the coast, we would plant pandanus for weaving mats and other artifacts inland. When we relocated, it was easier for us to access these pandanus plants and weave mats to sell and earn an income. Now that we have relocated inland, harvesting of the pandanus leaves is more frequent as we no longer frequently sell fish to earn an income. This has now resulted in more frequent harvesting of the pandanus leaves.
12. Fishing is an income generating activity that the villagers engage in. When we were still living on the coast, it was easier to go out and fish to feed our families as well as to sell and earn an income. Now that we have relocated inland, we have to walk to the coast to fish and gather shells. This has resulted in a huge change in our diet from fresh fish and shells for protein to eating mostly tinned tuna and 'rourou' as a staple in our diets. Rourou is taro leaves cooked in coconut cream.

Signed by Adi Sivo Yabakitolu

Witness: Brittien Yosef
Lawyer for the Melanesian Spearhead Group

Prepared at Vunidogoloa Village, Cakaudrove, Fiji on 28 February 2024

Our diets now consist primarily of store-bought food and changed significantly since we relocated. I know it is not healthy to consume too much of imported and canned food but we do not really have a choice – the ocean is now not easily accessible and imported goods are brought to our doorsteps in big trucks that come in from Savusavu. The big supermarkets in Savusavu bring imported items for us to purchase. These items are brought to us in big trucks and that come all the way to the village. We have two canteens in the village that also sell canned food and this is always readily available. The canteens are owned by two women in the village. The village is about a two-hour drive from Savusavu which is the nearest main town. It can be costly for us to travel to town to buy household items and food.

Youth

13. Since we relocated here, more than 50 children have been born. We now have a new cemetery located on the hillside near our village. The children who have been born here will never know what life was like for our Mataqali when we were living near the coast. They will now only know life as it is here. Children will no longer have traditional knowledge of fishing methods. We brought with us, songs and parts of our culture and these we intend to preserve and teach our children. However, traditional ways of living near the ocean will not be part of our children's lives as now live inland. Our community is primarily Methodist and we have a strong communal culture related to the Methodist way of life. Vunidogoloa village was the first village to accept missionaries in this Tikina – Tikina Korolau – the Tikina is a grouping that is divided into koros or villages and further divided into different mataqali. That heritage is something that our children will not fully understand and appreciate as they are now living here and not where the missionaries first had contact with our Mataqali. The community is special in that both religious Methodist beliefs and traditional beliefs are important parts of our daily lives.
14. There are currently 22 youths in Vunidogoloa who primarily engage in farming. Our children have access to the Nabua Primary School, Navatu Secondary School and Vaturova Koroalau High School which is situated further inland. However, the majority of our youths are engaged in farming activities to sustain families as well as make an income. We rely on the land for food.

Signed: _____

Adi Sivo Yabakitolu

Witness: _____

Brittien Yosef
Lawyer, Melanesian Spearhead Group

Date: 28 February 2024

Exhibit 8

I, Sailosi Ramatu, from Vunidogoloa Village, Cakaudrove, Fiji, solemnly affirm and declare:

Background:

1. My name is Sailosi Ramatu, and I am 64 years old. I was born in Vunidogoloa Village, in Cakaudrove, Fiji.

2. I now reside in Kenani Village which is 1.5km from Vunidogoloa Village which was the old village. I relocated to Kenani on the 16th of January 2014 because of the rising sea levels that drowned the original site of our village.

3. I was the former headman of Vunidogoloa Village and have been the headman for 23 years. I was the headman when the village was relocated to its new site 1.5km away from the old site in 2014.

4. I am a Fiji national, and I provide a statement to the International Court of Justice on the impacts we have faced because of sea level rise on our village which has had to be relocated.

5. My testimony is based on direct knowledge, the experiences that I have gone through and the knowledge that has been passed on to me from my ancestors.

6. I speak English, and I have given my testimony in English. This written statement has been read back to me in its entirety in English. I have confirmed that the content of the statement is accurate.

7. This statement uses italics words in my local language – Vosa Vakaviti (Fijian)

8. I have lived in Vunidogoloa village all my life until 2014 when we had to relocate.

9. Vunidogoloa village is a coastal village in the district of Korolau in the Cakaudrove province. There were 136 people living in 16 houses in the village. On 16th January 2014 all 136 people moved to Kenani village.

Sea level rise and floods:

10. I was brought up in a home close to the river in Vunidogoloa Village.

11. My wife and I have 3 children, a son and two daughters, and I raised our family in the same place until we were forced to move our village.

12. If you go there today, you can just see my foundation, the post of my home. The slabs of my washroom, everything has been washed away.

Signed by Sailosi Ramatu

Witness: Brittien Yosef
Lawyer for the Melanesian Spearhead Group

Prepared at Kenani Village, Cakaudrove, Fiji on 28 February 2024

13. This made me feel very sad because we were forced to move from our relatives and ancestors because we believe our relationship with our ancestors still carries on. The land we lived on was passed on to me traditionally from my parents and grandparents. We have records that people were living in that land since 1928 but people have been living there much earlier than that.

14. When I was growing up, I saw sea level rise and come inland with my own eyes. I was10 years old when I remember seeing the effects of sea level rise in my village because we started losing our food, and more and more of the land began to be washed away.

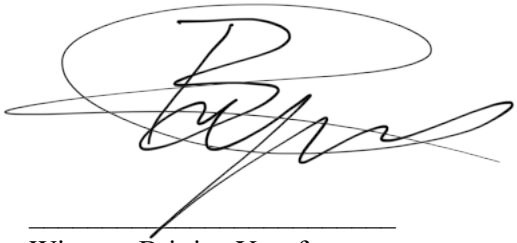
15. Because of the sea level rise, we started building the first sea wall in 1978 to protect our land. It did not take long for the first sea wall to collapse because when the water would come in it would wash away all the soil that was beneath the sea wall and it would fall because of that. In 1996, we built a second sea wall. The same happened with this sea wall. Both the sea walls could not protect us.

16. Sea level rise has been a reality for us about 50 years. The sea water would come into our homes during high tides and when there would be even more water coming in when there is a full moon. The water would come right up to our knees. The whole village has been drowned.

17. At night when we were sleeping, we could hear the water coming into our house. My wife and I would move our two little children to one corner and wait for the flood to come. Sometimes we moved away from our home entirely. We would climb up a hill and live there until morning when the water would go down and then come back home again.

18. It took us a long time to make the decision to relocate. Some of our elders did not want to relocate because they did not want to leave the land they were born in and they thought they would move to a foreign land if they had to relocate. It was a very big decision and a very hard decision for me to make.

19. Because of the hardship we faced in the old village site due to the floods, and the cyclones and the risks our children faced we decided to rename our village to Kenani – which is Cannan in the Holy Bible. For us it was like coming out of slavery, from a place of danger to a place of safety. This name was decided by the members of the community.



Signed by Sailosi Ramatu

Witness: Brittien Yosef
Lawyer for the Melanesian Spearhead Group

Prepared at Kenani Village, Cakaudrove, Fiji on 28 February 2024

The connection to the *Vanua* (land).

20. The *Vanua* is the land. I was created from the Vanua and am part of the Vanua. This way we are strongly connected. The Vanua is our identity because we are registered under it. It is like our mother. It gives us everything**. When we die, we become one with the Vanua again. Our ancestors who have passed away are already part of the Vanua.** When the land is destroyed and washed away by the sea water coming in, it is like killing us. Because of this, we have had to move from our land to a foreign land.

21. When we left the old village, we had to break our link with the land and the environment and our ancestors. The day we were relocating was a sad day for us. The people on that day were very emotional and we could hear the cries of the people. I had not experienced mourning until that day and the day we left the village it was the day I felt even more loss than losing a loved one.

22. We used a truck to move our things to the new village site. The truck drove up a small hill and got stuck. The driver of the truck was surprised that the truck could not make it up such a small hill and he was confused. In my mind, I knew what was happening. I was looking back at the old village and at that moment the link with our *Vanua* came to my mind. We were leaving our ancestors behind! I jumped out and called out to our ancestors, "We are going for a better place for our future generation. Please let us go. Our heart will always stay with you." After that the truck was easily able to climb that hill.

23. I miss the old village very much. My parents and grandparents are there. It's difficult for me to express how it feels to come away from them. Many times, I still walk back and when I visit my old home, I feel that the whole house is still occupied. I can still feel the connection with the old village. We all feel it inside. If we go fishing at night, if we go to the sea, we used to live next to, we can hear some people talking. And we can feel our ancestors are still there.

Importance of Yam and the *Dalo* (Taro) and the impact on it from sea level rise

24. The yam is the most important root crop in our culture. There is a special time when we plant the yam and when we harvest it. It is only used for two purposes. One, is to present to the chief in the month of March every year to thank the Vanua and it was a sign that the land is now matured. The second use of the yam is to present to God by bringing the yam to the church to thank God for giving the harvest, and to thank him for blessing us with the Vanua.

Sailosi Ramatu
Signed by Sailosi Ramatu

Witness: Brittien Yosef
Lawyer for the Melanesian Spearhead Group

Prepared at Kenani Village, Cakaudrove, Fiji on 28 February 2024

25. We have seen big changes in the harvest of the yam. Before planting the yam, we need to clear the land and prepare the land properly. We need good weather for this in order to this. Now it is very difficult to prepare the land because there is too much rain. Even with the size of the yams that we would get has changed a lot. Our parents would get yams that were very big but now the size of the yams is decreasing every time we harvest.

26. Now when we present the yam to the chief and God, we feel sad because how can we present a small yam to the chief and to our God who has given us everything.

27. *Dalo* is the other main root-crop that is grown in the village and used commonly in our cultural practices. Men are required to take *dalos* to present themselves and their communities to the chiefs. *Dalo* is presented in the funerals of our relatives. When feasting with the chief, *dalo* should be there.

28. When we visit somewhere we give *dalo* as a gift. It is very important for us. But because of the unstable weather with too much rain and too much sun the dalo is being affected. We do not get as much *dalo* as before and they are even smaller now.

29. Now when we go to a funeral, with 20 to 30 men we can only take three bundles of *dalo* which are small in size. Normally a group of that many men would take one or two bundles of dalo each to the chief. Now we sometimes we go empty handed. This makes us ask a lot of questions about why this is happening when we have been planting on the same land for so many years.

30. In the I-taukei (Indigenous Fijian) protocol it is an unheard-of behaviour to go to the chief empty-handed or go to a ceremony with nothing to present. We cannot do this. It has become difficult to maintain our traditions with the *dalo.*

31. For the men, this was a source of pride when they would go and present a lot of *dalo*. But now we cannot do this and this is affecting our ceremonies. We feel shy to go to the chief with the small bundles. Now we have to take breadfruit to present to the chiefs instead which is not very nice.

Impact of sea-level rise and cyclones on churches:

32. Churches are very important to our social life. It teaches us that there is a living God and if it weren't for his power and wisdom we would not be here. The church is where we take our families, our children to God and worship. God's word is spoken in the church.

Sailosi Ramatu

Signed by Sailosi Ramatu

Witness: Brittien Yosef
Lawyer for the Melanesian Spearhead Group

Prepared at Kenani Village, Cakaudrove, Fiji on 28 February 2024

33. In our old village we rebuilt our church three times. During a cyclone, the first church as destroyed. The land became weak because of the water coming in and this made it easy for the church to fall. The same happened with the other two churches as the cyclones and strong winds became worse and worse.

34. We have had stronger cyclones and strong winds since Cyclone Kina and we have noticed that each cyclone after it has become stronger.

35. When the cyclone comes, it takes away the church. It's like taking God away from us.

36. We have a temporary church right now in the new village and we are trying to build a proper one again. To have a church signifies to us there is God and He is the head. If there is no church, it's just like the body is here and we don't have the head. The church should be the head of everything and should be in the village.

Message to the International Court of Justice

37. I have said this from the beginning and I'm still saying it now; if only people could come together, and the leaders could listen to the most impacted people in this world. We can stop this devastation if only they listen. Great leaders, we are struggling, what is going to happen? We are about to die, what is going to happen? Will you listen to us?

38. Will this Court advise them to listen to us? To hear about what we are facing. We are facing the problems of the things they create. They are bigger countries; we are smaller countries. We are drowning but they are still floating.

Signed by Sailosi Ramatu

Witness: Brittien Yosef
Lawyer for the Melanesian Spearhead Group

Prepared at Kenani Village, Cakaudrove, Fiji on 28 February 2024

Exhibit 9

I, Jean-Yves Poedi, from Ajie Arho, New Caledonia, solemnly affirm and declare:

Background

1. My name is Jean-Yves Poedi. I am 67 years old. I am from the Ajie Arho customary area, which is in the middle of the country.

2. I am considered a French national because France administers New Caledonia as a non-self-governing territory. But really, I am a Kanak and the true name of my homeland is Kanaky, not New Caledonia.

3. I am a member of the Kanak Customary Senate, which is a body comprised of representatives of each of the eight customary areas of Kanaky. The Kanak Customary Senate takes decisions and offers advice on all matters related to Kanak identity and custom. I am the referent for the Customary Senate for everything related to the sea. This means I provide knowledge, expertise, and advice to inform the Customary Senate's activities and decisions with respect to the sea.

4. I provide a statement to the International Court of Justice on changes to the ocean environment and its species, and the impacts of those changes on Kanak custom and well-being.

5. My testimony is based on my direct knowledge, my knowledge based on custom which has been passed down to me from my parents, grandparents, great-grandparents, and ancestors. I also base my testimony on my role as a member of the Kanak Customary Senate, particularly as an expert on the seas.

6. I speak Ajie as my local language. I also speak French, which is the official language of New Caledonia. I was interviewed for my testimony in French.

7. I have been informed that the transcript of my interview was translated in its entirety to English and has been turned into this statement, which is in English. This statement was read to me in French by a translator, Magalie TINGAL, and I confirm that the contents are accurate.

Kanak Social Organization

8. In the Kanak world, there are clans of the sea and clans of the mountains. Within each clan there are the chiefs and the chiefdom—the area over which the clan has guardianship. The sea clans have guardianship over the coast and the sea, and the mountain clans have guardianship over the inlands and forests. We do not say we are "owners" in the Western sense. We are guardians and are responsible for caring for the lands and the seas.

9. The sea clans and the mountain clans engage with each other through exchanges. For example, if someone from a mountain clan wanted to eat fish, he wouldn't go fish from

Hoimbwom Dein President Ajie Arho area

the sea, because that is within the sea clan's guardianship. Instead, he would perform custom and make an exchange of resources from his area with the sea clan.

10. Through these exchanges, the link between mountains and sea is maintained, and this contributes to the cohesion of the group. There is no individualism in the Kanak world. It doesn't exist. This means I don't make an exchange for myself personally, it is for my clan. And likewise, the different clans are themselves part of an interconnected whole, each with responsibility for the areas for which they serve as guardians.

11. I am part of a sea clan, and so our responsibility is to the sea. This means ensuring a balance—harvesting what we need but ensuring the ecosystem's ability to rebuild its health. For example, there have been many times when I've caught good fish, but I've opened the net and released them, because I caught more than what I need.

12. Our responsibility is also about how we consume. For example, when we catch a fish, Kanak people eat the whole thing, down to the bones. We throw away the scales but we consume everything else. The Westerner, not to say the French, he is going to take the filets and throw away everything else. In Kanak custom, this is forbidden. If you throw away three fish heads, you are throwing away someone else's meal. Multiply that by the number of fish you take in a year, and the waste is huge, it's starving to death.

13. This careful balance of sea resources is disturbed because the territorial government sets quotas for fishing based on the provinces. And we have never been consulted on this. Not once.

Disappearance of Fish and Crustaceans

14. As a guardian of the sea, I know that environment intimately. I am part of the sea, and it is part of me. I've seen that the sea has grown increasingly disturbed in recent years. What I personally see the most is the disappearance of elements from the upper ocean, including the disappearance of fish and shellfish near the coast. This hurts me because these species make up my Kanak world and are part of my existence.

15. These species have disappeared because of the higher temperature. The ocean has become too hot and they can't tolerate it. There is also the impact of the French nickel mines. I think this is contributing too. It's the two combined. For example, up North there is no mine and the species are still there. But we've had the mine for many years, and it is only in the past few years, as the ocean temperature has gotten hotter, that the species have disappeared. So, I think it is the combination of both the mine pollution and rising temperatures that has caused the extinctions.

16. We have names for the species in my language. But the names in French do not exist. The French vision of the environment and the environment here are not the same. My language is oral, so it doesn't work to write the name either. But ever since these species have disappeared, I still try my best to hold onto them in my head. The best I can do is to

Joinhuun Reit President Ajie Aro Area

draw them. For example, we had a crustacean that would clean the sand. Now it doesn't exist anymore, but I can draw what it looks like and its role in the sand.

17. This specific crustacean, as I said, there is no specific translation, but if you wanted to describe it in French you could call it a crab-turtle. It's neither a crab nor a turtle, but it is a mixture of the two and it is as big as my fingernail. Its role is to clean the sand. In the east of the country, where there is less mining, their shores are still clean. But in my area the shores are full of the detritus from the mines. The crab-turtle used to burrow 10 cm down into the sand and clean away all the detritus from the French nickel mining. It's not there now. It doesn't exist anymore. So when you scrape the sand, you find the mining detritus there. The crab-turtle used to clean this, but now that it is gone, the mining detritus stays.

18. Other species that kept our environment clean have gone too. For example, there was a species on the reef. Its name is too complicated to write. It is not a snake, but kind of like one. It is a long creature, about 60 cm long, with thousands of legs. It had its work on the reef. It used to clean the reef and keep it healthy. It was always lying down on the reef. It's disappeared too. It no longer exists. It has been gone for three years.

19. Another species that has disappeared is a hairy crab. It is a crab that is all covered with fur. It's been gone for the past two or three years too.

20. The fish and crustaceans that have disappeared are part of the genealogy that we make in my customary area. Our genealogy is who we are.

21. Reciting the genealogy is at the core of Kanak life. We recite the genealogy at the three most important moments of Kanak life: birth, customary marriage, and death. We recite a person's genealogy going back through the generations, including links to the ancestors and to different clans through marriage. And when we do that ,we also talk about the environments of each of our forebears, including each of the species in the environment, because that is part of who they are and who we are. These species are our family and our ancestors too. The genealogy ties each Kanak to their responsibilities, and down below the sea, this responsibility is to ensure the balance between the harvest, being able to feed themselves, and the environment being able to regenerate.

22. The genealogy we recite also tells of the path of the dead. On the day we die, our soul goes back down to the seabed and joins what we call underwater worlds, which exist on the Sea Mounds. These underwater mountains are the representation of our mountains here on earth. It is a world of silence and tranquility. This is where the souls of our dead, our ancestors, rest and come to comfort. The area is considered sacred and is tabu (taboo). It must remain silent and quiet because it is where our ancestors are sleeping. It's a world of silence. A world of darkness. Don't touch it.

23. Now that the species have disappeared, there is a link missing in the genealogy. The genealogy is incomplete. Part of who we are is gone.

Jean-Yves Poedi President Ajie Aro area

24. It is important that we try to say the names of the disappeared species and preserve the knowledge. It's all we can do. But the new generations will never know these species because they are gone. The link is missing. The genealogy is broken.

25. The repercussions of the loss are broader than the loss of the species themselves. We Kanak live in the world, and we know how nature works. It is a delicate balance. This one species is here because it depends on that one, which depends on another. The food chain, for example. When we have one link in the chain that disappears, it has repercussions for everything else. We have species that have disappeared. That disturbs their predators. That disturbs all other elements of the world that interacted with them. The whole is disturbed.

26. The biodiversity around us creates our world and is also how we understand the world. Now that these species have disappeared, we aren't talking about them anymore, and we are losing that knowledge. We are losing part of our world, our Kanak vision.

27. Our culture has already been damaged severely by French colonialism. We are working hard to revitalize the culture and to build a basket of Kanak culture and Kanak vision to bring back to the country. But at the same time, we are losing elements of cultural importance like these fish and these crustaceans. So it is difficult to fill the basket and carry our culture forward.

28. The entire culture is in danger of collapsing and disappearing as a result of the loss of these species. We've lost these culturally important fish and crustaceans, so their names are no longer mentioned in the genealogy. This damages the whole genealogy, going back to our first ancestor, the Shark.

The Shark Totem

29. I am from a sea clan and my totem is the Shark. Some knowledge is too sacred to share, so I can't tell you everything that it means to have a totem, but I can describe it generally. The totem is an ancestor who acts as a guardian for us. The ancestor of my clan is the Shark. Some other sea clans also have the Shark as their totem, but yet other sea clans have different totems. There is also the Whale, the Turtle, and the Sea Snake. The totems of the mountain clans are different.

30. The Shark is our totem because he was our first ancestor.

31. By the way, when I say "Shark" you have to let go of your Western way of thinking and think like a Kanak. You can't separate one element from another or one individual shark or species of shark from another. It's holistic. It's a whole package.

32. For us, the Shark is the guardian. The Shark is a guide and a protector. The Shark is the one who, when we leave in the boats at night, makes a small light into the sea water and shows us the way to avoid going on the reef. The Shark also has a song to guide us, like the song of a bird. It's like a bird that sings at night and has a peculiar sound. And that's

President Ajie Arho
area

the sound we listen for, to navigate safely. When there is bad weather, the Shark puts itself under the boat and it is upon the Shark that the boat rests and stays safe.

33. The Shark also brings us fish. When we fish from shore, we see the fish come closer to shore, and it is because the Shark is ushering them from the other side over there to make them come to shore.

34. The Shark brings us news too. When something bad arrives in the tribe, or the family, and you are out at sea, the Shark comes and lets you know. To be honest, I didn't believe this, until I saw it with my own eyes. I was out at sea on my boat and the Shark came to me, and when I got back to land, it was my cousin who had died.

35. In the past, prior generations, each harvest season, we used to offer the first Yam to the Shark before consuming any ourselves. We don't do it anymore because of the influences of the French: of Christianity and modernity. But as I mentioned, we are in the process of coming back to it. We are doing what we can to reclaim our ways of being.

36. In recent years, we've been seeing Sharks less and less. This is because the ocean conditions are changing and the fish are moving away to find a better environment, and the Sharks follow the fish. Like I was saying before, when humans disturb the environment, disturb biodiversity, we disturb everything else, because each element depends on the other, which depends on the other. All the elements—us, the Shark, the fish, the trees, the air—are part of one whole. One type of harm ripples out and affects everything else.

37. It's a part of Kanak culture that is in danger of disappearing as well. The Shark disappears and so does everything else. It's all connected.

The Seasonal Calendar and the Yam

38. It's all connected. The sea and the land too. For instance, the Whales and the Yam.

39. There are many types of Yam. The women plant the Yam that we eat every day, to feed the family. Our staple food. The men plant the Yam that we use for ceremonies. We have to have Yam to perform our customs. Yam is part of us. It's our family. It's a relationship.

40. The Whales come here seasonally, and when they go home, they pass by us and tell us it is time to plant the Yam. There is a big channel in front of Wa Wi luu where the Whale comes in at the foot of the sea, runs along the entire seaside to get to the south of the country. This is the Whale corridor. And when the Whale passes by, that's when we know it is time to start preparing our Yam fields. It's a bridge of our culture. There's a whole history, a whole genealogy that goes behind.

41. The Whale also helps the Yam to grow. After the fields have been prepared, we put in supports and poles to help the vines of the Yam grow. The supports help the vines climb

Hoinhuu Boat President Ajie Arho area

up and reach the poles, and then they continue to grow along the pole, big and strong. The wind comes from the sea, and it is said that this is the breath of the Whale that helps to make the vines climb. It's a warm wind that we called Kuruö and it blows from the sea. It is in November when this wind blows. When I am in my field I can smell it. When there is a child who is born at this time it is said he will grow up quickly because he is brought in by the Whale.

42. The Yam grows until the time that the vine dries. At that time, the chief clan of the sea is going to dig up the first new Yam of the season. He is going to grill it over the fire, and he is going to go and make an offering to his totem at the edge of the sea. There are very specific places for making the offering. And once he's done that, he will eat new Yam, and then the whole tribe can eat it.

43. This is a big ceremony. It is the beginning of our year. It is the time when everything opens up. It is symbolized by the new Yam. And if we want there to be new life, new beginnings, it is necessary to start by consuming a new Yam because it is a strong symbol. This is also to pay respect to the environment, respect to the land, respect to the sea and the whale corridor, and respect to the sweat of the people who labored to produce the Yam. We pay respect to all of these interrelated elements that come together to make life.

44. The first Yam we eat, we must cook with the skin on. After that, we can cook it any way that we want, but the first one we have to keep the skin on. The skin is very thin. We respect very much this skin of the Yam, which was in contact with the soil—with the motherland, our motherland.

45. In this country, those in the South start to harvest first and then it moves slowly up to the North. So the clans in the far South harvest at the end of February, for us in the center, we harvest in March, and so on. In the far North they traditionally harvest as late as Easter weekend.

46. The temporality, the time of the Yam, it is well defined. It is the calendar of our Kanak life. But things are changing. The calendar has been disturbed. I've been growing Yam my whole life and I've always planted according to our calendar, just like my ancestors before me. After we plant the Yam, it is supposed to get cold. That's how it has always been and that's what the Yam needs to grow. But in the past few years, it has been hot when it is supposed to be cold. It stays too hot for too long, too late in the season. As we move forward in time, the discrepancy between what is supposed to be and what is happening is growing more and more noticeable.

47. This has a consequence for the Yam, and for all other things that grow. For the past few years, I've noticed that instead of one stem sticking out, the Yam produces many stems. This is a survival mechanism of the Yam. The Yam is unwell because it is too hot. If it is feeling good, the plant will give what you ask of it—one big strong yam, or two at the most, from each plant. But if it doesn't feel well, it will try to get out several little Yams to save itself. When you see there are lots of stems around the Yam, there is something

President Ajie Arho area
Moimbaou Rezia

wrong. It's a survival version. That's what we've been seeing for the past few years. Because the yams are struggling, the tubers we are getting are shrinking. They are much smaller and less healthy. They are struggling to survive.

Environmental Change Undermines Cultural Revitalization Efforts

48. We've been working to reclaim our culture, which has been so damaged by the French influence. I started this work, specifically with respect to restoring a Kanak cultural vision of the ocean, two years ago.

49. We're only at the beginning. They've only just recognized it at the government level and we are learning to change things little by little. What we want is to have the Kanak cultural vision enshrined in the law of the country, so that the Kanak people are able to make decisions about our oceans.

50. I began this work because I saw there was an absence, precisely, of the Kanak cultural vision in the management of the Coral Sea National Park. I initiated an effort to have the Kanak approach integrated into management of the park, because I realized we've become consultative in our own country. We have no real agency over our own environment. It feels as if we are strangers in our own country. We are transparent in our own country; we aren't seen anymore. We are subjugated by those who just arrived yesterday (the French). This disturbs me.

51. We are often not consulted at all by the territorial government, even on matters that greatly impact us. For example, the south province and Noumea council is currently catching and killing Sharks near Noumea, nor any of the sea clan were were not even consulted at all, although the Shark is our totem and our ancestor. Killing Sharks is a tabu (taboo). It is forbidden. In the Kanak custom, when we say that it is forbidden, everyone is supposed to listen. But the French? No. They have their own way of doing things which disturbs everything.

52. In the West, they see a separation between man and the environment. In the Kanak world, there is no space. We are all of these things. We are them. We are one of the elements that make up the environment. We are the Sharks, we are the trees, we are the stones, we are all that. There is no space, so when we disturb or hurt the environment, we hurt ourselves. That's how it is. That's the Kanak philosophy.

53. But the French don't see that. They are putting up nets, ripping man apart from the rest. If there is a problem, they will always blame the Shark, but are never self-critical and can't see the impacts of humans in the marine environment. They think themselves superior.

54. So the goal is to change things and to have the Kanak cultural vision to apply to everyone here, not just the Kanaks, but everyone who inhabits this country. To change the link among men and ocean.

Marimburu Reid President Ajie Arho area

55. This work is all volunteer work. I am not paid for what I do. There has been talk of getting funding from an international conservation group to support this work. Of course, France does not support this. Not at all.

56. Climate change is making preservation of our culture more challenging because our culture is the environment. The loss of our species, the harm to our crops, the changes to the weather and the sea, these are harms to the fundamentals of our culture. These changes have been imposed on us. Kanak people are resilient, and we always have been. But this is something new for which the Kanak people are not prepared. It's new and it's hitting us right in the face. We do not interrogating the nature, it is talking to us and we listen to it and indicate to us our role and place in our Kanak world. And we are asked, what is your reaction? What are you doing about it? But how can we answer this question? We have not contributed to this imbalance, so how can we respond to something we did not create?

Signed: Jean-Yves Poedi



Signed: Witness

President Ajie Aro area Koimbuuru REID



Date: 13 March 2024

Exhibit 10

I, Yvon Kona, from Canala, New Caledonia do solemnly affirm and declare:

Background

1. My name is Yvon Kona. I am 66 years old. I am from Canala, New Caledonia.

2. I am a French national because France administers New Caledonia as a non-self-governing territory. But really, I am a Kanak and the true name of my homeland is Kanaky, not New Caledonia.

3. I have lived in Kanaky all of my life, I have 4 children. 3 boys and 1 girl.

4. I am a member of the Kanak Customary Senate, representing my customary area, *Xaracùù*. I have been serving as a senator for the past three years. I was appointed because of my background and cultural knowledge. I have held several positions in the cultural field.

5. I've done a lot of work at the Tjibaou Cultural Center here in Noumea, working on the collection and protection of cultural knowledge. I was also involved in the independence movement in the 1980s. I worked with those leaders who were assassinated by the French and I was there during the events when those assassinations occurred

6. All of this experience has led me here to today. I know where we came from and where we want to go. That's what motivates me.

7. I provide a statement to the International Court of Justice on changes to the environment and their impacts on agriculture and customs in Kanaky.

8. My testimony is based on my direct knowledge and my knowledge based on customs, which has been passed down to me from my parents, grandparents, great-grandparents, and ancestors.

9. I speak *Xaracùù* which is my language. I also speak French which is the official language of New Caledonia. I was interviewed for my testimony in French.

10. I have been informed that the transcript of my interview in French was translated in its entirety to English and has been turned into this statement, which is in English. This statement was read to me in French by a translator, Magalie TINGAL, and I confirm that the contents are accurate.

My culture and the impacts of French colonization

11. I am from the Xaracùù customary area. This means "our fingers harvest the Yam" in my language. In my area there are six villages: Boulouparis, Thio, Canala, Kouaoua, Sarramea, and Farino There are four spoken languages. The dominant one is *Xaracuu* and another one of the four is close to disappearing which is Xavea.

Special Advisor Ajie Aoh area
Fouye Marie-Therese

12. Our origins, our history, and our identity are found in our genealogy. The genealogy is an oral recitation of all of our past clans from the origin of our people to the present. An elder stands on a wooden stage and recites the genealogy, and at the end he shouts the names belonging to the clan today. And if you don't hear your name, you know you are not from this place.

13. The genealogy includes not only the names of people, but of the places where they have been. Through the genealogy you can understand if you came from here originally, or from another place, because it recites our entire history. Before colonization, Kanak people here on the mainland used to travel a lot throughout the entire country, across the customary areas. We were moving with the seasons, to where the weather was good and where food and other resources were abundant at different times of the year. But colonization stopped that. People were made to stay put and settle in a fixed place. The genealogy recites the whole history so we can understand how our ancestors traveled in the past.

14. In my custom, the pine tree represents the man and the coconut tree represents the woman. So, before colonization, when we traveled across the lands, we could always see where people were settled because there would be pine trees there, or coconut trees.

15. French colonization has destroyed all of this. It destroyed the land, cut down the pine trees, erased our place names and replaced them with French names. It has erased our custom from the land. This brings us to the matter of toponymy: the place names that were given by our forefathers. They did not give names for the sake of giving names. Rather, they gave specific names to specific places because there is a whole story behind each name. And what did colonization do? It cut down the pine trees. It cut down the coconut trees. It erased the place names.

16. Today, we are doing a lot of work to reconcile all of this loss. For example, we are trying to restore the original place names. But these efforts to hang onto and restore our custom are made difficult by the changing environment and climate change.

Changes to the weather

17. As I said, I am from Canala, and within Canala I belong to a small tribe called the *Cayou*, which means "rock." There are only about 300 people in my tribe. We live inland, in a remote area. We are different from coastal people, living near the sea. We live in a valley right under the Mountain. Most of our people are not employed, we can count on fingers the number of people who have jobs. Mostly, we maintain a subsistence lifestyle, growing food and living with the land.

18. Like most communities living inland, we also live next to a river. We garden near the river because this is where the land is the most fertile.

19. We are really affected by environmental changes, especially flooding. When people think of the impacts of climate change, they always think of the ocean and coastal areas. But we experience it here in the valley, too.

20. There are traditionally only two seasons here: a hot season and a wet season. But in recent times it has been raining throughout the year. For example, last year we had a lot of rain throughout the whole year. Too much rain. This change has been especially noticeable during the last four or five years or so.

21. Before, there was a rainy season from July to January. But now, it rains all year. It's too much rain and this causes floods. The river floods and destroys our gardens. And now, every time there is a flood, we also get a landslide. The Mountain is collapsing.

22. As a result of the flooding and the landslides, our gardens near the river are destroyed and the arable land is disappearing. We still have gardens that are able to grow further up away from the river, but we have to think about what to do, because we can see that things will only get worse over the next 10, 20, 30 years.

Landslides

23. The landslides began about four or five years ago, when the rain became too much, and they have been getting worse and worse.

24. The Mountain was already weak because of the exploitation done by the French—the mining operations and the logging. They have been polluting our area for a long time and making the Mountain weaker. And today we experience the consequences. Now, with all of this rain, it is no wonder that the Mountain has collapsed. It's global warming, but it is also the French exploitation mining and forestation. Our people experience the consequences, but nobody is talking about us.

25. The Mountains are sacred. They are tabu. The Mountains contain medicines, totems, and one of the element is some powerful stones that connect us to the cosmos.

26. When we inland people die, the Mountains are the place where their spirits go. They are the resting place of our ancestors. We have two speeches that are made when people die in this country, to send them on their way to their resting place. The spirits of people near the sea go to the Sea Mounds to rest, and the spirits of inland people go to the Mountains. For us inland people, the Mountains are our cemetery, our resting place. But they are connected to the Sea Mounds. It is all linked. The Sea Mounds are tied to the Mountains, and so our spirits are connected too.

27. The spirits in the Mountains have a pathway to the Sea Mounds, a way for them to go into the ocean. They leap from specific, known sites in the Mountains. We have local names for these sacred places. From those spots the spirits are able to plunge into the depths of the ocean and reach the underwater land, the graveyard. So the spirits of all Kanak, both inland and sea, are connected.

Special advisor Ajie Archo area
Fouyé Marie-Thérèse

28. In spite of this, without considering it at all, the French stripped the Mountains. Mined them for nickel and removed the trees for logging. And now, the injured Mountains are vulnerable. They are collapsing because of all the rain we've been experiencing.

29. The landslides are also impacting the river a lot. We can no longer find any eel, prawns, or fish in the river. We used to eat these and can no longer.

30. Like the Mountain, the river was already weakened by French exploitation forestation. It used to curve and bend. It used to be cool and refreshing. There was a current. The French altered the natural character of the river. They forced the river to run straight.

Impacts of Changing Weather on Custom Crops

31. In our custom, Yam is man and Taro is woman. We need these crops to perform our custom—especially Yam. All of this rain is not good for the Yam and it isn't good for the Taro either.

32. In our belief, the Yam originated in Vanuatu. It came to Kanaky with our first ancestors. They came to the shores here with some very old Yam, and they planted it. That's how our people first started living in this country: with the Yam.

33. Yam is a national identity. It is used in all of our customs: In our custom marriages, for funerals, for births, for selecting and appointing leaders. You can't conceive of these ceremonies without the Yam. You must have Yam to perform these ceremonies. Otherwise, they don't make sense. They aren't real. This is why all of these ceremonies take place during the Yam harvesting season. Because you can't have the ceremonies unless you have Yam.

34. The Yam needs to be planted in a dry place and needs dry conditions in order to grow. For the past four or five years, it has been too wet and the Yam has not been able to grow in my area. It has become rotten.

35. For example, last year, we had too much rain and too much flooding. Most of the Yam that had been planted rotted, and we could not harvest enough Yam to perform our custom ceremonies.

36. Taro is also one of our most important crops. For inland people, whereas Yam is man, Taro is woman. We only eat the tuber of the Yam, but the Taro we can eat every part of it—the tuber, the stem, the leaves. Taro grows in damp places. It needs water to grow. It is our staple. We depend upon Taro for life. So we say Taro is woman because women are essential to life. If there are no women, we simply eat, we consume ourselves, we don't exist. Taro is life, plain and simple. In this way, it can be said that Taro is even more important than Yam.

37. Our Taro is failing. We plant it near the river because it needs the damp, watery area to grow. But because of all the rain, the river is flooding and destroying the Taro. It is too wet now, and the Taro is rotting. We plant but then we have to abandon the gardens because they are ruined.

Impacts on Custom Ceremonies

38. As I explained, we need Yam and Taro to perform all of our custom ceremonies, especially Yam. Because we no longer have enough Yam or Taro to perform the ceremonies, we make do with what we have. We replace Yam with foods we have purchased, like rice and sugar. But the ceremony doesn't make sense with purchased food.

39. An important part of the ceremony is the discourse, the speech, that describes our relationship to the Yam. When we use purchased food, the sense is gone. The spirit is gone. The relationship is gone. It feels despicable. It isn't right.

40. The ceremonial speech is itself a discourse on the state of the Yam, a way to explain our practices to the next generation. For example, that we are going to cut the head off the Yam and replant for next year, to have in the future. That we keep the rest to eat. So, when we are forced to replace the Yam with purchased food, the speech no longer makes sense and no longer fulfills its purpose. We still do the speech, but it doesn't make sense.

41. Now, because of the changes in the weather, we are left with money, with sugar, with rice, instead of our customs. We lose our traditions.

42. It makes me sad. I am thinking more about my grandchildren. How are they going to deal with climate change? I am trying to think of ways to preserve the culture for them. But we are up against a wall right now. It is hard to think of possibilities.

Signed Yvon Kona

Signed : witness

Date 13 march 2024

Exhibit 11

I, Francois Neudjen, from Ouvea, Loyalty Islands, New Caledonia, solemnly affirm and declare:

Background

1. My name is Francois Neudjen. I am 62 years old. I am from Ouvea, which is the northernmost of the three Loyalty Islands of New Caledonia. Ouvea is part of the Iaai customary area.

2. I am a French national because France administers New Caledonia as a non-self-governing territory. But really, I am a Kanak, an indigenous person of my homeland. Although my homeland is called "New Caledonia," this is not its true name. This is the name placed on the land by the French. The Kanak people call our islands Kanaky, which shows how the people and the land are one, and how the land makes us who we are.

3. I provide a statement to the International Court of Justice on changes to the environment and their impacts on custom, crops, water supply, and forced relocation.

4. My testimony is based on my direct knowledge and my knowledge based on custom which has been passed down to me from my parents, grandparents, great-grandparents, and ancestors. I am a Special Advisor to the Kanak Customary Senate based on my knowledge of Kanak traditions and culture. I also base my statement on this knowledge.

5. I speak *Iaai* as my local language. I also speak French, which is the official language of New Caledonia. I was interviewed for my testimony in French.

6. *Iaai* is the language of the land in Ouvea. It is the language of the first people. The language was created out of the land. It describes the flora and fauna of the place. There is also another language that is spoken in Ouvea, which was brought there by Polynesian visitors from Wallis and Futuna. This happened long before contact with the West. The visitors were welcomed by our ancestors and before too long they started speaking to describe the place: its trees, its creatures, its people, and soon that language took root too. It is called *Faga-Uvéa*. French is a newer language that was foisted on us due to colonialism. French is not a language of the land.

7. I have been informed that the transcript of my interview was translated in its entirety to English and has been turned into this statement, which is in English. This statement was read to me in French by a translator, Magalie TINGAL, and I confirm that the contents are accurate.

Customary Senate

8. Since 1998, the Kanak people have operated the Kanak Customary Senate. It is a country-wide body that provides a measure of Kanak self-governance within the French colonial occupation.

9. The Customary Senate consists of 16 customary senators, two each from the eight customary areas that make up our islands. Within each of the eight areas are families which form clans. The clans are governed by chieftaincies, and the chieftaincies are organised into districts. The senators from each area are emanations representing all of the people, communities, and connections within their area.

10. The Senate serves in an advisory role for the territorial government of New Caledonia with respect to any issue or decision concerning Kanak identity. It is considered a service of the territorial government and is under the authority of the territorial government. The territorial government also has a minister responsible for liaising with the Customary Senate. In this current administration, it is the president of the territorial government himself who occupies this role.

11. Each customary area maintains a customary council, and it is this council that appoints the senators for their area based on a process of mutual consent based on traditional customs. Nominees are selected at the clan level, and then move through the chieftaincy, and then the district, and then to review by the customary council, who makes the final decision by consent of its members.

12. Senators are nominated based on their Kanak values. The Kanak world, like other societies, is based on values. The values allow the world to exist. Knowledge of environment and custom practices is also essential to allowing our world to exist. So, mastery and real knowledge of the Kanak environment is an important criterion in selecting senators. But knowledge alone is not enough. It is also living in a way that embodies the spirit of the Kanak world and Kanak values.

13. The Senate's role is to make sure that Kanak law and governance are maintained—that the laws of the land are recognized as much as possible even inside French authority. The laws of the land are in fact deliberations to make in consideration and recognize in a sovereign way things to be done and that are part of everything that is Kanak identity.

14. The Senate is consulted for advice on various decisions, appointments, and proceedings undertaken by the customary government of each customary area. For example, when a new chief is appointed by a customary council in a given customary area, the senate gives its opinion on that appointment. They discuss it and reach a consensus and then give their opinion. And then the opinion goes back to the customary council concerned.

15. I am the special advisor to the Speaker of the Customary Senate, the Customary Senate itself, and the senators. I advise on all matters related to the Kanak world, Kanak identity, Kanak vision, and Kanak ways of life.

16. For me, I treat this role with immense humility. Me now, at 62 years old, I am comprised of all of those bits and little pieces that have made up my life so far. My life is full of little lives. That's our perception of life, that's the Kanak vision. I grew up, I had experiences, and now it is time for me to give back. What we have taken in life, we have to give it back. For me, the work I do with the Senate is synonymous with that

responsibility. Through this role, I am trying to be of service, to give back what I have been able to store; what I have learned from this life. That's our Kanak value: to have the humility to allow ourselves to learn from life, to be able to see better, and then to recognize our responsibility to give back what we have learned.

17. In the Western vision, you say that you are an "owner" of land. But that is not the Kanak vision. The land fashions us into who we are. And so in life, in practice, in responsibility, we are just guardians of the land. We are not here to stay. We are just passing through this life. During our lives it is our responsibility to care for the lands, which gave us everything that we have and everything that we are. I have incredible humility to have this role as advisor and not only through this role, but in all facets of my life, I try to give back what little knowledge I have gained in this life to the land and to the people.

Realms of Life – Vegetal, Animal, and Mineral

18. Our Kanak world consists of three realms: the vegetal, the animal, and the mineral. Together these three realms complete us and form our existence.

19. The vegetal realm consists of the plants and things that grow. The vegetal realm is the centre of our life because our crop foods are at the centre of our custom. Our year is managed around the vegetal cycle which is yam.

20. The animal realm compliments the vegetal realm. It completes our existence. To have a balanced meal, we need both the fields and the animal kingdom. We have tubers and other crops as the mainstay of our sustenance, and to supplement that we have protein that comes from the animal kingdom. We have pigs and cattle. And when we talk about the animal realm, we have the sea too. All seafood is part of the animal realm. It's really quite simple.

21. The mineral realm is the one that sends us back to the cosmos, to the whole, to the earth, and to creation.

22. In recent years, many, many things have changed. A lot of things have changed and have broken these cycles.

The Vegetal Realm and the Yam

23. The centre of the vegetal realm is the Yam. We say that man is the Yam. The Yam is us. Our lives are entwined. There are other species that are important too, like the Taro. They are important to custom too. But the Yam <u>is custom.</u> That's because it's the one in charge. It manages the year for us.

24. There are many different types of Yam. We have a special one that is endemic to our island called the *Walei* . It is a sweet Yam. All of the Yams travelled by sea to our islands. And when they arrived, they all went onto the island and went into a cave where they made a fire to get warm. And only one yam, the *Walei* decided to go take a bath and

rinse off. He washed all of the salt from the sea off of his body, and that's why he is a sweet Yam and all the others are savoury.

25. I am a Yam farmer. Our calendar is based on the cycle of the Yam. Our year begins in March, which is when we harvest the Yam, because we need cuttings from the harvest to begin the planting cycle. From March to June, it is traditionally too wet to plant, so we harvest for three months and during that time we also perform custom ceremonies. Then, in the beginning of August we plant, and then the Yam spends nine months growing in the ground—just like a baby! Come March, we harvest again, and the cycle continues. It's nine months in the ground and three months of harvesting and preparing for the next planting. That's the cycle of the Yam, and it is also the cycle of our year, of our lives.

26. The Yam is part of all of our important ceremonies, so the Yam cycle also dictates when we perform these ceremonies. For example, weddings take place from March to August because that is when we have plenty of fresh Yams. When it comes to August, weddings are over because it is time to move on. We switch to planting the crops.

27. The predictable seasons and the weather are what have always allowed the Yam to grow well. The Yam needs a short period of rain to get the vines out, and then after that it needs a lot of sunshine to firm up and grow big and healthy. Because the Yam depends on the predictable temperatures, weather, rain, and seasons, these are all essential factors of our culture.

28. But recently, there has been an upheaval. Something has gone wrong. The seasonal cycle has been disrupted. We haven't been able to plant as we should.

29. Normally here we have just two seasons. It's hot, it's cold, and there is a transition period joining the two, during which time it is rainy. But we don't have our given seasons anymore. The temperatures are going up and down. The rain is not coming when it should. For example, even during the hot season, it might rain for two months, and then it's cold for two months. This is not something our bodies or our hearts are used to.

30. Due to these changes, our year has been thrown off. Sometimes we can't plant until October because the rain did not come in August like it is supposed to. That makes the harvest late and then we have to plant during the harvest period. We aren't sure when to do things like before. The vegetal cycle is changing. The changes have thrown off our whole way of life.

31. We are also subject to La Nina and El Nino. We always have been. In La Nina years we get more rain and in El Nino years we get more sun. But these have been accentuated recently. We have never experienced La Nina and El Nino like we experience now. The rain is stronger and the heat is stronger. For example, last year it was very, very disturbing. We got rain in this country like we've never seen before. When we get too much rain, the Yams are too small. And when we get a lot of sun, we get very few Yams.

Signed: Francois Neudjen Prepared at customary senate, New Caledonia on 13 March 2024 Signed: Witness

member Büä'Ganuhi area
WAKA-CEOU Reibas

32. The changes are shaking things up, which is shaking up our well-being and upsetting our well-being. When the well-being of nature is damaged, so is the well-being of humans. It is making us fragile.

33. We are a civilization that lives by cultivation and gathering. It's vital. A vital need. It's in our genes, in our DNA. We don't see it as a constraint to work hard to plant and harvest Yam. On the contrary, it's the opposite that is disturbing. If you don't plant Yam there is something wrong. You don't feel like a complete man. Something is missing.

The Mineral Realm and the Cosmos

34. As I said before, the mineral realm is about the cosmos. We come from so-called animist beliefs. This allows us to understand the relationship we have with the mineral. We understand that the mineral is synonymous with power. There is power in the stones. For example, there is a certain stone with the power to call for the rain, there is another stone with the power to ensure that plants will grow.

35. Not just anyone can use these powerful stones. A certain clan has the relationship to call on a certain powerful stone. One clan has the relationship with the stone to call on rain for example, and another has the relationship with the stone with the power to help crops grow. So, to be clear, because each clan has a certain power, they also have a role and a responsibility on the level of the society, the clan, the group in which and to which it belongs.

36. These are the beliefs dating back to the beginning of our society. Now, these beliefs coexist with Christianity. Fundamentally, we believe in the spirit—the spirit of the tree, of the stone, of our ancestors—and we honour them. We believe in the beyond, and the afterlife, and a higher power, so this can be mixed with Christianity.

37. But the power of the rocks is broken now. We can't call upon the rain anymore or ensure the plants will grow. There has been a loss. We've lost a lot of the cosmos. The connection is missing. We're disconnected. It isn't harmonious.

38. What was so powerful is that although our grandparents didn't do any science, they knew the power of the cosmos. They received it directly. They could feel it. They could see it. They could smell it. They knew how to read the harmony of nature and understand their world.

39. But our grandfathers could also see that things would change with industry. And now things have changed so much. The weather is unpredictable, the rains don't come, the seasons are disrupted. We can't understand our world and we can't connect with the cosmos. We deplore this lack, but our grandfathers already knew it would happen.

Sea-level Rise

member Paicekemuhi areo
WAKA-CEOU Reibas

40. Ouvea is severely impacted by sea-level rise. I am the coordinator of a strategic plan to address climate change in Ouvea. As coordinator, I have prepared a diagnostic document to understand the impacts that climate change has already had on the island and will continue to have in the future.

41. My island of Ouvea is not large. It is a small island about 50 kilometres. It is getting smaller due to rising seas. 30 years ago, the coastline extended out 30 to 60 metres further than it does now. We've already lost that much land.

42. Sea-level rise is also really impacting the crops on Ouvea. The Taro is really affected. Taro has always been planted because it needs a damp environment and a little bit of salt in the soil. But the sea has risen so much that the saltwater is infiltrating the soil and mixing with the freshwater. The balance needed for cultivation of Taro is thrown off. You might say, the balance sheets of the culture have changed and flipped over into saltiness. The salinity is rising and the Taro is suffering. We've lost a lot of Taro. We have much less Taro now.

43. The loss of the Taro is a huge loss. First, it's the symbolism of the Taro. To make a long story short, when we talk about the Yam, the Taro is always next to it. The Yam is man, and the Taro is woman. We need both. She's part of us.

44. On Ouvea, there are three groups of people: the people in the north, the people in the south, and the people in the centre. The people in the north and the south mostly grow Yam. But the people in the centre mostly grow Taro. This is because the centre of the island is extremely narrow and the sea is on both sides, so the environment is not suitable for Yam. It used to be perfect for Taro because a little bit of salty water in the soil was good, but now as a result of sea-level rise there is too much and the Taro can't grow. The people in the centre don't grow Yam so they use Taro for their custom. They also use Taro for all of their custom exchanges with other communities.

45. The custom exchanges are how we maintain and strengthen relationships between our communities. The villages in the centre trade their Taro for Yam from the villages in the north and the south. When they can't grow Taro, they can't do the custom exchange and the relationship breaks down. It's the same for villages who use Yam for custom exchanges and can't grow enough anymore.

46. Our drinking water supply has also been really affected by sea-level rise. Before, in Ouvea, you could always find fresh water because the geology of the island trapped rainwater easily. Even at the shore you could find freshwater. You would dig in the sand and freshwater would come up. But you can't do that anymore. Over the past 30 years, the water has gotten saltier and saltier, and now there are no more freshwater wells. Things have become unbalanced. The quality and drinkability of the water has been really affected.

47. Water is such a crucial issue that, in the 1990s, we decided to build a saltwater desalination facility to help meet our water needs. We have a unit on each extremity, North and South of the island, and one in the middle.

48. We have enough water now that we have the desalination plant. But more than that, managing water is our way of life. Managing water has always given us our way of life. It is our way of thinking, because water is very precious.

49. Although the desalination plant helps to meet our drinking water needs, it is still an impact. It isn't natural. We used to be self-sufficient, we could get all the water we needed from the island. But now, because of sea-level rise, we have to rely on the plant. And that plant takes energy to run. The energy is provided by Enercal, and the energy it provides, by the way, comes from coal.

50. We've seen the harms of climate change, and we think it is wrong to run a plant on coal. The community of Ouvea has committed to changing the energy source for the desalination plant. So now, the unit in the North of Ouvéa is run on a combination of fossil fuel and coconut oil. And we are trying to switch to completely green fuel. Biofuel.

Forced Relocation

51. As a result of sea-level rise, forced relocation is already a problem. The sea is already causing damage and making it difficult to live in low-lying areas. It's a big problem because three quarters of our population lives by the sea.

52. We are preparing our populations to move. We can move some communities to the interior for a time, but our island is too small. They will have to move to the mainland. We are preparing for that now. This is a big shift in mindset for us, because 10 years ago we thought we would never move. It was inconceivable. We are related to our land, so how could we move? But now, the sea is rising so rapidly we see that we will have no choice but to move. That's the reality. We've accepted it. But our hearts are broken.

53. Each of our communities is run by a customary council. This means it is not only the population that will move but also the customary authority, the custom itself. It's not only the family. It is the whole. But our custom is the land. How will we hold onto our custom when we are not on our land? How will we hold onto our self-governance with our customs? Even if we move to another island, the community there may not accept our chiefly system and our custom.

54. We know that we have to prepare both parties. Not only the people moving, but also the community that is going to receive them. We are thinking about how tolerant the receiving community will be. To accept our custom, and our authority, if we have to move into their land. We are discussing and trying to see what we can do but it is a big challenge.

Signed: François Neudjen Prepared at customary senate, New Caledonia on 13 March 2024 Signed: Witness

member Boici-Cenuhi aroa
WAKA - CEOU Reibas

55. But after all, we were able to open our arms to the coloniser. We didn't want to, but we did. So Kanak people are not going to turn their backs on our brothers and sisters. In our custom we have a way of welcoming people and accepting people. It is the Melanesian way. These are our values. It is the soul of the people that transcends the soul of the individual.

56. But even if we are welcomed, the loss will still be immense. When we lose our land, our life is going to disappear. We are in danger now. Now that we stand to lose them entirely, it makes us even more aware of how precious our custom and values are.

Dual Impacts of Colonisation and Climate Change

57. We've already lost a lot because of colonisation by the French, and climate change is causing additional loss on top of that.

58. A lot of changes were caused by French presence here. The change was inevitable simply because someone else is in our country and on our land. The changes are unavoidable, because before it was just us living our own way of life, but now there is someone else here too. Sometimes there might even be good intentions on the side of the French. But good intention or bad intention, the effects on us of French presence here have been only negative.

59. One of the worst impacts of French colonialism has been nickel mining. I first came out of the loyalty islands to the main island in 1974. At that time the mountains were all green. But now, when you pass by the mountains, you see how the nickel mining has bled them dry. They are red and scratched. They look like they've been flayed.

60. There are other direct consequences too. The mining disturbs the waterways. The waterways are depleted and water is becoming scarce. Certain rivers have completely dried up; have gone extinct. Streams are completely changing their course, changing their beds, simply due to pollution in the streams. This is because of the exploitation of the mines. That's it.

61. They think they are getting richer, but really, they are getting poorer. In the end, because they are destroying nature, they are leaving us all poorer. All of us. Because the decline of nature affects all of us. We all depend on nature. And it isn't like nature hasn't spoken.

62. We are already wounded by colonisation, so climate change is another blow that is landing on an open wound.

63. We know what is causing all of the changes we are experiencing. It's on the other side of the world, but we know what is going on. We know that the major, primary reason for this is excessive industrialization. It's these fumes. They disturb everything. We must point the finger at who is really responsible. And it's not our stoves. It's not the fumes from our cooking pots causing the damage. Who is responsible for the changes? It's the

industrialists and it's the machine that sucks us into this economy. But it is us here in our villages that suffer the consequences.

64. Here in the Kanaky islands, we can say that France is responsible for climate change. We have three nickel factories. We have many cars. That's not our plan. France is responsible for these things, and we didn't have a choice. But it is not only France. Other big countries are also to blame.

65. Here there are two ways of life. The colonial way and the tribal life. We Kanak only have one foot in the modern life. We are still really attached to our cultural life. Although we have three nickel factories here that we are not really happy about, we are forced to live with them. Right now, I am in Noumea and I can see the smoke from the nickel factory. But I can get on a plane and in 30 minutes I'll be in my own village, which is a different way of life. I can sit and listen to the birds and watch the Yam growing.

66. The village way of life is well-organized. The village is a well-organized environment. The people are good. We can see right away when someone comes who has spent too much time breathing the fumes from the city. It happens a lot. It disturbs. He doesn't respect the rules. This is where we see that humans are mutated. It's important to say—the effects, it fundamentally changes the man so much that we notice at the level of behaviour.

67. Here in Noumea, you can see we are being forced towards this extractive economy. But we have people in our village, in our tribe, in our island, who want to live in our own ways. We are already experiencing attacks to our culture from French influence, and climate change is another attack, changing those things that are fundamental to our culture – the weather, the seasons, the temperature, the land itself.

68. Since we experience both ways of life, we know who to blame for the changes and what the causes are.

Message for the Court

69. The Kanak people are still in a struggle for independence from French colonisation. Climate change really affects us here, but because of our colonial status, our voices are not heard on the international stage. The MSG submission is a lifeline for us, which carries our voices onto the international scene. I am thankful that my voice can be heard before the International Court of Justice. When I say this, I think of all the elders who have already done what they have done, who are no longer with us, but who have made it possible for us to have these moments of exchange together. So, I am talking on behalf of all of our ancestors, all of our leaders, who have already gone. I hope that the ICJ hears our voices and understands our struggle. I am going to stop here because I am getting emotional.

Signed: Francois Neudjen

Signed: Francois Neudjen Prepared at customary senate, New Caledonia on 13 March 2024 Signed: Witness

member Pouic Comuhue area
WAKA - CEOU Reibas

Witness member Paici Cemuhi area
WAKA - CEOU Reibas

Date: 13 March 2024



Signed: Francois Neudjen Prepared at customary senate, New Caledonia on 13 March 2024 Signed: Witness

Exhibit 12

We Wethy Boniface, Laeticia Witie, Eric Kapetha, Wethy Frederic, Jean-Claude Genet, and Joseph Weniewa from Ouara Island, New Caledonia, solemly affirm and declare:

Background

1. We are the Ouara Tribe from Ouara Island, New Caledonia

2. Our names are Witie Boniface (70 y.o), Laeticia Wethy (46 y.o), Eric Kapetha (52.y.o), Wethy Frederic (49 y.o), Jean-Claude Genet (71 y.o), and Joseph Weniewa (51 y.o).
3. We have been asked to give testimony to the International Court of Justice about how the weather and environment is changing, and how this impacts our lives and our customs. We gathered together to share our views. We are a tribe and a community. We share a collective identity. We feel it is only right to share our experiences together and we have chosen to give a statement as a group.

4. On the day we gave our testimony, many people from our community had to go to a funeral, but we stayed behind to host MSG and ensure that the community's voice is heard.

5. Our testimony is based on our direct knowledge and our knowledge based on Kastom, which has been passed down to us from our parents, grandparents, great-grandparents, and ancestors.

6. We speak the naa Ouen as our local language. We also speak French, which is the official language of New Caledonia. We were interviewed for our testimony in French.

7. We have been informed that the transcript of our interview was translated in its entirety to English and has been turned into this statement, which is in English. This statement was read to me in French by a translator, Magalie TINGAL, and we confirm that the contents are accurate.

We are the Ouara Tribe of Ouara Island

8. Ouara Island is a small island in the South of New Caledonia. Ouara is our home; we are the Ouara Tribe.

9. Although Ouara is now our home, we are not from here originally. Our ancestors are from all over New Caledonia. We were pushed off our land by the colonisers. First,

Signed:
Wethy Boniface

Laeticia Wethy

Eric Kapetha

K.E

Signed:
Jean-Claude Genet

Joseph Weniewa

Wethy Frederic

Signed: Witness

Deputy SG UC
Romuald PIDJOT

we were forced to move to Mont-Dore, which is a village on the mainland near Noumea. Then we were forced to move here. For some of us, it was our great grandparents who were forced to move, and for others of us, it was our grandparents. It was not their choice. They were displaced. They were chased here by the French. This occurred a long time ago, more than 100 years—at the end of the 1800s.

10. We were told by our great grandparents and grandparents that our lands before were much better. The soil was better and more fertile. And we had plenty of land to cultivate, to work, to occupy. But because our land was so good, the French wanted it for themselves. They violently forced us off our lands, and we ended up here on this island.

11. Before, we were different clans, we had different homelands, different totems, different identities. But because of the colonisation we all lost our lands and were pushed together here.

12. Even though our ancestors were moved here against our will, this island is our home now. And even though we came from different clans and different places, now we are one. We are the Ouara Tribe from Ouara Island. It is who we are.

13. Our tribe has special connections to three animals: the Turtle, the Whale, and the Shark. The mountain on the island is the Turtle. We are related to the Turtle. The Turtle is the guardian of the land.

14. We are also related to the Whale. The Whale is the guardian of the reef. The Whale tells us when it is time to plant and when it is time to harvest the Yam. The Whale journeys past our island and when the Whale comes we know it is time to prepare the fields to plant the Yams. And then the Whale comes back and tells us when it is time to harvest.

15. The totem of our clan is the Shark. In our language, the Shark's name is *Wakonde* The Shark is the guardian who looks after us. He is our God. He tells us when we can go fishing, when the ocean is safe, and where the fish are.

16. He also gives us warnings. He tells us when a death is coming. For instance, Boniface lives on the other side of the island. He is an elder, and so the *Wakonde* knows him and comes and visits him regularly and informs him if a death is coming. *Wakonde* is a guardian not just for us here, but all of the people, lands, and oceans in the South of the country.

Signed:
Wethy Boniface

Laeticia Wethy

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Eric Kapetha

K.E

Signed:
Jean-Claude Genet

Joseph Weniewa

Wethy Frederic

Signed: Witness
Deputy SG UC
Romuald PIDJOT

17. So you can see it is all linked. The Whale comes and tells us when to plant the Yam and when it is time to harvest and eat. And when we harvest the new Yam we always eat it with Turtle. *Wakonde* is the guardian of all of this throughout all of the oceans in the South. That is the relationship between the sea and the people and the land.

The Yam Cycle

18. The Yam is everything. It is the center of our lives. It is sacred. It is who we are. The Yam is man. For Kanak men, if you do not have Yam in your garden, you are not a man.

19. We do everything with the Yam. We eat it, we do custom with it, we use it for trade and to maintain relationships with other communities. It is just central to our lives. It is integral to every aspect of our lives.

20. The Yam is needed to perform all of our ceremonies and is at the center of all of our important events. For example, the Yam is essential for marriage, and for mourning, and for deaths.

21. Our lives are centered around the cycle of the Yam and the seasonal calendar, which as we explained are related to all elements of the land and the sea. The Yam cycle has always been the organizing principle of Kanak life.

22. Recently, the cycle has been disrupted. Before, we knew that when the Whale was around it was time to plant. The Whale used to come every year in July or August, but now they are coming later and later—as late as November in recent years. So we plant later.

23. In our tradition, we always eat the first Yam on March 19. That is the beginning of our year. With the planting getting later and later, the Yams are not mature by March 19. We still harvest one and eat it so we can keep our tradition, but we keep the rest of the Yams in our garden. Before we used to harvest all of the Yam on March 19—it was an important part of our kastom, signaling new life, new beginnings for the new year. But now we just harvest one and keep the rest in our gardens.

24. Before, we had about four months in between harvest and planting, and that was the time when we did all of our important ceremonies, all of which require the Yam. Now, with planting starting later and later, as soon as we harvest we have to plant again. It has really disrupted our lives and our ability to practice our customs.

Signed:
Wethy Boniface

Laeticia Wethy

Eric Kapetha
K.E

Signed:
Jean-Claude Genet

Joseph Weniewa

Wethy Frederic

Signed: Witness
Deputy SG UC
Romuald PIDJOT

Climate Change Impacts on the Yam

25. Apart from the changes in the cycle, the Yams themselves are also suffering due to the changes we have been experiencing.

26. We have been gardening all of our lives, using the same practices as our parents, grandparents, and ancestors. We rotate our crops and fallow our fields. Despite this, our Yam gardens have changed a lot. The Yams are not as big as they used to be and not as strong as they used to be. The Yams are getting smaller and weaker. There are many species of Yam, and especially for the special Yams that we need for our custom, it is becoming very difficult to get a harvest of them at all.

27. One reason for this is the rising seas. The saltwater is coming in and mixing with the soil, and this is impacting the ability of the Yams to grow.

28. The rising seas are also flooding the gardens. The Yam gardens start on the flat land and go up toward the mountain. Before, they always stayed dry, but now the sea comes up into our gardens and drowns the Yams. This has been happening for around ten years.

29. It is the same with the fruit trees—the oranges, the coconuts, the grapefruit. We have been growing them for a very long time. They have always been healthy. Now, their roots are getting saturated with saltwater, and this is causing them to die. They are disappearing.

30. We keep moving our gardens back further and further to avoid the saltwater, but the problem is that there is the mountain, so there is only so far we can move. And it might already be too late. Joseph lives at the bottom of the mountain, but for the last two years, he has seen crabs from the sea at his house, and he can see when the crabs are digging there, sand is coming up. There should be soil, but instead there is sand. This is because the sea is coming so far inland. He has also seen small saltwater fishes in the river near his house. The saltwater is mixing with the freshwater all the way back there. The sea is already reaching to the mountain.

31. In the past few years, we have also been getting rain more frequently and the rainfall has been much harder. This happens every January and February especially, which is the rainy season, but the amount and intensity of rain is now much greater than in the past.

Signed:
Wethy Bonifacc

Laeticia Wethy

Signed:
Jean-Claude Genet

Joseph Weniewa

Signed: Witness

Deputy SG UC
Romuald PIDSOT

Eric Kapetha
K.E

Wethy Frederic

32. This has affected the gardens. As we said, the Yam is supposed to be harvested in March. In January and February, the Yam is not mature yet. The rain we are getting now is too much for the growing Yam. All the rain has also caused flooding and this has destroyed all of the Yam. This has happened many times. And as a result, we haven't been able to harvest any Yam. So we have given up gardening in our traditional area.

33. Instead, we have tried to move our gardens up to the side of the mountain. It isn't too much higher, maybe one meter higher, but it is still better to deal with the flooding. If the seas keep rising, the only place we will have left is to go up into the mountains. But of course, the conditions are not right in the mountain for growing Yam.

34. On top of that, all of the rain has been causing landslides from the mountain. We had to move some gardens up toward the mountain to avoid the rising seas, but then they were destroyed anyway by the landslides coming down from the mountains.

35. This is causing a lot of stress to us, because all the changes are really affecting our gardens and our Yams are suffering. They are not healthy. They are growing weaker and weaker. As we said, there have been times when the rains and flooding have destroyed all of the Yams. Because Yam is so crucial and central to our lives, this is a big loss, and a big fear.

36. Another big stress is whether we will have enough space to do our gardening. With the sea coming in from the coast and the landslides coming down from the mountain, the amount of space left for gardening is getting smaller and smaller. We are getting squeezed from both sides.

37. There is also the concern about where we might be able to move. Because of the landslides, moving near the mountain is no longer a safe option. But our houses are also now regularly being flooded.

Loss of the Taro

38. Taro is an important custom crop and staple food for us. We use it for custom and also eat it as our daily food.

39. We have been forced to stop growing Water Taro entirely because of the rising seas. The Taro plantations and gardens that used to be here by the village are gone entirely. The salt water has infiltrated the soil and made it too salty for the Taro to survive. We still grow small quantities of Mountain Taro, but very little, and the Water Taro is

Signed:
Wethy Boniface

Laeticia Wethy

Eric Kapetha

K.E

Signed:
Jean-Claude Genet

Joseph Weniewa

Wethy Frederic

Signed: Witness

Deputy S6 UC
Ronvald PIDJOT

gone altogether. This occurred long ago. It was getting worse and worse, and by 1975 it was no longer possible to grow Taro. So our generation was the last to really grow Taro. The young people never have. It makes us feel discouraged.

40. The loss of the Taro was terrible. We no longer can perform custom with it and there is nothing we can use to replace it.

Changes to the Reef

41. The reef is an important part of our life, and an important food source. The women fish on the shallow reef, usually for octopus, crustaceans, and squid. And the men usually do spearfishing in the deep sea.

42. Traditional fishing depends on the season. But the seasons are changing, so everything that we knew about the sea and fishing is different now.

43. We've also seen many more crown of thorn starfish on the reef. When we were children, they were never there. Now they are everywhere. They are eating the reef.

44. Many species which have always lived near to here, and which we relied on for food, have completely disappeared. Others have almost completely vanished. Before, you could easily go out and take 200 kg of a species, but now it is only five kg at most.

45. We think this is due to changing conditions, like the water getting warmer, but we also have to consider the waste from the French nickel mines. Some of the waste from the factory is taken and dumped into the sea not far from our island. Eight days ago, there was an acid leak from the mine.

Impacts on Food Security

46. The staples of our diet, the most important sources of our food, comes from this island. From the land and the sea. All of the protein, the fruits and the vegetables, and the staple starches.

47. There is no shop on this island. We go to Noumea to buy some items, like rice, sugar, flour, and coffee, but it is a long trip, and expensive too. One way, it takes one hour and twenty minutes by boat and then another half hour by car. There is only one boat and it comes three times a week. It's expensive to get there and expensive to buy the food from the shop.

Signed:
Wethy Boniface

Laeticia Wethy

Eric Kapetha

R.E

Signed:
Jean-Claude Genet

Joseph Weniewa

Wethy Frederic

Signed: Witness

Deputy SG UC
Romuald PIDJOT

48. We've always been self-reliant here, but now as our garden space gets smaller and smaller due to the landslides and the rising seas, we are really worried that we won't be able to feed ourselves anymore.

Forced Displacement

49. We're worried about the rising seas and how that affects our ability to live on this island. The seas have been flooding our village and houses. The flooding has gone up as much as one meter in the house. And, as we explained, the space we have available for gardening is getting smaller and smaller because of the salt water getting into the soil, and because of the landslides coming down more and more from the mountains.

50. We know these things are making it harder and harder to live here. But for us, moving is not an option.

51. Because of the colonisation, we have already lost our lands and been forced to move. We do not want to move again. We have been thinking for the past months and years about how to ensure that the sea is not going to flood our garden. What we can do to make sure we can continue to live here.

52. We know we cannot go up into the mountains, because of the landslides and because there is no fresh water there. So we know what we need to do is to try to protect the coastal area, where we are living now.

53. We want to install seawalls to stop the sea from entering and do some dredging and filling to build up the island. We know this won't stop the sea from rising, but it might allow us to stay longer. We can't afford to do this on our own, so we are trying to think of how to get funding for projects to protect our community and our island, and our lives here.

54. It's mainly about sea level rise. That is what is preventing us from working in our garden. We don't want to leave our land. Again.

Tour of the Village

55. We took the lawyers on a tour of our village and gardens, from the coast to the mountain. We showed them various things. They took photos and videos and said that they will include them as part of the submission to the International Court of Justice.

Signed:
Wethy Boniface

Laeticia Wethy

Eric Kapetha

K.E

Signed:
Jean-Claude Genet

Joseph Weniewa

Wethy Frederic

Signed: Witness

Deputy S6 VC
Romuald PIDJOT

The Coast

56. We've lost a lot of our coast. The grassy area used to extend out much farther, and there used to be big trees growing there. We used to sit in the shade and enjoy. Now that is all gone. It has been taken by the sea. All we have left is a small strip of sandy beach. 25 years ago, we had many trees on this shore. Now there is only one left alive. The rest have died because of the rising seas.

57. Now when we have high tide, the sea regularly comes onto the land. It inundates the roots of the trees and makes them sick. A lot have died. More are probably going to die very soon.

58. We have only one pathway on the island. Everyone has to use it to get around—from those who live near the mountain to those who live near the sea. With more rain and rising seas, the pathway has been flooding more and more. It has made it very difficult for people to move around the island. They get trapped in their homes. That happens when we have high tides. When we have cyclones, it is much worse. The water gets all the way through the village, into the houses. About 20 years ago.

The Mountain

59. Last week, we experienced a big landslide because of the intense rain. The mountain fell down on a family's home and destroyed it. They had to relocate. Other families were building homes in that area to move away from the flooding happening near the coast at high tide, but because of the landslide they had to stop building and had to find a safer place. The landslides are happening because we've been getting too much rain. But it goes both ways now. Sometimes it is too rainy and we get landslides, and sometimes it is too hot and we get fire. For example, two or three years ago, the heat was so extreme that we had a fire here.

60. We showed the lawyers the holes where the crabs live, right next to the mountain. The crabs are coming up from the sea. They are not supposed to be here. They are supposed to be in the sea. We are far from the sea, next to the mountain. We are not supposed to have saltwater crabs here.

The Yam Garden

61. Joseph took the lawyers into his Yam garden. The Yam garden is a sacred place. The Yams are living, sacred beings. It is tabu (taboo) to allow anyone else to enter your Yam garden, to show anyone else your Yam garden. Doing so can cause a curse to befall you. While the Yam is growing, we do not disturb him. We leave him growing

Signed:
Wethy Boniface

Laeticia Wethy

Signed:
Jean-Claude Genet

Joseph Weniewa

Signed: Witness
Deputy SG UC
Ronald PIDSOI

Eric Kapetha

K.E

Wethy Frederic

by himself. But even so Joseph invited the lawyers to come to his garden, because it is important that the Court understand about the Yam and what we are going through—how much we are losing. So we are breaking the tabu and allowing the lawyers into the Yam garden, so they can see and understand, and share what they learn with the Court. None of the others in the community went there, because it is sacred and only for Joseph.

62. As we explained, we don't use the same garden to plant Yams year after year. We let the soil rest. Sometimes we can see the soil is good so we might plant a second year, but never more than that, because all of the minerals that the Yam needs are taken in one season and the soil needs to rest and replenish before it is suitable for planting again.

63. We need all of the elements to come together for the Yam to grow well. We need proper rain, proper soil, proper sunshine, and the salty wind to help the land to be fertile to plant our Yam. Now the elements are out of balance. There is too much rain, the sea is coming up where it is not supposed to be, and the mountain is coming down. Because of this, the Yam is struggling to grow, and we are struggling to hang onto our customs.

64. The mountain is coming down and the water is coming up. We are stuck in the middle trying to hold onto our traditions. We have to try our best to hold onto our customs, our ways of doing things here on this island. It is our way of life and who we are. If we lose it, we don't know what will become of us.

Prepared at Ouara, New Caledonia on X March 2024

Signed:
Wethy Boniface

Laeticja Wethy

Eric Kapetha

K.E

Signed:
Jean-Claude Genet

Joseph Weniewa

Wethy Frederic

Signed: Witness

Deputy SG UC
Romuald PIDJOT

Exhibit 13

I, Leticia Witie, solemnly affirm and declare:

Background

1. My name is Leticia Witie. I am 45 years old. I am from Ouara Island, New Caledonia.

2. I am a French national because France administers New Caledonia as a non-self-governing territory. But really I am a Kanak from Kanaky.

3. I provide a statement to the International Court of Justice on the impacts of rising sea levels to my island and our Coconut trees.

4. My testimony is based on my direct knowledge and knowledge based on custom, which has been passed down to me from my parents, grandparents, great-grandparents, and ancestors.

5. I speak my local language. I also speak French, which is the official language of New Caledonia. I was interviewed for my testimony in French.

6. I have been informed that the transcript of my interview was translated in its entirety to English and has been turned into this statement, which is in English. This statement was read to me in French by a translator, Magalie Tingal-leme, and I confirm that the contents are accurate

My Connection to Ouara

7. I was born here on Ouara in 1978. I stayed here until my first year of school, and then I moved to Noumea, following my mother.

8. When I reached the age to have a boyfriend, I went with him to the Isle of Pines. It didn't end well with him, and I moved back to Noumea, but I couldn't find a job.

9. I moved back here, where my mother has a house. I needed to come back here to heal, because I couldn't get over my breakup and I was questioning a lot about life. Plus, I did not have a job and I knew if I came back to Ouara I could eat, have a home to stay in and have community.

10. I have stayed since then. This island is my home. To me, this island represents strength, love, and the fact that we help each other. When there is an activity, we all do it together.

11. I am worried about the rising waters. If rising waters affect my house, I will try to move up higher on the island.

12. I want to stay.

Impacts of Rising Seas on the Coconut

13. The Coconut is special to us here on the island. We say that while the Yam is man, the Coconut is woman. We say that the Coconut is woman because the Coconut is everything to us. It is life.

14. On the Coconut tree, we use everything. The Coconut gives us nourishment: we drink the water, eat the flesh, and make milk from it. When the stalks that hold the Coconuts are dry, we use them to light the fire and cook in the pot. The leaves are woven to cover the houses, for men's headwear, and to make dishes. With the stalks of the leaves, we make brooms for the house. Children also play with the leaves and stalks that mothers weave, creating wind vanes. When the Coconut falls, it regrows too. It's endless with Coconuts.

15. With rising waters, all the Coconut trees along the coast are uprooted. This worries me because I wonder what we will do without the Coconut. I am afraid.

Signed: Leticia Witie

Signed: Witness

Date: 29 November 2023

Exhibit 14

International Court of Justice

Statement of Ara Kouwo

I, Ara Kouwo, of Veraibari Village, Kikori District in the Gulf Province of the State of Papua New Guinea, solemnly and sincerely affirm and declare on 23 November 2023:

Introduction

1. My name is Ara Kouwo and I am a national of Papua New Guinea. I am 52 years old. I provide my statement to the International Court of Justice on the impact of climate change on my village, island, culture and my life. I base my testimony on observations and my direct knowledge, except for what has been passed down to me through Kastom (Tok Pisin for custom) and traditional knowledge.[1]

2. I was told by my father's brother that Ara is the name of a spirit man. Kouwo is the name of a wooden carved canoe, what we would traditionally (and many of us still) travel in. I was born in Damaibari village, but I came to live in Veraibari village because my wife is from here. I raised my family in Veraibari.

3. I am a community leader of Veraibari as well as a church Elder in the Seventh Day Adventist Church. I am also the leader of my family.

4. Damaibari was located behind Veraibari on the other side of the island. It is no longer in existence. It was washed away in around 1982 by the rising tides. We all live in the one village now and we speak the same language, Urama. Urama is a distinct language that only 11 villages speak it. I am from Paia'a tribe. I also speak Tok Pisin and English. I have given my statement in English.

5. We live at the mouth of the Kikori River. The Kikori River is called Ouro in my language. The Kikori River flows into the Kikori Delta in the Gulf of Papua. We live where the Kikori Delta and the Gulf of Papua meet.

6. I have lived all of my life on this island and for most of my life in Veraibari. There are no stories of migration to this place, unlike the other tribes. We originate here, we were created here. We are *from* here. This is our only home. We cannot leave.

7. I can go back six generations in my family when the Government first contacted us in the 1920s, but you would need to talk to the older people to go right back to the origins.

8. Veraibari was so beautiful when I was a child, I used to walk down to the beach passing under mango trees but this has all changed. In my lifetime I have seen the seas get higher and higher, destroying our coconut tree forest, our traditional burial grounds,

[1] This statement relies on an exception to the hearsay rule where evidence is given on the culture, custom, laws and traditions of Indigenous peoples.

Signed:

Statement of Ara Kouwo

Taken by:

Brittien Yosef
Melanesian Spearhead Group Legal Officer

our school, our health clinic and our houses. It has an ugly face now, where our trees, houses, places that are important to us look like ruins.

9. We have been forced to relocate four times already, three in my lifetime and the last time was in 2020. We are now planning to relocate again for the fifth and last time. The seas are coming into our houses, which are already built on tall wooden post foundations. If this relocation fails, we have nowhere else we can go as we are already pushing back into swamp lands.

10. I started to notice the changes in the 1980s, when my village was destroyed, and 1990s but it is getting much worse now. We can't keep up with the rising sea, it is coming in so fast now. In the last three years, it has been rapid.

11. As a leader of the village, the people talk to me about the problems they are facing. I am facing them too. In my statement I would like to share my testimony about what sea level rise has done to my home, hoping that we can hold hands to find a way forward together. Please hear my testimony.

Life in our village

12. Before the sea started to rise, we had a beautiful village. Now I look out and see at low tide, the coconut trees, other destroyed trees, like mango trees, and the structures from the houses we could not dismantle and I get very sad. We no longer have a beautiful village.

13. Life in our village is simple. Most of us do not have electricity or running water. I have a generator that I will run at night for a few hours.

14. We do not have wi-fi. We do not have cellphone coverage most of the time. Sometimes, you can get a little coverage standing in certain places in the village.

15. We are heavily reliant on our environment for our food. 97% of our food we catch or grow. Only 3% we buy.

16. We used to make money selling crabs, which we could use to buy market crops and petrol for small banana boats. We would go to the closest town, which is Kikori in canoes with sails, which would take about a day.

17. Now our only income is generated from selling the bladder from the fish maw since 2021. Since 2021, we have been able to purchase banana boats. It now takes us about 2 hours to get to Kikori.

18. Most of us live in traditional housing, made from traditional materials.

Signed:

Statement of Ara Kouwo

Taken by:

Brittien Yosef
Melanesian Spearhead Group Legal Officer

19. We are rich in our Kastom and traditions. But we are struggling to hold onto these things because of the changes that have been happening to our environment.

Rising seas

20. When I was young, Veraibari was located in an area which is now taken by the sea. My grandparents told me that Veraibari used to be on higher ground.

21. You can still see what is left of the coconut tree forest at low tide. This was at the back of the village. Where the village was located is completely inundated by the sea.

22. The current location where my house is used to be the back of the village where the forests were. The waves have now reached my house during the high tide. Sometimes, the first floor will flood.

23. Next to my house is our Seventh Day Adventist Church, which is made in the traditional way, using traditional materials. The seas have destroyed the weaved wall at the front of the building. It occasionally floods.

24. I built my current place in 2020, after having to abandon my old place. My new home is a two-story building and a permanent building made of tin and wood. It is the only permanent building in the village. It cost me a lot of money to build. I am now forced to rebuild further inland.The rest of the village housing is made traditionally, using traditional materials. We use the traditional weaved walls inside the home.

25. Veraibari has now moved back inland four times. My grandparents told me that the first time happened before I was born. The whole village moved. The second time was in around in 1980, when I was a child. The third time was around 2013 and I built a one-story permanent home. In 2020, I was forced to abandon it and rebuild where I am currently located. This is the fourth move. I have noticed in recent years the sea rise is getting faster.

26. Our houses are built on wooden posts. You can already see the exposed wooden posts from the wave action. These posts were buried deeper into the ground as foundations. These are the houses which are closest to the water. You can also see the marks on the posts where the water comes up.

27. In around 2022, we were given sandbags from the Provincial authority. They have already been destroyed.

Water

28. We used to have a ground water source. We had a lot of wells in our community. However, all our wells have now turned permanently salty. This happened around 1995.

29. I have water tanks which supplies my house with water to drink, bath in, for our toilet and for our kitchen. We regularly run out of water, especially in the dry season which is from October to March.

30. We used to have four water tanks in a tank house for the community, but they were washed away in around 2022. We managed to salvage the tanks and they have been put in different places in the village.

31. We sometimes will go to the Aird Hills, a small mountain to get water from the Porome tribe, but we will have to seek permission through our relations or will have to pay. It takes an hour and a half by banana boat and then we have to trek up the water source. Sometimes the Porome tribe will bring water down to us and we will buy it. It costs 25Kina (around $6.5 USD) for 25litres.

32. We also will strain saltwater from the sea to remove the mud and use this for our everyday use.

33. Some families will use large blue plastics drums to catch water off their roofs to drink.

34. When there is no rain, we will also go to the swamp which is further inland, near where we want to relocate. We will sometimes have no choice but to drink this water. I have experienced stomach problems, coughs and diarrhea from drinking this water, but quite often it is the only water source on the island.

35. Sometimes, even this water source is salty. When the rain falls, the taste is Ok. I worry what will happen if we lose this water source too.

36. I am recommending to my people to install a water tank at each house. This will be about Kina10,000 per tank (which is around $2,500USD).

Losing our school twice

37. Education is so important to us in this village. We put in a lot of emphasis in building our community school as a learning center for our children. The first school was constructed in a location that is now under the water during high tides. During the low tides, you can see the concrete steps to the teacher's house.

38. We decided to relocate the school to another location away from the shorelines. However, our efforts were in vain, when the sea level kept moving up inland and reached the new classroom. The classroom building can no longer be used.

Signed:

Statement of Ara Kouwo

Taken by:

Brittien Yosef
Melanesian Spearhead Group Legal Officer

39. Since 2020, the school can no longer operate, and our children have not been able to go to school for 3 years now. They are now running around in the village.

40. I had saved money to send my children away to get an education, but I was forced to use it to rebuild our house. I also used this to go to Port Moresby to start the relocation project and to hire a saw to start building the houses, but the money did not go far. I no longer have any savings. Now I am so upset that we will have to move again without savings. How can we pay for this?

Dangerous high tides and king tides

41. The sea keeps coming in closer and it endangers our lives and homes.

42. During the high tide once a month, which lasts for 3 days, and during the king tide we have to jump into the water to stop logs and other heavy debris from hitting the wooden post structures of our house. This happens also at night. The splashing waves causes those logs to continuously hit the wooden structures that supports our houses and can cause our houses to collapse.

43. The boys and men from the village will jump into the water and try our best to keep the logs away from our houses. Sometimes all the village will have to help to stop the debris. There are saltwater crocodiles where we live because we are located at the point where the Kikori River meets the Gulf. It is brackish waters. I worry that one of the children or even the adults will be attacked by a crocodile, especially at night during high tide, when we are in the water trying to save our homes from collapse.

44. In 2018, a young boy was caught by a crocodile at the shoreline so this worry is always at the forefront of my mind during high tides and king tides.

45. The houses become weak from the debris hitting it. When this happens, a temporary place is built and people will break down the house and salvage what they can for rebuilding their new place, but the land is getting scarce.

46. We have multiple families living in one house now because land and materials for rebuilding is scarce. Sometimes this is as many as three families, which could be around 15 or more depending upon the number of the children.

47. I have put wooden poles in front of my house to try to stop those logs from hitting my house. We have built wooden fences across the village which will collect debris and logs too.

Signed:

Statement of Ara Kouwo

Taken by:

Brittien Yosef
Melanesian Spearhead Group Legal Officer

Strong Wind/Stronpela Win

48. Where we live has always had wind and waves, but last year in 2022, we experienced the strongest winds in the first of its kind. This wind completely destroyed 12 of our houses, but 21 houses were damaged all up.

49. No one was seriously hurt but there were minor injuries, such as scratches, bruises and twisted ankles as we all ran out of our houses because we were afraid of the strong winds.

50. It destroyed a lot of mangroves, which we use for our houses and axe handles. The mangrove wood is the main source for our houses and the leaves are used to thatch the roof.

51. Yolarnie from Piku Biodiversity Network (Piku) who has been working with us since 2014 told me that she was informed by University PNG that this was a cyclone. We had never experienced a cyclone here before.

Culture and secret (sacred) sites

52. The impacts of climate change is having a worrying impact on our Kastom. Our ancestors have been living on this land from the beginning of time.

53. The tribe next door is Kerewo, which is across the water. They say that they come from somewhere else and have a migration story. We do not. We are from here. We are created here and originate from here. We are from here from time immemorial.

54. The legend snake, Gemo, would visit us at certain times of the year when I was in school and would rest as the black sand banks, formed by the wind and wave action. At the time of visiting it would rain and Gemo would come up and visit the family. The place where it comes up is like a big drain, so we know that Gemo had visited the family. My wife is from the Gemo family. This has changed now because the seas have changed.

55. The story of Gemo is that there was a human mother who was pregnant but when she had her baby, it was a snake. Others wanted to kill the snake, but the mother said "no". The mother named the snake Gemo and took the snake down to the water and the snake swam off and settled in the middle of the Kikori River. Gemo no longer visits because the seas have changed and the land where Gemo would visit has been washed away. Gemo stopped visiting around 1986. I think this was around when the second relocation occurred. Right at this current time, there is no sign of Gemo.

56. My mother gave birth to me in this land, her blood was spilt into this land, when she gave birth to me. My umbilical code was buried in this land, and so I am attached to

this land permanently. I cannot be separated from the land and I speak the language of this land.

57. We participate in cultural events, and express ourselves through custom singing (gerebadi in our language) and dancing to the traditional beats of our traditional instruments.

58. We used to have sacred places where we commune with the spirits of our ancestors. We could feel their presence with us when we involved them with us.

59. All of our secret places, except one, have been destroyed by the rising sea. Our ability to commune with the spirits are gone. The communal spirit in the village is also affected. We have lost our traditional knowledge and the kastom that is being associated to our secret places because we can no longer go there.

60. Our secret tree has been destroyed by the sea, only recently. This tree used to be in the middle of the village. The tree is where the spirit man lives and when the uncles (mother's brothers) want to take a new born baby down out of the house to introduce the baby to the community, they call the spirit man and give him beetle nut, shell money and smoke as a gift. They invite the spirit man to come to the celebration. That night, the whole community will dance and celebrate. There will be much joy because the spirit man has joined them and they are connected. The baby and the mother up until the gerebadi have been separated from the community for a month.

61. In the early hours of the morning, the uncles will bring the baby out to introduce the baby to the community and to show the baby the land, the water and the island as their place.

62. For this celebration, I would wear a grass skirt made out of young sago palm leaves and headdress made out of cassowary feathers. I showed this to the lawyers.

63. We used to build long traditional houses in which all the men and male elders would gather to discuss our customary and cultural matters. The long house gathers us altogether as one people within our customary land boundaries. The strength of our unity is forged within the long house. If there are any disputes, we resolves those disputes in the long house. The long house holds the peace of the community.

64. We have kept most of our sacred artifacts in those long houses. This is our traditional knowledge. It gives us the relevant information about our surroundings and how we interact with our environment and culture.

65. Sadly, the traditional long house was destroyed by the rising seas too.

Signed:

Statement of Ara Kouwo

Taken by:

Brittien Yosef
Melanesian Spearhead Group Legal Officer

66. We also lost our ancient burial sites to the rising sea. This was where my mother was buried. I lost the bones of my mother because of the high seas. This causes us a lot of pain and discomfort. It is a deep sadness which is impossible to describe. I can no longer go and visit because the burial site is not there anymore.

67. I buried my father under my house. I had to dig him out again and then for a second time I had to rebury him in 2020 when the seas took this home.

Food security

68. Our staple food is coconut, sago, cassava, banana, fish, crab and greens. With the rising sea level, the salt water has washed out most of our gardens in 2022. Our crops cannot grow when the land is salty with water.

69. We have a food security problem. We are unable to make gardens like we traditionally used too. We even had a food security project with Piku Biodiversity Network to try and find alternative options for food security and it failed. The king tides washed these alternative options away.

70. Our mothers' traditional gardens were made by a type of large crustacean (we call it the ka'i mi) that we do not eat. These crustaceans build little mounds of soil, which allow for gardens to be made. These were inland above the tide mark. They must do something to the soil, because otherwise garden crops, like the greens, cannot grow. We can no longer use these because of the tides.

71. Our mothers have managed to grow their vegetable garden in one old dingy, but we have to buy soil and compost. We are no longer able to grow our food in the gardens created for us by the ka'i mi.

72. Most of our coconut trees have been destroyed by the rising seas. It takes years for them to grow.

73. We also had a coconut forest on the island, which has been completely destroyed by the sea rise.

74. Coconut is a staple food for us. We use it for all of our food and rely on the water for our hydration.

Relocation

75. I am now working on a project to relocate the entire village for the fifth time to a new location. This will be the final relocation. We cannot relocate further. This is the boundary of our customary land and the last place the island can hold us. However, it

is already near a small river and swamp and close to the back of the island. I worry that the water will keep rising and rising, including the small river, and we will have no where left to go because on the other side of the river is a swamp.

76. We have a plan to relocate the village. We have drafted up plans of what the village will look like. We have established a Veraibari Relocation Community Development Committee. I am the chairman and initiator. I have been helped by Tofinga Isaiah who designed the plans with me and specifically designed climate resilient houses. We estimate to rebuild the village will cost us around 1.5million Kina (around $375,000USD). We do not have these funds.

77. If we are forced to move to other people's lands, it will never be our own because of how Kastom land works here. It will cause social disharmony and conflict. We will lose our food source and our hunting grounds. We will continue to lose our culture. What will become of us?

Climate change

78. I did not know that the problems are because of climate change. We were all thinking it was sorcery and asked other villages, who said they were also experiencing the same problem. We had been working with Yolarnie from Piku for a long time. She started to talk to us about climate change in 2020 after I built my current home (after the last relocation).

79. For the first time in this area, we hosted in November 2023, a three-day workshop on climate change to educate people in the area about climate change and the need to adapt, where they can. It took us three weeks to build a place for the workshop. We had a day for leaders, a day for the mamas (women) and a day for children and youth. Many people are facing so many problems from climate change in our Kikori region.

80. After learning more about the problem from Yolarnie, I spent time overseas and in one city I saw the smoke in the skies from the factories. I could not see blue sky, only for 30 minutes each day. I then realised that we do not have any factories in my village. We do not have any factories in Kikori. We are innocent. We need help.

Photos

81. We have been unable to print out the photos that the lawyers took with me when we walked around the island and village on 21 and 22 November 2023. The MSG lawyer, Mr Britten Yosef, told me that he will put them his statement for the International Court of Justice so that the Court can see images of the destruction caused by the rising seas.

Statement location

82. This statement was taken at Veraibari village.

Signed:

Statement of Ara Kouwo

Taken by:

Brittien Yosef
Melanesian Spearhead Group Legal Officer

Exhibit 15

I, Cynthia Rosah Bareagihaka Houniuhi , from Honiara, Solomon Islands, solemnly affirm and declare:

Background:

1. My name is Cynthia Rosah Bareagihaka Houniuhi, and I am 29 years old. I was born in the Solomon Islands and now reside in Honiara.

2. I am from two provinces in the Solomon Islands – Makira and Malaita because my parents are from there. My father is from Malaita while my mother is from Makira. Because my parents are health workers, I grew up in one of the remote places called Reef Islands which is in Temotu Province. I lived on Reef Islands until I was 10 years old and after that I moved to Port Adam, Kalona, South Malaita Province. We moved to Honiara in 2005.

3. I currently do contracted legal work as a legal officer in the Solomon Islands. I have completed my Master's Degree in Law from the University of New South Wales in 2023. I am also the President of the Pacific Islands Students Fighting Climate Change, the youth led organisation that began this initiative to seek an ICJ advisory opinion on climate change.

4. I am a Solomon Island national, and I provide a statement to the International Court of Justice on my experience of growing up in the Solomon Islands and the realities young people like me have to face when faced by the impacts of climate change.

5. My testimony is based on direct knowledge, the experiences that I have gone through and the knowledge that has been passed on to me from my ancestors.

6. I speak English, and I have given my testimony in English.

7. This statement uses italics words in my local language – South Malaita language and in Pidgin.

8. Reef Islands is one of the remote places in the Solomon Islands. We do not often have access to shipping from the main island. As a result, we rarely eat processed foods. I remember we would only eat processed foods on Sundays as a treat while growing up. We would rely on our gardens and on the fish we get from the sea to feed us.

Introduction to the issue of 'climate change'

9. I remember hearing about climate change when I was in grade five and I was very interested about the concept. I would ask a lot of questions about what it is and how it was affecting my people.

10. My father, because of his science background, further helped me understand about the issue of climate change when we travelled to his island called South Malaita in Port Adam. We would get dropped off at Fanalei Island where some of our families and relatives live. Fanalei Island is like a big port where people come to and then travel onwards. It is a stopover spot for people to get their things and then continue their journey. It is a main port for more than three villages.

11. On one of our trips to the island in 2011 I found that the island seemed deserted and isolated. Most of the houses on Fanalei were no longer there. Some of the houses had the posts of the houses in the sea and the island looked a bit rearranged in the sense that the sea used to be further out and now it had moved in.

Signed by Cynthia Houniuhi

Witness: Susan Kabau
Attorney - Solomon Islands

Prepared at Honiara, Solomon Islands on 13th March 2024

12. I asked my father about this and why the people were no longer living there and he explained that the people had moved further inland to a place called Fouele. Because of this move you could see the difference on Fanalei. The picture I have when I could come home to Fanalei is of a group of young children with blonde hair laughing and playing on the sand. Now, they are no longer there. Everyone has moved somewhere else and the playing children are no longer what I see first when I get home.

13. At first it seemed to me that the people were moving because they wanted to move but later on, after hearing the stories, it became clear to me that they were being forced to move because of the rising seas. I felt sad, seeing where the houses used to be and the houses now standing empty, seeing that all the children had left. I thought it was very unfortunate that the people had to move and I began asking the question of 'why', what did our people do to deserve this?

14. I decided to pursue a Bachelor of Laws and study environmental law specifically because I thought if I was given the chance, I would love to help my people who are facing such disheartening situations.

15. From my university study I came to understand that countries like my own have played an insignificant role on the problem of climate change and larger countries outside our region have caused and are causing more of the damage. This was now about climate justice.

16. Speaking with young people, many feel hopeless saying that we are a small island nation and what can we do to change if the problem is caused by bigger countries? They feel nothing is going to change, that the system is not for us.

Food Security in the Solomon Islands

17. One of the big changes we have seen is around the food we eat due to the excessive rain in Makira. The rains have become very frequent to the point that it rains almost every day there. The rains spoil the gardens and people cannot grow enough food. When I go back home, I would ask my aunties what they would normally eat because they are now forced to ask us in the towns to bring bags of rice for them or to send it to them because their gardens are not producing as they used to due to the rains.

18. The gardens would normally produce a lot of root crops but now the people are struggling to find the right time to plant and harvest. For example, before we would plant *Kumara* (sweet potato) for one whole week during the planting season. We would have good weather and sunny days. Now we get rain almost every day and so in a week we can only plant on one day when there is some sun. As such the harvest gets affected.

19. *Kumara* used to be the staple food for our people but now because of the unpredictable and frequent heavy rainfall affecting the harvest, people have to eat rice as the new staple food. So if you are a family in the provinces that has relatives living in town you would be able to eat rice because you can ask your relatives to send bags of rice back to the provinces. If you don't have anyone in the town that can afford a bag of rice, which is about 120 Solomon Island dollars for a 10kg bag, then you will be missing out on sufficient food for your family back in the provinces.

Signed by Cynthia Houniuhi

Witness: Susan Kabau
Attorney - Solomon Islands

Prepared at Honiara, Solomon Islands on 13th March 2024

27. With so many changes happening now and people not gardening anymore I question sometimes what will happen if my children will not have the same experience of going to the garden like I used to. They will probably be eating rice and tuna and other processed foods because of the change in the practices. Because we no longer do gardening, the young women who will grow up to take the place of the aunties of the village, who would normally have this knowledge, will not have this knowledge because they will be forced to learn new ways to adapt and survive which will be much different than before.

28. Adapting is good, but in the process, it also means losing the traditional knowledge that we have.

Future of young people

29. Thinking about the future of the Solomon Islands scares me. It's very uncertain and that uncertainty keeps me up at night thinking, what if this extreme weather event happens, what would the people have to face? What if a cyclone or a hurricane were to hit someone that I love? All of this also makes me think about how unfair the situation is. Why are our people suffering more and having to face this uncertainty?

30. People know about the information about climate change but why isn't anything changing? This makes me very worried, scared and anxious about the future and angry and frustrated about why nothing is being done because I have a lot to lose and my people have a lot to lose. We ask the question – will it stop? Will it have to be another island sinking before the world takes attention? Whose island will it be? Will it be mine?

31. It feels very hopeless but we choose to stay and fight for the children that we will bring into this world.

The Climate Justice fight at the International Court of Justice

32. Back in 2019, young people were tired of this bleak future that we had before us. I was fortunate to be part of the 27 law students from the University of the South Pacific that began this campaign, by asking our leaders to seek an advisory opinion from the world's highest court (International Court of Justice), to help us address this problem and help protect our future. We formed an organisation called the Pacific Islands Students Fighting Climate Change (PISFCC) to continue our climate justice journey.

33. I saw the value of the law in governing and this attracted me to study international environment law. My motivation for this has always been our people and that they deserve better. They do not deserve the reality that they have now and that is why I joined the Pacific Islands Students Fighting Climate Change. I wanted to bring back some hope for our people, some certainty to our people.

34. Because it will be our people that are going through things that they did not cause. Yet they are the ones that have to worry at night about when the next harvest is going to be or if it is going to be raining tomorrow and all that. So that is one of the reasons why I pursued this campaign, because when I leave, I hope that others who come after, will continue to be inspired by the journey and carry on hope, especially for my people.

Signed by Cynthia Houniuhi

Witness: Susan Kabau
Attorney - Solomon Islands

Prepared at Honiara, Solomon Islands on 13th March 2024

Expectations from the International Court of Justice

35. As someone who has been there from the start of this campaign in 2019, I hope the ICJ will bring some clarity to what is happening around us. In the Solomon Islands, when there is some confusion or there's a breach of custom or there's an issue between two families we always go to the chief - someone to say something about the matter and this brings peace to the people.

36. We look to the International Court of Justice as the equivalent of the chief in this time where my people have been saying the same thing over and over again that we are being affected, we are being forced to relocate and our people are facing great suffering. So we are, in some ways, like families trying to grasp this issue and find a solution to it. And so in the village we would go to the chief and whatever the chief would say we would highly respect it and this would normally bring peace and harmony to our people. We are now looking for the same peace and harmony and the ability of the ICJ to bring that.

37. As a young woman, I look towards the ICJ to provide greater clarity on country responsibilities that will protect the children that we will bring in the future. I hope that the ICJ will provide anadvisory opinion that names and spells out well the obligations of States to protect our future, the rights of future generations. I hope the ICJ does not shy away from really explaining it in detail so that the world can abide by this.

38. I hope that our stories will be something that is reflected in the advisory opinion. Our stories, especially the realities and experiences of everyday life for the Solomon Islanders,is considered and reflected in the final opinion delivered by the Court.

39. We look to the ICJ and we have a high expectation, but we believe that the Court can be the chiefs that our people need today.

Signed by Cynthia Houniuhi

Witness: Susan Kabau
Attorney - Solomon Islands

Prepared at Honiara, Solomon Islands on 13th March 2024

Exhibit 16

I, Hilary Fioru, from Malaita Province, Solomon Islands, solemnly affirm and declare:

Background

1. My name is Hilary Fioru. I am 48 years old.
2. I was born in 1978 in Kilu'ufi Hospital, Auki, Malaita Province.
3. I am a national of the Solomon Islands.
4. I am a fisherman.
5. I am married and my wife Sylvester and I have three (3) sons.
6. I am from Lilisiana Village. I have lived here in Lilisiana village for my whole life. I grew up in this village and have lived here until now.
7. Lilisiana is a well-known fishing village that is located in Auki Harbour which is very close to the sea. It is well known for its skilled fishermen and also for our skill of shell money making.
8. My family is one of the first families that came to live in Lilisiana village back in the early years of 1900's when the British Protectorate was still in the Solomon Islands. So, we are the sixth generation living in Lilisiana village since our great great grandparents have come to live and build this village to become Lilisiana.
9. In this statement, I share observations of being a Fisherman in my village, traditional fishing practices, changes to weather patterns that affects fishing, current state of fishing, impacts of changes to fishing, cultural significance of gravesites, traditional medicine, and canoe from the perspective of a member of the Lilisiana village who has lived all his life in Lilisiana.

Fisherman

10. Traditionally, our people have relied on fishing for our daily sustenance where we fish to feed our families and to also earn a living by selling it at the local market as means to support our families for our daily needs.
11. Our staple food is Fish and *Koe* (Mangrove fruits).
12. I have been fishing my whole life since I was a little boy. Fishing is one of the first skills that I had when I was little. My father always made sure that all of us knew how to fish and he started to teach us to do fishing in front of Auki harbor before going out to fish on the nearby reefs.
13. I was taught by my father on the best times to go fishing and how to identify the *Koburu* (cyclone season) and *Ara* easons (humid season). I was taught the importance of tidal

Signed: Hillary Fioru

Witness:

COMMISSIONER FOR OATHS ★ MALAITA MAGISTRATE COURT ★

Date: 04/03/24

movements for fishing because certain fish are plentiful at certain tides and this is linked to the moon.

Changes in the Weather that I observed.

14. In the past, we could fish, based on our knowledge of the *Koburu* and *Ara* seasons. We know where the wind will be blowing, what the weather will be like and what the tides will be like, so we know where and when to fish. However, I have observed that in the past 15 years, the *Koburu* and *Ara* seasons have become very unpredictable for us, the local fishermen.

15. Since 2010, we have started experiencing unusually low tides and unusually high tides in our village. Furthermore, we started experiencing a lot of heavy rainfalls which frequently flood our village.

16. Our village is located in front of the mouth of a lake so usually once the high tide comes in, the lake will rise higher and will eventually flood the entire village. This type of flood we didn't experience 10 years ago but now our village is very vulnerable to flooding every time there is high tide.

17. I have observed that storm surges have become more frequent in our village these past 10 years. In 2023 we had 3 – 4 high storm surges that rose up and destroyed our village by severe coastal flooding that came all the way into our houses. I have also observed rapid coastal erosion from these floods.

18. These coastal floods are flooding through our gardens of "swamp taro" which is one of the staple crops for us coastal dwellers. The increased salinity from saltwater into our swamp gardens means our swamp taros are no longer able to grow and produce good yield like they used to 10 years ago. This is an extreme concern for us, for our future, in terms of our food security.

19. Last year I noticed that we have high tides *more than once a month* which is an increase from what we experienced 10 years ago where we would have high tides *only once a month*. Once the high tide comes in, it floods the entire village, to the point where we have to paddle in a canoe to get to the next house because we can no longer walk across. The water reaches up to our chest, if we are to walk, so we use our canoes to cross to other houses within our village.

20. As a father and a leader in the community, I feel extremely worried and sad to see these rapid changes of sea level rise that are changing our way of life in our village. It is worrying for us parents, especially our children's future, we worry about how they can survive all these impacts of sea level rise.

Tradition of communal fishing

Signed: Hillary Fioru **Witness:** Date: 04/03/24

COMMISSIONER FOR OATHS
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21. When my father taught me how to fish, he showed me all the nearby reefs where we can catch fish which are just within the Auki Harbor and the fishing grounds near our village.

22. He also showed me our traditional fishing grounds or *e're*. The *e're* was right in front of the village and within the mangrove forest. This fertile, swampy area was filled with sea creatures and our whole community could fish there.

23. One of the traditional customs in our village that was practiced from before I was born, is the way of communal fishing in the *e're*, which is done by all men in our village, with the assistance of all the women of the village.

24. The communal fishing practice happened in the *e're* and is like this; all men will gather standing around the *e're* in a circle, holding woven coconut fishing nets, that were woven by our women, to catch the fish. Once the men corner all the fish into one spot, then a few of the men holding spears will spear the fish.

25. After the catch, the usual practice is that they will offer some of the fish as a sacrifice to the ancestors first before sharing the rest with the whole village. That sacrifice to the ancestors is made to thank the ancestors for blessing them with their fish catchment.

26. When I was growing up as a little boy in the 1980s, our forefathers built a huge wall of stones from the village towards the reefs. These sea walls were built from our seashore towards the reefs where the waves break. They were built to protect the village and also to protect our *e're*.

27. These sea walls were built because our shoreline was already being affected by rising sea levels and storm surges. The mangroves in our *e're* were being uprooted by the sea and the sea was bringing them into our village. As a young boy, I observed these changes although they were not happening at the rate I observe today.

28. I was not able to partake in the communal fishing in our village as it stopped being practiced in our village when I was growing up. Even though our forefathers built the seawall to protect the *e're*, it did not protect it for long. All the mangroves on our shoreline were eventually uprooted by the strong seas and so too, all the sea creatures that lived at their roots.
29. However, I was told by my grandfather and father of how they used to do communal fishing and about the *e're* and its importance. Theyexplained to me that the cultural significance of communal fishing in our village is that it brings unity, peace, and harmony.

Changes to the *e're* and reefs

Signed: Hillary Fioru

Witness:

COMMISSIONER FOR OATHS
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30. Today I observed that the *e're* is a dead place. When the tide is low, it is a muddy and barren place. When the tide is high, it comes with force and the water level in the *e're* grounds are high, and we cannot walk or stand there to fish.

31. Heavy rainfall and flooding is also causing massive soil erosion in our village. The floods wash away our soil into the sea which tends to make our sea very dirty.

32. In the past 5 years, I have seen huge corals being washed ashore.

33. I have observed that this happens after severe storm surges and high tides. These corals are washed ashore with lots of other debris and rubbish. We have no mangroves and no seawall to protect our village from the high tides nor from the debris and rubbish.

34. I have also noticed that with a lot of corals being washed up on the shore; fish are no longer breeding in the reefs nearby.

35. These are the reefs that people in our community usually go to do our fishing, the reefs that we rely on for sustenance...

Loss of the traditionall fishing knowledge

36. In the past, traditional fishing skills would be taught to younger generations through practice.

37. From the late 1980's I observed that our communal way of fishing was no longer practiced in our village. Growing up as a little boy my grandfather and father explained that it was because of the changes to weather that was happening. I

38. It was very hard to practice these traditions, where there are no fishing grounds to practice on and so the elders are not passing the knowledge on and it is being lost.

39. Our way of communal fishing is no longer being practiced in our village by our people anymore. As our people see no need to do communal fishing because our e're are destroyed. The generational skill of communal fishing has died out.

40. When we lost this communal fishing practice, our women's traditional way of weaving big coconut nets for communal fishing was also lost because the people in our village nowadays do fishing by themselves, for their individual families, and no longer need the big coconut nets. Therefore this skill of weaving coconut nets for communal fishing is now dead and women today in our village no longer have this knowledge and skill.

Signed: Hillary Fioru **Witness:** **Date:** 04/03/24

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41. Our men now travel further into the deep sea to fish using manufactured fishing nets to catch fish and sell at the market to support their families. We no longer fish to support the community and give thanks to our ancestors like our people did before.

42. Even the skills we developed fishing in our nearby reefs are going, as the reefs and the fish in them are disappearing.

43. Now I fish with the aim to sell and earn money to support my children for their school fees and their needs.

44. Fishing is now seen as a survival skill to earn money and no longer seen as a way of building a community as in the past.

45. I feel sad to lose thees practices, practices that used to unite and hold our community and people together. It is devastating for our people to lose our way of living that breeds unity in our village.

46. I believe the practice of communal fishing is a huge loss because such practices build stronger relationships between elders and villagers, men, and women, and it establishes working together. Communal fishing is one of the traditional practices that builds harmony, peace, and unity amongst our people and within our communities when they work together for a common benefit.

Current State of Fishing

47. Our people now have to go into the deep ocean to do their fishing using outboard motor boats.

48. I have seen that fishing can no longer be done near our village, we must go further, as far as other islands such as Alite Reef, Ramos Island and as far as Isabel Province to fish. These places are in the deep ocean, and we are often faced with the risk of unpredictable weather that happens when we are out there in the deep sea. We are also faced with the cost of buying fuel to fish further.

49. The use of our traditional canoes or baru are no longer encouraged due to the increasing unpredictability of the weather in the deep ocean. Canoes cannot withstand the stronger winds or stronger currents in the deep ocean, only outboard motorboats can manage and this is why they are recommended.

50. Now that baru is not recommended for deep sea fishing, our people have used more Outboard Motor engine boats than baru. This made people become less involved in

Signed: Hillary Fioru **Witness:** **Date:** 04/03/24.

building canoes as they have seen that it is not important to us like it was before when our ancestors were still alive.

Impacts of having to travel further away from home to fish

51. It is becoming expensive to travel far to fish, as you need fuel to use in your motor boat. The further you travel to fish, the more expensive the catch of fish will be to cover the cost of fuel used.

52. This has resulted in a change of diet for the people in our village, from eating fresh fish to buying and eating more canned food as it is cheaper.

53. The unpredictability of the Koburu and Ara seasons also makes it dangerous for us, the local fishermen.

54. Just recently in 2023, towards the end of the year, 4 local fishermen from our village were lost in the sea due to the unpredictable change of weather. They lost their way to return to our village when they came across a strong wind and rainfall in the sea. We sent a search rescue team to search for them for 2 weeks but we never found their bodies.

55. The frequent weather changing patterns makes it difficult to fish safely. Some people feel like giving up on fishing due to the fear of losing their loved ones in the sea when they go fishing. These traumatic experiences of losing our families in our village have also brought so much fear for me as well when I go out fishing.

Cultural significance of Graveyards and Burial sites to the Lilisiana People

56. In every community in the Solomon Islands, according to our customs, there are three places that make up a community and are important to the community's identity. One is a place for worship, second is a place for women to go give birth or a place to generate the tribe called 'Bisi' and the last one is grave sites. Every village has all three, there is no village without those three important cultural sites.

57. Our grave sites are important because we believe that we are still connected to our people who have died, because we believe their spirits are still around us, protecting our land, ensuring our safety, and giving us goodwill or fortune.

58. Our graveyards are a place where we bury our forefathers, and it represents our ownership of our land and our connection to the land and our ancestors before us.

Graveyards being destroyed by sea level rise.

Signed: Hillary Fioru **Witness:** **Date:** 04/03/24.

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59. In the past, the site for our graveyards used to be near the seashore.

60. Today, I have observed that a huge area of our graveyards have been dug up and washed away by the rising high tides and coastal flooding.

61. A few graves belonging to my family have also disappeared as the sea comes up and floods into the burial ground and digs the sand displacing the remains of my family member.

62. When these graveyards are being destroyed by sea level rise, it basically destroys our connection to the land and to our people that have passed on. It also destroys our community life as one of the three parts that make up our community identity is now being destroyed.

63. In our culture, where we buried our ancestors are known to be as tabu (sacred and restricted) places for people to live close to or walk close to as it is our cultural belief that the spirits of our ancestors are still there with us and should be respected. I have observed how rising sea levels have come into our coastal graveyards and uncovered our ancestors' remains through erosion and there have been some graves that have been swept out entirely.

64. Our road access is now through the gravesite as our beach and graves have become one site as the sea moves further through our grave sites.

65. When I witnessed the destruction of the graveyards, where bones and remains of our ancestors have been washed out of the soggy grounds and caskets have been unearthed when high tides come into the village, I felt emotional and sad as these are sacred part of our identity, and we are losing our sense of identity and connection to our people and land. Our connection to our grandfathers is now being taken away which is the saddest thing that we must deal with every day.

66. The loss is unacceptable, and I feel we have no power to stop the changes we are experiencing. For us people of Lilisiana village, our grave yards hold a huge part of our community as it holds our community identity, our family history and our family heritage. And it saddens me that our future generation will not be able to see where their descendants are being laid and learn about the stories of our village through these grave yards.

Traditional Medicine

67. We have herbal medicine to treat coughs in our village. My grandfather and father taught me and all my siblings various traditional medicines to treat cough, and this traditional

Signed: Hillary Fioru **Witness:** **Date:** 04/03/24

COMMISSIONER FOR OATHS * MALAITA MAGISTRATE COURT *

medicine is planted along our seashore by our grandfathers decades ago. It is common knowledge of all our people in the village about this traditional cough medicines that we have in our village.

68. I have seen over the past 10 years that the high storm surges that we have been experiencing have destroyed these plants for cough medicine. I observed as the sea water comes into the soil that holds those traditional medicines, the plants started dying off.

69. This plant used to treat cough can only be grown near the sea. We have tried replanting in land, but they died. The sad reality we have right now is that this plant has now been swept away by the frequent high tides that come into the village, also destroying all the trees that were near the seashore.

70. This has resulted in the loss of these herbal medicines for our people, and we no longer have access to this to treat our people. We have to go to a nearby clinic which is 1.5km by foot, to have our children and people treated. This is a huge loss of traditional knowledge of herbal medicine for our people, now we have to pay for hospital medicines to treat ourselves and it is also very expensive to buy medicines from the clinic and private clinics as well.

Canoes

71. My family came to Lilisiana by Canoe and all others that followed came by Canoe as well.

72. Canoes are the main form of transport in our village and our people are known for making canoes. We are the only ethnicity in all the regions of Solomon Islands that are well known for our craftsmanship of building boats and strong canoes. This is a generational skill that has been passed down by our ancestors of canoe making. My Father knows how to make a canoe and he taught me how.

73. The tree for canoe making is known as "Dalo". Dalo is only grown and can be found growing near the sea, and it cannot survive on swamp places or wet grounds.

74. Canoes have helped us to engage in barter systems of exchanging sea food for local root crops from the bush, it helps us to travel to nearby villages for cultural ceremonies like marriages, conflict resolutions between our people and we use canoes to do fishing.

75. Today, canoeing has made it easier for my people to travel to access basic services and to earn money by selling catch or produce and even to barter with neighboring villages.

76. Before, you could find Dalo just along our seaside but nowadays, it is very rare to find that Dalo tree anymore and I think this is due to the increased sea level rise that has

Signed: Hillary Fioru **Witness:** **Date:** 04/03/24.

COMMISSIONER FOR OATHS
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Exhibit 17

I, Faye Mercy Saemala, from Malaita Province, Solomon Islands, Solemnly affirm and declare:

Background

1. My full name is Faye Mercy Saemala, I am 70 years old. I was born on 10 September 1953 at Kwaibala Hospital, Auki, Malaita Province.

2. I am a Solomon Islands National. I am from Bougainville, Isabel and Malaita Province.

3. I live here in Ambu village, Aoke Langalanga Region, Malaita Province, Solomon Islands.

4. I first moved to Ambu in 1974 when I married a man from the Aoke Langalanga region located in Malaita Province. We lived in Ambu until the early 2000s when we moved to the closest town, Auki. I moved back to Ambu in 2009 when my husband got sick, and I have lived here since then.

5. My husband died in 2009.

6. I have six children, one girl and five boys. I have 26 grandchildren and 4 great grandchildren.

7. In the Ambu village before, our house was 3 meters further away from the sea but now it is currently one meter away from the sea.

8. I provide statements on the Langalanga peoples relationship to the sea, changes to the tides, weather, reefs, land space and shell money. I also provide statements about the impacts of these changes on our people.

9. This testimony is based on my direct knowledge of our Langalanga Custom which was passed down to me from my parents, grandparents, and my ancestors.

Our Relationship to the Sea

10. Ambu Village is one of the most populated coastal communities within the Aoke Langalanga region in Malaita Province. It is one of the coastal communities in Malaita Province that engages a lot in fishing and diving and most of the skilled fishermen in the Aoke langalanga region are from Ambu village.

11. For our people of Ambu, we hold a strong connection to our sea and corals as they are like the homes to our ancestors. And to us, sharks are regarded as our ancestors that guide and protect us when our people are out in the ocean fishing or diving. So this is how we share a close relationship to the sea.

Signed: Faye Mercy Saemala **Witness:** **Date:** 4/03/2024

Fmsaemala

COMMISSIONER FOR OATHS MALAITA MAGISTRATE COURT

Sea Wall

12. During the 1970's my late husband built the sea wall around the Ambu Village to protect our houses from the sea. The sea walls were 3 meters above sea level. Today, the sea has gone above the 3-meter sea walls that my husband built during the high tides. It reaches our knees when we step out in the high tides to clean up the tones of rubbish that it brings along.

13. With the increase of sea level rise our people have started to remove the stones that hold our reefs and fish habitats and use them to build our stone walls to help prevent tides coming into the village during high tides. And the impact that it does to the reefs is that fish can no longer breed there like they usually do before, and the frequent low tides also makes it difficult for fish to come near the reefs.

Changes in High Tides

14. In the past until five (5) years ago I was able to walk to Auki Town from our Ambu Village and it would take me around 5 to 10 minutes to reach Auki during low tides.

15. Auki Town hosts most of the basic services for Ambu people, such as hospitals, Schools, Shops, and other basic services.

16. I have observed that over the last 15 years the sea level rise has increased tremendously.

17. Now, even in low tide we cannot walk from Ambu Village to Auki. The sea is now very muddy and swampy which makes it difficult to walk through. I now have to walk using the main road which takes us about 15 minutes to get to Auki town.

18. I have also seen that in the past, the high tides we had were about 2 meters which can be up to our chest if we are to swim across from Ambu to Auki. And we experience big high tides once a month or rarely. Now we get them as often as twice a month and it floods and stays in our village for 3 full days as compared to before when it would go down in one day.

19. Big high tides coming into our village are just like flooding because once it comes in, it brings lots of rubbish into our village and the sea water covers the village, to the point where it reaches to our knees.

Signed: Faye Mercy Saemala **Witness:** **Date:** 4/03/2024

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20. Our houses that we live in are built on high posts which are six (6) feet and our cooking houses or bush kitchens, which are separate buildings, are built lower on the ground.

21. I observed last year that the big high tide happened more than once a month. The high tide reached three (3) feet up my house post and the post of my house is 6 feet. When there is high tide, my outdoor bush kitchen is fully flooded, and I can no longer cook in it anymore. And the water reaches my knees when I walk around the village.

22. I have observed that the sea level has risen and as a result some of my families have now built houses that are 10 ft high to withstand the high tides and in land floods that come right into the village when there is high tide. We no longer build houses that are 6 ft higher because the sea level can reach 3 ft of their house which is not safe anymore for their families especially when the high tide comes in during the night.

23. Our people's houses have dropped lower because of the water making the soil soft and the house posts sink, no longer able to hold our houses. Our houses are now very vulnerable because of this and can easily fall off during an earthquake. Earthquakes have occurred in our village not quite often but when it does all our families are always on alert for tsunami or earthquake warnings because of this vulnerability.

24. The sea level rise is life threatening. As a grandmother, the fear for the lives of my little grandchildren has prompted me to teach them as young as three years old to know how to swim so that they can survive these events when there is a flood or disaster. Even when they are playing outside in normal times, I still make sure they understand the dangers of floods or disasters that could happen.

25. Now with the frequent sea level rise and high tide which floods our village, we have also experienced a lot of health issues in our village where we have a huge outbreak of our children suffering with continuous flu & cough, diarrhea, Malaria, severe vomiting and stomach ache and this was due to the fact that our toilets have been flooded when there is high tides.

26. I have observed that the debris that comes into the village during the high tides leaves a lot of rubbish which makes it a breeding ground for the mosquitoes that are regarded as the malaria mosquito. I observed that our children after such floods are often sick with severe Malaria and we have to travel 1.5km to the clinic for treatment.

Coral Reefs

Signed: Faye Mercy Saemala **Witness:** **Date:** 4/03/2024

Saemala

COMMISSIONER FOR OATHS ★ MALAITA MAGISTRATE COURT ★

27. I have observed for the past 20 years we have a rich ecosystem of healthy coral reefs where I have observed that lots of varieties of school of fish and seashells usually breed and grow on those coral reefs. I have observed these when I would go out fishing on the nearby coral reefs which are closer to our village, we would have a really nice quality catchment of fish.

28. I have also observed that our coral reefs are so vibrant in their color and unique smell and our sea is fresh with really nice and clear colors of the coral reefs that can be easily seen when we are out fishing.

Changes to the Reefs

29. I have observed over the past 10 years that the sea water has become warmer. I have also observed since the past 5 years that a lot of algae and moss in the sea and that seagrasses are no longer in the same places it used to grow before, in our seashore which is just a meter from my house. I have seen and observed that there are no sea grasses anymore, but it is now filled with rubbish that the high tides bring in.

30. Just last week I saw many corals being washed up on the shore and getting stuck in the mangrove mud. They were white and did not have their unique smell, they appeared dead to me. I have noticed over the past 10 years that our reefs seem to have been dying out and that is why I see many of our coral reefs washed ashore.

31. I think the warmth of the sea makes it inhabitable for corals to grow and live under the sea, it's too warm for them. They end up dead and washed ashore.

32. I have also observed that after frequent high tides and flooding of the village after a heavy rain, I find corals washing up on the shore. I notice the same thing happening in the villages nearby.

33. I have observed over the past 10 years that there are less fish near our village. Before, my children usually did their fishing just at the sea walls that my husband built in front of our house.

34. Now they no longer fish there because there is no fish to catch.

35. As a result, we often do not have enough fish to eat and enough to sell to earn money for family expenses such as school fees.

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36. Our diet has been affected and we resort to manufactured goods such as canned fish, rice, noodles, and other goods we can buy from the shop.

37. I know that our bodies are not used to manufactured goods, and we have *sibolo* (thirst for fish) but there are not enough fish when we fish.

Cultural Significance of Shell Money

38. For us, Langalanga people, shell money is valuable and has a huge cultural significance. Shell Money or *Tafuliae* is made out of shells that are found in our waters, and is woven by our women.

39. *Tafuliae* is used by our families and tribes for compensation and reconciliation in the event of conflict or a custom of the village being broken. We exchange this to ensure peace, respect, and harmony in our communities and also between our tribes.

40. *Tafuliae* is also used for bride price or what we call *Kwatena*, which means gift, during a traditional custom marriage - in which the boy's family will give as a gift to the girl's family to show their joy of having their daughter join their family, as it is this daughter that will bear children for their tribe.

41. These are the true cultural importance of shell money.

42. Being a woman from Langa Langa region, this skill of shell money making is being taught by our mothers when we are little. The shell money skill is a skill that only the people of langalanga can do and this skill is being passed down from generations to generations.

43. Being born, raised and married to my husband who is also from Langalanga, I knew the cultural importance of shell money and how valuable it is for our people. I have used shell money for my all my son's bride price and also resolving conflicts in our families as well in our tribe as well.

44. There are 3 important shells that we used to make the *Tafuliae* and these shells are *ROMU* (Red shells), *KAKADO* (white shells) and *KURILA* (Black shells). In the past we could find

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the shells near our shores, now, we cannot find them nearby but have to look further and even pay for them from other islands.

45. These shells grow in coral reefs.

Frequent Flooding and changes to Weather Pattern has affected the shells.

46. I have seen that our coral are no longer growing and breeding close to our nearby reefs.

47. I have noticed that the shells have been disappearing since the late 1970s when I was a young girl and first moved to Ambu Village.

48. I have observed that the frequent flooding from the bush and the high tides from the sea have affected the breeding ground for coral reefs that grow the shells because the soil gets washed into the sea and onto our coral reefs. I think this destroys the corals because it carries various sediments of soil dirt and trash from the land into the sea and corals do not grow well in these conditions as I observed they die and wash ashore after it floods.

49. I have seen flash flooding inland in the mountains occur more frequently now than 10 years ago. Flash flooding usually occurs when there is heavy rain or if it rains for longer periods. We can tell when it is going to flood by looking at the black clouds that usually start from the mountains up in the bush.

50. In addition, flash flooding from the head of the river coming down to the sea front has really caused a change to the habitats of the seashells. It has caused huge mudslides that bring broken logs, trees and plastic pollution into the sea that destroys the habitat of the sea's shells.

51. Given the difficulty of having to find these *romu*, *kakado* and *kurila* shells to make Shell money "*Tafuliae*", I worry it will be difficult in the future to maintain the traditional way of shell money in our community as chances of these shells being completely gone is very high.

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52. I feel very sad because this will be a huge loss for my village and the people of Langalanga. This generation's skill of shell money making will disappear in the future if these 3 specific shells that will be needed for shell money completely disappear from our reefs.

53. As a woman from Langa Langa and as a grandmother, I worry that my grandchildren's children will not know about this shell money, about how it was made and the cultural significance of it. It is a part of their identity and they need to know.

54. The loss of shell money making in the future will really affect our traditional identity because we Langa Langa people are well known for making *Tafuliae* and it will be a sad reality for our future generation to lose this generational skill that has been maintained by our ancestors for so many decades be vanished due to changes that affects our reefs and our sea.

Value of Coconut to the Ambu People

55. To us, coconut is an important source of food for our people. We rely on it for our survival. We use its fruit for food and drink, its leaves and trunks are used for cooking and house material.

56. It is also used during traditional marriage, known as *Geni Dadani,* where the bride as part of her traditional attire, will bring as a gift from her family to her husband's family, a young coconut plant to be planted at her new home. It is symbolic of the value the woman will add to her new family. And like the coconut, she will bear the generations to come.

57. It used to be planted along our sea shore. Our ancestors planted many coconuts along the sea shore of our village because they see the cultural importance of coconut for our people as for food purposes and for *Geni Dadani* . But today, many of our coconut trees have been uprooted during the coastal floods and sea level rise that have frequently occurred in our village.

Sea level rise has left limited spaces for planting coconuts and affected our soil

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58. For villages like Ambu, coconut is no longer planted due to limited land space.

59. The sea has come up too close to the shore and this affects the replanting of plants such as the coconut due to space available as our village has no space that can cater to plant coconut trees anymore.

60. As our children are grown and having families of their own, they are building new houses on our land. Some of our families are also rebuilding their houses further inland to avoid high tides and some have rebuilt because their houses have been destroyed by the sea level rise.

61. The planting of plants, crops and the building of new houses, are competing for the limited space available.

62. Limited land space has led to land disputes. It has really affected families by causing division amongst our families and people and this is since the space cannot cater for more houses to be built as the sea comes into the village covering our land that is available and even building sea walls nowadays has not withstand this sea level rise that we are experiencing.

Relocation

63. To say we should move away from here is very easy to say but it is difficult to do it.

64. Currently, we already have land disputes, people already arguing over land, which makes it difficult to relocate to another place.

65. We are sea people; it will be difficult for us to live in the bush. Our way of life, our food and lifestyle revolve around sea resources. I have observed that when our people move to the bush to live, they become sick. It's just the way it is, we are sea people not bush people.

66. Living close to the ocean to our ancestors has always been what we know.

67. We, Langalanga people are known to many in our country as the skilled fishermen, skilled navigators and skilled seafarers as this was a generational skill being passed down from

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our forefathers or ancestors from the past decades for so many years. But now with the frequent weather changes of intense high tides and cyclone-like weather it has made it difficult for us to teach these skills to our children anymore.

68. Additionally, only some of us are lucky to have land further inland to relocate to, for others this has always been the land we know and belong to.

Message to the International Court of Justice

69. My message to the International Court of Justice is that I want the court to see and hear the silent cries of our children and our families heard through these submissions. I want the court to issue an advisory opinion that will be a powerful instrument to pave the way for our international laws and our domestic laws to safeguards us from the increased impacts of climate change. As a mother, grandmother and great grandmother I have seen that our lives are unknown to predict as the changes of weather that we are experiencing now are no longer safe for us. Everyday we are fighting for our survival to live in our homes and our land but the risk of the rising sea level is rapidly taking our land away from us and it is unknown where our children and their children in the future will be able to live a life like we have today. I want the court to know that Climate Change is real and it is an everyday reality that me and my people are faced to deal with for the rest of our lives.

Signed: Faye Mercy Saemala **Witness:** **Date:** 4/02/2024

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Exhibit 18

I, Francis Hickey, from Port Vila, Vanuatu solemnly affirm and declare:

Background

1. My name is Francis Hickey. I am 66 years old. I was born in 1958 in Canada. I first came to Vanuatu in December 1991, when I was 33 years old. I have been living here ever since. I became a citizen of Vanuatu in January 2023.

2. I work at the Vanuatu Kastom Center in Port Vila. My position is Coordinator of the Traditional Resource Management Program. I have held this position since 1997. In this position I have spent nearly 30 years traveling throughout the islands of Vanuatu, speaking with communities about their traditional knowledge and practices, and recording that information so that it can be preserved for the future.

3. I have been leading the Vanuatu turtle monitoring program, and I was designated by the International Union for the Conservation of Nature (IUCN) as the Marine Turtle Speciality Group member for Vanuatu.

4. I provide a statement to the International Court of Justice on the impacts of climate change on Vanuatu's biocultural calendar, kastom practices, and sea turtles.

5. My statement is based on the expertise and knowledge I have gained over the past 27 years researching, recording, and archiving traditional knowledge across Vanuatu, and performing marine ecological research and biocultural research with respect to sea turtles.

My Role with the Vanuatu Kastom Center

6. My background is in marine biology, and I originally came to Vanuatu to take a job with the Republic of Vanuatu Fisheries Department. I was posted in Santo, and I was the senior executive director for fisheries in the Northern Region of the country. I had a little boat and every month I'd spend about ten days at sea, going to different islands, and then I would come back and do all my administrative and policy work.

7. I stayed in that position with fisheries for 6 years. During that time I spent a lot of time in the islands and I saw a need for government programming to help communities strengthen their traditional resource management.

8. At that time, traditional resource management was in decline because of all of the typical things: Westernization, the pressures of capitalism, money, money, money. Especially in fisheries, there was a lot of pressure from outside forces to develop commercial fisheries,

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Witness: Brittien Yosef
Lawyer for the Melanesian Spearhead Group

Prepared at Pango and Port Vila, Vanuatu on 13 and 16 November 2023 respectfully.

but without any regard for the traditional sustainability and resource management practices. For example, fisheries would be set up without any regard for existing taboos, that kind of thing.

9. I brought this to the attention of Ralph Regenvanu who was then the director of the Kastom Center. We went on a sailing trip together around the islands to see what was happening, and then we applied for Canadian funding to do a project researching and strengthening resource management. That funding was enough for me to continue to sail around and learn more about the resource management practices. This was in 1997, and with that funding I started working with the cultural center, and I've been with them ever since.

10. I sailed all around the islands, sometimes with a videographer if one was available, or sometimes just by myself. It wasn't always easy battling the ocean but I loved it. My boat finally got wrecked during super cyclone Pam in 2015. I had that boat for 18 years. It was the end of an era.

11. During my travels, I would meet with communities and I would interview them, going through a long questionnaire. I would ask about resource management practices, for example, how did you catch fish and how did you manage fisheries resources? I asked about wind roses and other means of canoeing and navigation. I collected the ethnobotany related to canoes, all the different trees and plants used to make them, and I collected kastom calendars, as many as I could.

12. I recorded all of this knowledge as a way to archive it and preserve it. I recorded using various methods–video cameras, a voice recorder, writing it down. That's all on record and is something I will publish eventually. I could see the urgency of collecting the knowledge, especially the canoe stuff, because now a lot of people don't know that information. They are being pulled away from their traditions by, for example, labor mobility schemes in Australia and New Zealand. They are being sucked into this cash economy. That is really causing a loss of culture, and climate change is compounding that loss, it is exacerbating it.

13. Eventually, we at the Kastom Center also formed a woman-led team focused specifically on women's traditional resource management. So the woman managing that did the same thing as me, she went to all of the islands and focused specifically on talking to women and recording their stories.

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Vanuatu's Biocultural Kastom Calendar

14. Life in Vanuatu follows a kastom calendar. The kastom calendar is based on the moons. There are 13 moons in a year, and so there are 13 months in the kastom calendar. There are 138 languages in Vanuatu, and each language has its own names for each of the 13 months.

15. By the way, the Gregorian calendar does all of this contorting to make it work, there are leap years and months with 29 days, 30 days, 31 days. That is all to conform it to 365 days in a year. They didn't understand it the way indigenous people do. There are thirteen months.

16. The seasonal calendar is biocultural. It is a biocultural calendar. Biocultural refers to the combination, or the interrelationship between the biodiversity and the cultural side. The biological and the cultural are inextricably linked. They are tied to each other and they modify each other and they preferably live in harmony.

17. So the fact that the calendar is biocultural means that specific cultural activities are performed each month in line with what the environment and the biodiversity is doing at that time. For example, there is a month when the Yam should be planted, one when it is time to harvest the Yam, things like that. There is a month for when the wildcane is flowering. That is a very significant time because it is when the fish spawn. So when the wildcane is flowering, that is the sign that the fish are spawning. When the wildcane opens up and releases the seed, the fish are doing the same.

18. I will try to explain the cycle in a bit more detail. During the hot season, the Yam is planted and is in the ground.There is also a tabu on the near-shore fisheries at this time, which is also the season that all the marine critters are spawning. During the hot season, the tides are higher, seasonally. That's the way it is, because of the way the earth is aligned at that time of year. During that time, people are eating vegetarian. Coconut milk on the island cabbage, all the fruits, things like that. It's hot, very hot, so you want to eat light like that.

19. After the Yam is harvested, at the end of March, it is the cold season, which lasts until August. At that time, the tides are super low, especially during the day when the moon is new and when it is full. So now the spawning season is over and the near-shore fisheries open. These fisheries are also easier to access at this time because the tides are so low. So men, women, and children go out and harvest from the reef. They can just walk straight out there, and because the tide is so low there are even fish and crabs and things stranded in pools on the reef, so it is very easy.

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20. They've separated fisheries and agricultural activities seasonally in this way that ensures balance–ensures that the resources have time to replenish–and at the same time, the resources are harvested at the right time of year, when it is easiest and safest to do so.

21. In implementing this seasonal biocultural calendar, one of the main traditional resource management practices is the tabu (taboo). Actually, tabu is the Bislama (pidgin) term for it, but there are words for tabu in all 138 vernacular languages. One example is *Ringi te su* [sp], which means "leave it there to multiply."

22. That translation gives a sense of what the tabu is all about. When a certain area–a fishery for example–is made tabu, that means no one is allowed to go there to harvest resources. It is off limits until the resource has the chance to replenish. The tabu is sacred. It is overseen by the ancestors.

23. The ancestors are still here, they are still with us, but they are living on the other side. The tabu is an entreaty to the ancestors to overlook the restricted area, to act as a guardian. And the people have to comply. The tabu is also a law, a prohibition, but a sacred one. If people breach the tabu, the belief is that they or their family members would fall sick, or even die. It is a mystical punishment.

24. To engage ancestors with the activities of the living, the blood has to run. So when the people need to call on the ancestors, they have a ceremony and kill a pig. Pigs are ceremonial, they aren't killed all the time for eating or anything like that. It is a ritual. There are pig killing ceremonies for a lot of things. For example, to set a tabu as I was saying. Or, if there has been a conflict, once it is resolved, they might kill a pig to settle it, to say that there is no bad blood anymore.

25. The tabu is indicated by particular leaves that are used. Each leaf has a particular name and a particular meaning, basically variations on the "let it rest and let it multiply" message. The leaves are very sacred. Some of the tabu indicators are shared across communities, and some of them are unique. The leaves of wildcane, coconut, and namele are some common ones.

26. Tabu is a good example of a biocultural practice that enables sustainability. For example, as I was saying, when the new Yam goes into the ground, the near shore reef is tabu until it is time to harvest the Yam. That's the best possible practice, because during this time, which is the hot season, all of the marine critters are breeding, and that is the same time you are supposed to be in your garden tending to your Yam. So you let the marine environment replenish itself while you are busy tending to your Yam.

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27. It is also culturally important for people to be focusing on their Yams at this time, because when it is time to harvest the Yam, everyone presents a Yam to the chief and it shows their manna, their status. So nobody wants to come out of the season with dinky little Yams. Yam gardening is about status. Not only how good your yield is, but also how well you performed all of the tabus associated with Yam gardening. So this also encourages compliance with the tabus.

28. For example, it is tabu to eat turtle or their eggs while the Yam is in the ground. The wisdom goes that if you eat turtle or their eggs during the growing season, your Yams will come out tiny, like little eggs. And that may well be linked to the fact that the process of cleaning the turtle is really pungent and that smell clings to you. So if you go into the garden and are turning the Yams on the vines and all of that, the bugs might say "mmm smells good," and then they ruin your Yams. Anyway, that was a suggestion by one of the elders I spoke to.

29. Another example is that, on some islands, it is tabu if you even expose your feet to the sea to go into the garden. This reinforces the tabu on the near-shore reef, but it also helps to protect the garden, because salt is no good for the garden, it is very detrimental to the garden.

30. The seasonal calendar is basically the cycle of the yams, the tides, and customs. That is what it is.

31. I have brought a booklet with more information about these practices, which the lawyers have said they will attach to my statement. The booklet is called "traditional ways of looking after the environment" and was authored by me. The subtitle of the booklet says "We are lucky to have a living system still with us" and "Everything has to be connected to the foundation, which is kastom."

The Yam as the Center of Kastom

32. So as I've said, it is all connected–land, sea, and people. But at the same time, it is fair to say that the seasonal calendar centers around the Yam, which is the main crop in Vanuatu. The Yam is what the people have eaten since they first arrived on these islands more than 3,000 years ago. It is their staple and their sustenance. But it is much more than that too. The Yam is linked to a lot of stories and the people have spiritual links to the Yam as well. For example, an elder once told me "Yams are like your children, you love Yams just like your children. You care for them so much." Yams are very sensitive.

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They are easy to harm. Like the tip, if you spoil the tip then the shoot is not going to grow. So you have to treat them very gently and lovingly.

33. The stars tell the story of the Yam. All of the stars, all of the constellations go by and tell different parts of the Yam story. For example, Orion's Belt, the three stars, that represents a man coming home with two Yams from the garden. The symbology is pretty much the same across the different communities, but sometimes it is a little different. For example, for some communities, Orion's Belt is a man returning from the sea with two bags of shellfish.

34. The Yam is also an essential part of all kastom ceremonies. For this reason, the ceremonies are always held during the cold season, when the Yam has been harvested and is plentiful. For example, all kastom marriages are held during that time. There is also a ceremony around male circumcision, when the boys go off into the bush with the elders and learn about becoming a man. It is rite that involves sharing traditional knowledge, and you have to have Yams to do it.

35. Because the Yams are so sensitive, they require just the right conditions at the right time to grow. So that's why the seasonal calendar is so related to the Yam. When the conditions are just right, you prepare your field, you plant your Yam, the Yam grows, you harvest your Yam.

Impacts of Changes to the Weather on the Seasonal Calendar and the Yam

36. When I first moved here, the weather was very stable. The seasonal cycle was stable and predictable. In the dry season it was dry and in the wet season it was rainy. Now, it is random. It rains all the time, at any time of the year.

37. This has really disrupted the seasonal calendar, which as I explained, is sacred. For example, with regards to the Yam cycle, when to plant, when to harvest, all that, the people follow Matariki, which is a star cluster. It is also known as Pleiades or the Seven Sisters. It is a little heap of stars that are in a line. At the start of the dry season, which is in October, Matariki rises at sunrise, it looks to the east and you can see it clearly, because the sky is clear at that time, because the weather is dry. Then, six months later, the wet season starts, around April. At that time, Matariki rises at sunset, but when you look out, it looks like it is drowning because there are so many clouds. That is how it should be. But now, Matariki is still on its cycle, it rises where and when it is supposed to, but the sky is different. The clouds are just random. There are clouds when it is supposed to be dry and no clouds when it is supposed to be wet. Everything is totally out of balance.

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38. Because of these changes to the weather the crop cycle is disrupted. That is changing how people live. The worst is now we are getting rain during the dry season. The Yam needs dry conditions to grow. Now that we are getting so much rain at that time, the Yam is rotting and the yields are poor. I explained already how central the Yam is to life and culture, so that is a really devastating impact.

39. There is another ceremony I should mention, it is called the *Now Sal Tonga* , and this is a ceremony that happens throughout the Shepard Island group, which are all those between Efate and Epi. In these islands, the chief is the steward of all the land, and within that land all of the families have plots that they use for gardening. So at the new Yam harvest, that is the time of the *Now Sal Tonga*, and that means that every family presents Yam to the chief, presents the richness of their gardens. It is a way of paying allegiance to the chief. It cements the underpinnings of the society: the sense of responsibility and reciprocity and respect. This ritual holds everything together, the social fabric, everything. So if you don't have your Yams, or you don't have enough Yams, well then, your fabric is falling apart.

40. Here in Port Vila, because it has been so urbanized and taken over by the cash economy, no one is really doing this ritual anymore, we've already lost it. But on the other islands in the Shepards, they are still doing it. It is still the culture and the way of life, but I don't know how they are going to adapt now that the seasons have become so disrupted and the Yam has been so damaged.

41. We also have diseases coming through that have wiped out the leaf lap lap, which is very important. You can't substitute banana or anything to make the lap lap, it has to be that leaf. Lap lap is a big pudding made from tubers. You grate the tubers and basically make them into a big pizza, you put meat in there, whatever you want, and coconut cream, and you wrap it up in the leaf lap lap. You tie it off, fasten it, and it goes on the hot stones to cook.

Impacts of Cyclones

42. As I said earlier, I had my sailing boat for 18 years and I sailed it all around the islands. It finally was destroyed by Cyclone Pam in 2015. I've lived in Vanuatu since 1991 and I've lost count of how many cyclones I've lived through, but Pam was something different. That was bad. That was scary.

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43. There is a little cove where everyone normally hides their boats during cyclones. It is a sheltered place and the boats always stay safe. But during Cyclone Pam, the boats were all destroyed. It just ripped through and destroyed them all.

44. On the day that Pam hit, I woke up in the morning and stepped outside and there was not a leaf on the trees. My house used to be surrounded by trees, but they were all destroyed by Cyclone Pam and have not been able to grow back since, because ever since then, we've been getting so many severe cyclones.

45. Cyclone Pam also destroyed my garden. It has never grown back to its former glory. Everything got destroyed. The root crops, yam, taro, and the big fruit trees, just completely destroyed.

46. Then after Cyclone Pam, as I said, we had so many big cyclones. For example we had the twin Cyclones in March 2023 and then Cyclone Lola in October.

47. Being battered repeatedly by such severe cyclones, it was bad. It was bad psychologically. For example, my trees and garden kept getting destroyed, so I've just given up on them, psychologically. What's the point in try to regrow if they will just be destroyed again? So I've given up and just let everything go completely bush..

Impacts of Climate Change on Sea Turtles

48. I explained already about how the Yam came with the first people to Vanuatu, and how it was part of life from the beginning. It is the same with turtles, although they were here first. The Lupita people came from Southeast Asia over 3,000 years ago on their canoes, and the turtles were here. So this means the communities here have lived with turtles as part of their biocultural realms for 3,000 years. For some tribes, their totem is the turtle, which means it represents them and also is their guardian and protector.

49. The turtles were being caught right from the beginning for eating. They have very rich meat. But they aren't a run-of-the-mill food. Turtles, like pigs, are special, sacred. They are reserved for kastom, primarily. They are eaten only at certain special or ceremonial times.

50. In some places I did surveys, the villages said that the whole community would eat one turtle a week. They would eat the turtle on sunday, because there it is a special day, there is a certain holiness to it. They eat and celebrate together, they talk story and laugh. And so turtle is very much a special, prized food. The cultural value of a full grown turtle is

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equivalent to a tusked pig, which is massive. It is one of the most sacred animals, for kastom purposes.

51. Turtles will also be served to honored guests, like chiefs who are visiting from other islands, high ranking government officials, and so on. For the government people, it is funny, because they will have to break the national law, which makes it illegal to kill a turtle, and eat the turtle they are served. It is an honor basically. They are giving you an honor by serving turtle.

52. Everything about turtles is very specialized cultural knowledge. They know where they are, how to find them, how to catch them, and how to cook them. And when they prepare the turtle, they use everything. They don't waste a single drop.

53. Within the village, the taking of turtles is very ordered. It is carefully managed. The Chief says how many you can take and when. The Chief determines the appropriate amounts and times through his council, which includes elders, and enforcers, and people with particular skill and knowledge with respect to turtles. The rules around catching turtles is also linked with the seasons, as I was saying before. It is taboo when the Yam is in the ground.

54. So as you can see, turtles are very important to culture. Very important to the fabric of life here. Unfortunately, they are really being impacted by climate change.

55. The biggest thing is that the nests are being washed out, by cyclones and storm surge, and also sometimes just by king tides. From November until about March it is nesting season, and the turtles come up to shore to nest. And if they don't go high enough, if we have a cyclone come through, they get washed out, the nests get destroyed. It isn't just the cyclones but even storm surge when there are smaller storms, or even high tides can wash the nests out.

56. The turtles always come to the same nesting spots, it is in their DNA. This never used to be a problem, but now, with the more severe weather we are experiencing, with sea-level rise, which causes higher tides and more severe storm surge, and with the increasingly intense cyclones, the turtle nests are just getting wiped out.

57. One of the most critically endangered species is the leatherback turtles. These turtles are massive, about the size of a Volkswagen. Their nests are washed out by the storms and the tides and things, but they are also washed out by the heavy rains we are experiencing now. This is because the leatherbacks come up onto shore where there are rivers, probably because they can cruise up the river and then haul themselves out rather than

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Prepared at Pango and Port Vila, Vanuatu on 13 and 16 November 2023 respectfully.

trying to make it to shore across all the coral, since they are so big. But when we get the heavy rains these days, the rivers flood and that destroys the leatherback nests. It was never like this before.

58. In recent years, this has happened time and time again. And it is really concerning because these turtles are endangered. There is a local NGO, called Vanuakai, that is working to address this issue. They've come up with a method, which is basically relocation. They just have a dish full of sand and they carefully pick up the eggs, put them in the dish, and move them up higher.

59. The transportation intervention so far has worked pretty well, as long as they get high enough up. But the problem is that this is really labor intensive and it takes a lot of money too. And right now, the NGO members are just volunteering. It is under stress, that level of volunteering. We only have two nesting hot spots for leatherbacks, on Ambrym and Epi. They are super remote beaches both spots, so basically the volunteers have to camp out there for a few months. They aren't getting paid for this and they aren't in their gardens, they aren't with their families, so it is a big sacrifice.

60. And then, for those eggs that don't get washed out, the changing temperature affects the eggs. It affects the sex of the eggs. The warmer temperatures we've been experiencing mean more females hatch than males. In the short term maybe you think that's good because the females are the ones that lay the eggs, but in the long term we need both males and females for the species to survive. If it is too hot, we aren't going to get any males, and it is only going to keep getting hotter.

61. The same NGO, Vanuakai, are trying to come up with solutions for this problem too, like these cooling systems that pump seawater up onto the nests to cool them off. It is kind of ridiculous. It is really high-tech, running on solar batteries and stuff. It is really expensive and labor intensive, because people have to lug this equipment out to the nesting sites and monitor them too, and all of this just to try to get us back closer to the way things are supposed to be. Vanuatu can't fund this. The country doesn't have a lot of money.

62. Another thing is the main food source for the turtles are the seagrass beds, and seagrass doesn't do well with heat. I've done a lot of surveys of seagrass in shallow areas at low tide, and recently it just get covered with epiphytes. It gets all covered with brown algae that grows on it and kills it. The algae blackens the seagrass and it diesAnd that's because of the heat. That algae grows much better in warmer water, and it is killing all the seagrass.

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63. One amazing thing about turtles, that we've been able to observed because we've satellite tagged many of them, is that they are unaffected by cyclones when they are at sea. They seem to power right through the cyclones. We can watch their course on the laptop, and even when the cyclone is right over them, they aren't being derailed from their destination. They are steady.

64. I can give you a nice little story about the turtle. So in Vanuatu, turtles are called *Fonu. Fonu* has a dual meaning. It means turtle, but it also means trickster. And that's because the turtle, he pops up, sticks his head up out of the water, and then he is gone and next time he pops up he is all the way over there. So you can call someone a *Fonu*, or in bislama it is *Gammon*, if they lie or play a trick.

65. And here is another nice one: One day, a young man woke up and had a strong craving to eat turtle. He thought, I just have to eat turtle today. So he walks down to the shore and he stands there with his spear and he is waiting all day for a turtle to swim by. He is there over lunch, he doesn't move, and everyone is thinking what's going on with this guy? Then it is getting to sunset and he still hasn't moved, so some of his friends come up and say, what are you doing? Why haven't you moved all day? And he replied, I'm looking for a turtle. And they said, well just look down–you are standing on one!

66. It is a favorite story and the saying is "standing on the back of a turtle," meaning looking for something that you already have. And it is something that we all do right? We've got everything we need but we still want more. So I love that little story. And whenever you find people doing that thing, you say, ah, you are standing on the back of a turtle.

67. That's a good analogy to what I was saying before–everything must be connected to the base, to the foundation, which is culture. You already have what you need, everything you need, in the culture. We are lucky we still have a living system still with us. So to me, the most treasured thing, the most important thing in the culture, is the knowledge of the environment, how to live with it, the people who live off the land and the sea. It is such precious knowledge. We want to keep that safeguarded into the future however we can.

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Lawyer for the Melanesian Spearhead Group

Prepared at Pango and Port Vila, Vanuatu on 13 and 16 November 2023 respectfully.

Signed: _____
Francis Hickey

Witness: _____
Brittien Yosef
Lawyer, Melanesian Spearhead Group

Date:14 March 2024

Signed by Fancis Hickey

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Lawyer for the Melanesian Spearhead Group

Prepared at Pango and Port Vila, Vanuatu on 13 and 16 November 2023 respectfully.

Exhibit 19

I, Jeannette Lini Bolenga, from Pentecost, Vanuatu solemnly affirm and declare:

Background

1. My name is Jeannette Lini Bolenga. I was born on Pentecost in 1962. I am 62 years old.

2. I come from the Tabi Tribe in North Pentecost. On my island, we have two tribes, the Tabi Tribe and the Bule Tribe. I come from the Tabi Tribe. We have a matrilineal system of land ownership. We own specific areas of land and sea and all resources upon it. So because my mother is Tabi, all of her children are Tabi too. A woman marries and moves to her husband's village. Mother, my other siblings and I have access to the land, sea and resources of father but ownership is by his Vara (clan) of the Bule Tribe. I was born and grew up in a place called Avulevule in Lamalanga, popularly known as Laone, which is in North Pentecost. Avulevule is my father's place.

3. I provide a statement to the International Court of Justice on the impacts of cyclones and changing weather on my community, particularly impacts to the women's practice of weaving ceremonial mats and on Yam gardening. When I say "my community" I am referring to my father's village in Lamalanga/Laone, but also all of the surrounding villages, which we maintain close relationships with. That is about 15 villages in total, and over 1,000 people.

4. My testimony is based on my direct knowledge and knowledge based on custom, which has been passed down to me from my parents, grandparents, great-grandparents, and ancestors.

5. My mother tongue is *Raga*, also known as *Hano* which is my local language. I went to English school and so I am also fluent in English. I gave my testimony in English

Pandanus Weaving

6. On Pentecost, we have a special red mat called *Bwana* that is used in all of our important ceremonies - weddings, births, deaths, peace, ranking taking and other ceremonies. It is a very long mat, perhaps four metres or so, and the weaving is very fine. Women make *Bwana* from pandanus leaves. First they harvest the leaves from the trees. Leaves are then smoked over open flames, striped into fine strands with a sharpened part of a dry wild reed and then soaked in water for several days. Leaves are then dried in the sun over the thatched roof of a house, on the grass or on the everyday household outdoor pandanus mats. The leaves dry and also turn white after about two weeks. For the leaves

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to be strong and white during the process of weaving, the leaves are stored in big baskets called *Tanbunia* over the kitchen fireplace and are regularly dried out in the sun. Once the mats have been woven into fine white mats, there is a special ceremony for mats to go through the different stages of pattern designing and tuntunu (burning) in a special tree bark. Mats are infused in water with the red color using traditional dyes, from the roots of Labwe and plants.

7. The *Bwana* are essential for all of our ceremonies. We also wear a smaller version of the *Bwana* called *Bari* for ceremonies. The men and the women wear them in different ways, but we all wear them.

8. For deaths, you wrap the dead body in the *Bwana* and bury them. We still do this today. Previously, before Christianity, we would wrap the body in the *Bwana* and put them in the graveyard and put stones over them. That's how we would put them to rest. Today we bury the bodies, but we still use the *Bwana*. The late first Prime Minister of Vanuatu, Father Walter Hadye Lini, Vuhungan Vanua, Quinguin Vanuatu was wrapped and buried in over 100 red mats.

9. The *Bwana* are also essential for marriages. They are used in a ceremonial exchange. On the bride's side, they give mats to the husband's family and the husband's family gives pigs (boe) to the bride's family. On the husband's side, the mats exchanged by the wife's father and paternal uncles in return of the pigs received have to be of the same value. For both the husband and wife, Bwana were distributed to their biological fathers, paternal uncles and aunties the afternoon before their wedding day. The exchange is not a " bride price"; it is a means of paying respect to and acknowledging the Creator for your heritage, your lineages, clans, the extended families and your father. It is acknowledging support received since birth, the new life you will enter and the future. The exchange is showing reciprocity and creating a connection, a relationship between the two families and the many clans that make up the Tabi and Bule tribes. Marriages is restricted between Tabi and Bule tribes, and marriage within one's own tribe is forbidden. So it is about building bonds, maintaining relationships, and strengthening community cohesion. Hundreds of *Bwana* are needed for a wedding. As I will explain more below, the *Bwana* are hand woven by women. It is a lot of effort to make even one. So the exchange of hundreds of mats is really meaningful.

10. Ranking ceremonies are associated with the killing of pigs (boe) and the exchange of *Bwana*. These ceremonies are for both young men to become chiefs in the Melanesian "bigman" society way and existing chiefs to acquire higher ranks. Both young and older men and women also have ranking ceremonies to take the next step in life, like for marriage and most important for the young and older acquire titles to have authority

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and be recognized in the community. The ranking ceremony is performed in an open place we call a *Sara* (open space in front of the village *Gamali* – commual house). To attend the ceremony you have to wear a *Bwari*. You also have to bring a *Bwana* or a Boe, pig to contribute and trade in the ceremony.

11. So *Bwana* are just essential to our kastom. They are what bind us together. They are our relationships and identity.

Origin of Pandanus Weaving

12. In our island, we have our own creation stories, and these are tied to the *Bwana, Boe,* names and titles and the land and sea. We have original places where we are from. One of these places is Avulevule, which is in my home. Laone is a long stretch of sand that stretches about a kilometer or so from Avulevule in the north to Anvura/Amataisia in the south. Avulevule is a sacred place. It's one of the core places in Raga/Pentecost.

13. My father's family has land rights there in Avulevule, but for a long time nobody was living there. Before I was born, around 1950 my father went and established himself there, and that is where I grew up. He was able to do this because he is genealogically related to the original people who came from there.

14. The practice of making *Bwana* started in my home village, by a woman named Nuenue who lived in Avulevule. She started to make the mats and she used to make beautiful mats. She was a goddess actually.

15. Nuenue had a son. Her son was a chief. He was very charming and charismatic. One day, he went off to a ranking ceremony in neighbouring Avunmarama, another village to the north of Avulevule. There, two girls saw him and were enamored because he was so handsome. So when he left the village they followed him.

16. Nuenue and her son lived in the realm of the Gods, so in order to get back home, the son had to go through a secret passage to get back home to his realm. He had to sing and do a secret ritual to open the passage. He told the girls to close their eyes so they wouldn't see what he was doing, but one of the girls didn't obey his words. She kept her eyes partly opened and she saw what he did.

17. The girls came with Vulevule through the secret passage and back to his home. When he got home, the Son told Nuenue that the girls were with him. Nuenue didn't say anything in response.

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18. The next day, the Son asked people to go weed his Yam garden up on the hill. So the village people came and they were working on the Yam garden, weeding it.

19. In the meantime, the Son sent the two girls to go home to Nuenue to help her to prepare food. When they got there Nuenue asked them: "where is the meat?" The girls told her that they didn't know. And Nuenue understood that the Son was planning to use the girls for the meat. She told them this, and that if they wanted to stay alive they would have to leave now, because the Son was planning to use them for meat.

20. The girls were really terrified and they were crying. But the girl who had kept her eyes open said to the other, "don't worry, let's go and try this before he gets here." So they went to the spot where they had arrived from the secret passage. The girl did what she saw the Son do and she sang, and the passage opened, and they were able to go back to their village.

21. Later, the Son returned from the Yam garden and asked Nuenue where the girls had gone. She said that she didn't know but that they were gone. This made the Son very angry because there would be no meet for the *vaguni* (people weeding) and he wanted to kill his mother.

22. At that time, Nuenue was weaving a mat. Normally, when you weave you use a long or heavy stick as a weight to make sure the mat stays lying flat. So when the Son came upon Nuenue to kill her, she hit him with the stick and he fell down and was dead.

23. The son was named Vulevule and the place where he died is called Avulevule, which is where I grew up. We respect him and never go close to the spot where his grave rests, and if chickens or anything wandered over there, they would die. People who know but want to tamper with the grave fall ill or get cursed or die.

24. So, the mother, Nuenue lived on, continuing to weave. And there is a big cave there in the area right close to where the white sand ends. In that big cave is where she used to dye the mats there.

25. Eventually, Nuenue left her place and moved around to teach the women of Pentecost how to weave. She brought all of the tools for weaving and dyeing with her. She went all around the island and eventually to central Pentecost, where she settled, and that is where she died.

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26. Today, women are weaving white fine mats everywhere in Pentecost, but there, where she settled in Central Pentecost is where most mats are woven, produced as red fine mats and distributed through Pentecost and Vanuatu.

27. So that is the story of how the red mats came to be in Pentecost. The story is also shared among our people through a beautiful kastom song and dance that is dedicated to Nuenue. In central Pentecost, she is known by another name in Wawan language and there is also a popular song and dance beat in her honour.

Process of Pandanus Weaving

28. The red mats can only be made by women. The process is very intricate. The mats are made by preparing, weaving, and dyeing pandanus leaves.

29. The first step is that women must plant pandanus trees, because we need the pandanus leaves to weave the mats for our families and extended family, and the mats that are needed for all of the important ceremonies.

30. Once the trees are grown, the women harvest the green pandanus leaves and then cut them, put them over the fire and then dry them in the sun. Today the leaves are also boiled in water. Once the leaves are dry, the women shred them into strands at whatever thickness they want to weave.

31. The weaving is very fine and the mats are very long with a width of 1.5 metres. If one woman is working by herself, it takes her about one week to create one mat, working on it full-time. Sometimes, groups of women are paid to work together to get a mat done more quickly. For example, my cousin is now preparing some ceremonial white mats and she brought together a group of 4-6 women to work on the mats at the same time to get them done more quickly.

32. After the mats are woven, they must be dyed. In language, we call this process "tuntunu/burning." It is a very expensive exercise. In preparation you have to have planted many gardens of Yam, Bweta (Taro), Kava, Sugarcane, and have fed, negotiated and secured many female and male pigs for food and as reward. Male pigs with tusks of every stages are important for the payment of those involved in the process. The *Tuntun*u *Bwana* process can run into several days, weeks and months depending on the numbers and weather. It is a lot of hard work, there are many ceremonies involved with it, and there are a lot of complicated steps. First, before beginning the dyeing, you have to perform a ceremony. You light the firewood to burn the mat, and because the mats are sacred, you have to kill a certain number of pigs, and

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so on. These are the steps to start the dyeing, but there are similarly a lot of steps that have to be followed to start, even with the weaving too, the drying after dying and when its ready to *Bute* (be released or launched) to the public.

33. After the burning takes place, the dyeing process involves wrapping the mats in the bark of a particular tree. The women put the mat and the traditional dyes, like the roots and leaves I mentioned earlier, into the bark and add water. It takes a lot of time and effort and resources to do that.

34. At this stage the women also have to make the design with the dye. There is already a design (patterns) in the weave of the mat itself, but in the dyeing process, there is another or several designs added on top of the woven patterns.

Impacts of Cyclones on Pandanus Weaving

35. Young women today are not really planting pandanus. They are relying on the trees that were planted by their mothers and their grandmothers. When the cyclone hits, the trees are all destroyed, and there is no new pandanus grown, so there is a shortage of pandanus tress and leaves. Over the past 40 years, Pentecost was hit by several strong cyclones and even if young women, especially mothers were planting new trees would also be destroyed by the cyclones.

36. For example, here in Port Vila, I asked my sister-in-law, who lives in a nearby village in Efate, to help me weave a big Bwana (red mat) basket called *Tanbunia* three years ago, and until now she hasn't been able to do that because there has been no pandanus leaves. All of the pandanus was destroyed by Cyclone Pam, and then it never had the chance to regrow, because the other cyclones–Cyclone Harold, Cyclones Judy and Kevin, and Cyclone Lola–keep destroying the saplings before they have a chance to grow.

37. It is the same in Pentecost. All of the pandanus trees there have been destroyed, and it takes time for the new ones to grow. These days, the cyclones are coming so continuously that the new ones get destroyed too, before they have a chance to grow. That has led to a reduction in weaving of *Bwana*, because there is not enough pandanus leaves. This means that there are not enough *Bwana* circulating for ceremonies in Pentecost and also amongst communities in Port Vila and Luganville and Vanuatu amongst Pentecost communities.

38. On top of that, the dyes used to dye the mats red are natural. As I said, the main ingredient for the dye is the root of a particular plant, *Labwe*. But other plants and trees

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are also used to get the right color, and most of those other plants also get destroyed by the cyclone. The tree that the bark we use to burn and dye the *Bwana* is also destroyed by the cyclones. So that is another way cyclones impact women's ability to make the *Bwana*.

39. In the past, bad cyclones didn't hit so often. If a bad one hit, people could plant and there would be plenty of time for the trees and crops to regrow and replenish before the next cyclone hits. Plus it was very rare that a cyclone hit that was so bad it would wipe out all of the trees. But now, severe cyclones are hitting so frequently that the trees don't have time to grow before they are destroyed again. This started happening in 1986 with Cyclone Nigel, but got much worse beginning with Cyclone Pam in 2015. The Northern and Central parts of Pentecost has been especially affected by cyclones. More recently it was Cyclone Harold and Cyclone Lola.

40. In Northern Pentecost, the women have stopped weaving mats. In the North, we are now depending on women in the central part of Pentecost to supply us with mats. We pay for them with money.

41. Weaving is central to a woman's life. From a young age, girls are supposed to be weaving. When I was growing up, we did weaving in school, but really young girls learn from their mom and their aunties. From an early age, young girls learn how to weave baskets for carrying food from the garden, how to weave simple mats for sleeping, and how to weave and prepare the *Bwana* for ceremonies.

42. But now, the young girls are not weaving anymore. This is because of the scarcity of the pandanus, and because mothers are not prioritizing teaching weaving anymore. With so little pandanus left, the only option is to go buy pandanus from somebody who still has some and because the pandanus is so scarce, it costs a lot of money to do that.

43. So women are not weaving anymore. It is because of the cyclones destroying the trees, but it is not just that. It is also because women are not planting pandanus anymore. I think this is because it may seem futile to plant, because the trees keep getting destroyed, but also because it is so easy to go buy synthetic mats from the Chinese shops. Things are getting harder for us because of the intensifying cyclones, and that makes the cheap, synthetic alternative look more and more attractive. But the Chinese mats are not for ceremonies, they are just for sitting and sleeping on. So that isn't a solution to the loss of resources to make the *Bwana*.

44. As I said, we have to have the *Bwana* for ceremonies. To get *Bwana* for ceremonies, a lot of families have to pay. They have to buy *Bwana* from those few who are still

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making them. Just like the pandanus leaves, the *Bwana* are really expensive to buy because there is a severe scarcity of supply, because of the impacts brought by all of the cyclones.

Other Cyclone Impacts

45. Outside of their effects on mats, cyclones are really impacting life in North Pentecost. I was supposed to go there last week to do aid distribution following Cyclone Lola, but the relief trip got canceled due to all of the changes in the weather. The conditions are too bad to make the trip.

46. There is no food in North Pentecost because everything was destroyed by Cyclone Lola. We can't get aid there because of the rough weather happening right now, due to the cyclone passing through Fiji. My husband and my son are there now. They have told me that nearly all of the villages in North Pentecost have been destroyed. All of the houses are down and all of the food gardens are destroyed. There are only three out of a total of 15 villages in Ahivo District of North Pentecost that still have any houses standing.

47. It is not only North Pentecost, Cyclone Lola also destroyed villages all over the island– also central and southern parts of the island. And for Central and South Pentecost, this is the second cyclone that completely decimated the villages in the past few years. They were also completely flattened by Cyclone Harold in 2020. Now, after Cyclone Lola, all of the buildings they rebuilt following Cyclone Harold are gone again. Completely destroyed.

48. The ongoing severe cyclones also make it hard for people to build back their houses. Most of our houses are built from local materials. Our traditional houses are squared or rectangular with a pointed roof. We use wood including roots of the banyan tree to build a house, because the roots are straight. The roof of the house is made from bamboo and held together with a local vine. We use a local tree, the sago palm tree to make the thatch roof, and a local bamboo-like stem plant (Nene) to sew it up. Bamboo is also woven and used for the walls.

49. These local houses are built to withstand cyclones, and in the past they have been able to do so. The houses are built lower so they can withstand the wind, and the plant that is used to sew up the roof is very strong. The local vine that we use to hold the bamboo walls together is also very strong. On top of that, the way the houses are woven together allows some wind to go through the house. So when the cyclone hits, instead of the

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wind hitting against a solid wall and pushing it over, some of the wind passes through but the house stays standing.

50. Also, when a cyclone comes, we put coconut leaves on top of the thatched roof. We tie the top ends of two coconut leaves together and put several pairs over the thatched roof with stems towards the ground to give them weight and to secure roof. Normally, this helps hold the roof down and prevents it from getting blown off during a cyclone.

51. That is how it was. But these days, we are getting cyclones that are so severe, they destroy all of the houses–even the traditional cyclone ones that have always withstood cyclones in the past. The severe cyclones also destroy all of the plants we use for building, and because the cyclones are so frequent, these plants don't have time to regrow before the next cyclone hits. Without materials, we are not able to rebuild.

52. Right now, following Cyclone Lola, most houses are down and they can't rebuild. So what people are doing is just trying their best to make temporary shelters from whatever is left of the destroyed houses.

Sea-Level Rise

53. In my village, we have lost a lot of land due to sea-level rise. We used to have a large stretch of beach in between our homes and the sea, and there were lots of trees. But now most of the beach is gone. The trees got washed away by Cyclone Nigel in 1986, and they haven't been able to grow back because of the rising water. It's too salty for them to grow now. People have tried to replant, but they wouldn't grow because of the ocean coming up. It killed them all.

54. The trees are called Vae in our Raga Hano language. They were big trees with big yellow hibisus-like flowers. They acted as windbreakers. They protected us when there were storms. They also prevented erosion. They held the sand in place. But now they have all been destroyed. We also had Vuevue, big thick green leaf vines that held the sand, but they've been destroyed too.

55. Our homes are not being flooded by the king tides or the high tides right now, but it is getting close. Houses are built closer to the cliffs now. We can see that it is not far off and soon our houses will be flooded.

56. The rising seas have also made it difficult for about 300 people in my village to travel, even within the village itself. One side of the village is the Lamalanga Anglican Church. At the end of the village on the other side is the commercial center: there is the shop,

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the port where the boats come in and the accessible gravel road that links to the airport, health clinic and all other parts of the island. So it is important that people are able to get from one side of the village to another.

57. We used to have a beach and people would simply walk along the beach from one side of the village to the other. The village that used to be one long stretch of sand is now separated at Lamalanga (cave) and cliff into two villages. The rising seas over the past 8-10 years washed away the sand at and around the cave and replaced it with rocks. At high tide the sea is above the mouth of the cave and over the rocks and at low tide it is difficult to walk over the rocks. When the beach disappeared leaving rocks under the cliff the community built a trail along the cliff, sort of a billy goat trail they could use to get over the rocks safely.

58. But then this most recent cyclone, Cyclone Lola, destroyed that trail as well. So now the two halves of the village are cut off. In order to get to the other side, the people have to either follow someone with a boat or organize the trip, or they have to swim. For example, my niece who lives and work in Port Vila went to my village for a wedding about three weeks ago. She resided at the cut-off side towards the end of the village where the groom lives. She is a relative of the bride who lives on the other side of the village. Our weddings last several days. So every day she would swim over and change there every morning attending the bride's pre-wedding ceremonies and then swim back in the evening.

59. The sea has also disturbed our graveyard. The graveyard was in a big area by the sea surrounded by huge tamanu and oak trees. It was established by the missionaries, and both local people and missionaries are buried there. When it was created, the sea was so far away. But now, the sea has come all the way up, and it's dug up all the graves. For example, my grandmother's grave. We had to dig her bones up and rebury her higher up the hill in 2019. We were lucky we were able to do that, but a lot of the others were just lost. With the graves being lost, we don't have the records of those ancestors and missionaries anymore. The connection to the place is gone. The history is erased.

Climate Impacts on Growing Food

60. The changes to the weather, especially with all of these cyclones, are affecting our food, and our ability to grow food. Food is becoming scarce. This is hard especially for the women because, as mothers, they feel it is their responsibility to provide food for their husbands, children and grandparents, but they don't have enough to feed them. Food is so scarce because the cyclones keep destroying all of the yam, taro, banana, manioc and kumala gardens and they don't have a chance to regrow.

Signed by Jeannette Lini Bolenga

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Lawyer, Melanesian Spearhead Group

Prepared at Pango, Vanuatu on 15 November 2023.

61. My nephew took his family to his village last year, 2022 for Christmas from Port Vila. He was thinking, since we don't have any gardens here on the island, they would go to the popular annual Christmas Eve Market and get some fresh foods. But when they went, the market was empty. There was nothing in the market. Villagers waited on the roads for vehicles carrying food from the interior communities and bought food off vehicles. None of the foods reached the market complex.

62. Because they are unable to grow surplus food, the people in North Pentecost are mostly now eating processed imported food, like instant noodles, rice, canned fish and so on. They are able to do this because a lot of people are involved in labor mobility schemes in Australia and New Zealand. They send money back home and then the families use it to buy these imported foods instead of planting and growing their food. So the community's diet and lifestyle is really changing. Climate change is responsible for this shift because of the food scarcity it has created and how hard it has become to plant, but it is also caused by the growing dependence on labor mobility remittances. It is both things.

63. Food scarcity also affects community relationships. We have the nakamal. It is a central place in the village where everyone gathers for meetings ceremonies and other events. It is a huge thatched roof communal house. There is a big feeling of love there. You gather and you share and you eat.

64. Actually, nakamal is the pidgin name for it, but in my language we call it G*amali*. The *Gamali* is the village meeting house. It is the center of our communal life. The *Gamali* is made from all local materials. And that's one thing you will see across Pentecost: a *Gamali* in every village. Some big villages might have two or more *Gamali*.

65. There is a big open area outside the *Gamali* where all of our ceremonies are performed. For weddings, for example, we do the food, the ceremony, everything there at the *Gamali*. When someone dies, the body lies there in the *Gamali* before it goes to the church and then buried in the graveyard. There is also a big earthen oven at the *Gamali* where we do communal cooking. A Gamali is a big rectangular building. Finally, there is a porch outside, and this is where kava is prepared and consumed.

66. Most of the *Gamali* is open to the entire community, but there are certain restricted areas for men who have achieved certain ranks and women who have performed certain ceremonies and attained titles and ranks too. There is also a restricted area at the back of the *Gamali* that is just for the high chief of the village. He can invite others of similar titles and ranks to eat and drink kava with him. He has his own earthen oven.

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67. The *Gamali* is also a neutral place where visitors are welcomed. If you go to Pentecost you will always have a place to stay, because you are always welcome to stay at the *Gamali* and people will welcome you and bring you food. You should never go hungry on Pentecost and you should never sleep outside because every village has a *Gamali* and you are always welcome there. That is the practice that has been going on for centuries on Pentecost.

68. So, for example, once there was a European sailor who survived a shipwreck and washed ashore on Pentecost. He was taken in by a village and hosted in their *Gamali*. In those days, high ranking chiefs built large stone platforms on the beach to signify their ownership, a sign that the area is conserved and that there is a ban on harvesting of resources for eating and building in that area. The stone platforms represented peace and peaceful co-existence of the chief and villagers with the land, sea and the resources recognized and practiced by all including neigbouring villages. If shipwrecked people went to those platforms, they would not be harmed because they were seeking life. So that's what this sailor did. He didn't know the meaning, but he saw the platform and thought it would be a safe place to stay, so he crawled onto it and fell asleep. The chief's security and watchmen found him, informed the chief and took him in for several years before arrangement was made with the chief of my village for him to live at Laone so he could return home on the next ship.

69. Several ships called at Laone looking for the sailor, some even extended their stay and mingled with the men. The sailor by the name of Jimmy knew they were looking for him but he loved living on the island. Each time a ship arrived he would paint/colour himself with ash and charcoal to disguise his white skin and hid. Finally, the high chief of Laone said it was time for him to go meet his people, so when the next ship came he did. When he was boarding the dingy on the shore to take him to the ship, he looked to the high chief and the people and said, Ure Tabe, which translates to "Land or World of Love, Peace, Happiness, etc". Jimmy was describing his feelings and experience for the people, culture and values that make up a strong Pentecost person and community. So I am just sharing this story, because that is what our people are supposed to be: open, happy, loving and welcoming. But a lot has changed now.

70. For example, about seven years ago I stopped by my village on my way back to Port Vila from a conference. Normally, when I go, everyone is happy to see me, they all come to say hello, the young and the old, everybody, and they would offer me fruit, lots of things to eat. But this time, people seemed a bit hesitant to talk to me. I couldn't understand why. They were standing at a distance and not greeting me warmly. Something was wrong. I think it was because they didn't have anything to offer me.

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They didn't have enough food to share, they didn't have anything to give me, so they felt ashamed and like they couldn't greet me properly. Life has changed. Scarcity has changed who people are. That's because of the cyclones.

71. It is the same within the villages. In the past, we'd go into the Gamali with a big basket full of yams, taro, other crops, because that would be your meal for the day. We'd even have extras to roast over the fire, like yam and banana and snack on them. But these days, food is so scarce that you go with just one yam, one taro, or one cassava, or even with an empty basket. It isn't enough. You know, if you have five children and others in the household that need to eat, it isn't enough. There isn't enough for the household, let alone to share, so we don't really gather in the same way these days.

72. On top of that, the *Gamali* were also really affected by the cyclones. Most of them, across Pentecost, are down right now. They were flattened by Cyclone Lola. So many villages don't have their centers anymore.

The Yam Calendar

73. On Pentecost, *Damu*, or the Yam, is a very important crop to us. Our seasons, our calendar, and our lives are centered around the life and growth of the Yam.

74. The Yam originated as a gift from a God, a spiritual God. We called him Saldam. He lived but he decided that he should be killed to become something for the people. He decided to sacrifice himself to make or become something good for the people.

75. Saldam asked the people to build a fence out of a certain tree and then he asked them to cut his body into pieces and to plant him, and then to wait and see what will come out from his body. So the people followed his instructions and planted the pieces of his body into the mounds they had dug and prepared.

76. When the people cut Saldam's body, there was so much blood, and the blood washed onto the fence they had made out of a particular tree and the blood seeped into the fence. That blood is seen in that tree now. If you cut it, it bleeds. That tree also is part of our seasonal calendar today. The tree also tells us when the land crabs are almost ready to reproduce, to make new crabs. When that bleeding tree called *Nanara* flowers, that is the sign. So the people go look for the crabs, especially the female crabs, because they are ready to reproduce and the meat is plentiful and delicious. We continue to have crabs in Pentecost because those in the traditional conservation areas are not harvested and continue to breed.

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77. Saldam's blood also washed over the fence and went into the sea, and it turned into the balolo worm, which is a sea worm, a very important sea worm. It is a delicacy for us and also an important part of the Yam calendar.

78. So, back to the story, on land, the people planted Saldam's body parts, and the plants grew from them and became yams, the different types of yams. We have so many different types of yams from the body that was planted in the soil.

79. As I said earlier, our seasons are connected to the Yam. In our indigenous calendar we have four seasons. The first one is *Rara*, which is July-September and is like our Spring. The next season, which is like our summer, is called *Udu*, and is from October to December. *Udu* is also our name for the balolo worms in *Raga Hano* language. Next is *Bora*, which is our Autumn, and which is in January, February, and March. And then we have the last one, which is *Rango*, that is Winter which is April, May, and June.

80. So those seasons are based on the Yam, its cultivation until it is harvested and stored. It is all centered on the Yam. During *Rara* (Spring) we prepare the gardens for planting. We cut down the bush and then let the leaves and stems and branches dry out before we set fire to that plot and burn it. We leave it for a couple of days for the ashes and burnt debris to turn into the soil before we clean it out ready to dig it up and prepare the mounds for yam planting. Rara has three stages: Ulugaitavu is when the flowers fall and new leaves grow; Rara Memea is when the Rara tree flowers and in full bloom with red flowers and and Rara Harui is when the leaves die and fall. Yam is grown according to the Rara growth and life cycle of its leaves and flowers.

81. The beginning of *Udu* is the time for planting the Yam. The season is called *Udu* because our signal to plant the Yam is the *Udu* worms. When they are coming up to shore to there heritage we know it is time to plant. *Udu* is actually split into thirds. First we have *Udu Malageha*, that is when the Yams are first growing, the stems are sprouted and are green. Then we have *Udu matalala*, the Yams are growing bigger. Then we have *Udu Rara*, when the Yam is growing bigger and is almost ready, but not quite.

82. When the *Udu* worms are out, people go and collect the worms at night. I remember when I was a child, I saw these women from the villages on top of the hill coming down in the evening with coconut leaves tied together and also bundled dry reeds. I asked my mom, why are these people here? And she said, oh they are here for the evening to catch *Udu*. So they passed our home and they went to the rocks and they lit the bundles of leaves and reeds, and they were singing. And I was laughing at them–mom are these women crazy? What are they doing? And my mom explained to me, that is our kastom, they are calling the worms. The worms will see the light and will come to them. At the

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same time, the men would go out on outrigger canoes beyond the reefs and light the reeds and the leaves and collect the worms from there.

83. So once you get the worms, you have to store them in bamboo containers partly filled with sea water to keep them alive and fresh. Worms are collected by scooping them out from sea water with the roots of a specific plant called *Gogoromi*. Nowadays people use kitchen sift, cups, pots, pans et.c and store them in buckets, dishes and large pots. Outboard motor boats go into the deep sea and men catch *Udu* into big drums and eski coolers. The sea water from which the worms were stored, we put in our yam gardens. This will make the Yams grow huge and the harvest will be plentiful.

84. That is about *Udu*. And then *Bora* comes. There are three parts to *Bora*. So first we have *Bora Tirigi is* in January, when we keep the garden clean, because the food is almost ready and harvest will come. At this time, you know the next season is Winter and the plants will die. So you clean the garden so you can harvest, and after harvest you will also keep cuttings and replant during the next *Rara* (Spring) so that the Yam cycle will continue.

85. Next is the "Bora Lavoa", it means that the Yam is fully grown and is ready to harvest. We see the leaves getting yellowish and brown and all that, so we know the yams are ready. They've reached their maximum size. Actually, we do not harvest the Yams from the new garden yet, but Yams that were planted during the previous year are still stored in the ground or in the houses in the three seasons. This is a resilience thing. We harvest the Yams from the last season, so that the next season, even if something goes bad, we will always have some Yams in the garden or at home.

86. The third stage of Bora, "Langisi" is when the old small whole or piece of yam (*Tarabehina*) that was planted in the soil has rotted giving power to the body of the yam to push the head or top above the ground. You can see head and roots. At this stage the yellow yam leaves are turning black.

87. Rango is the time to harvest to the Yam. The leaves and vines are black and are rotting The head of the Yam is up above the ground and there are roots and that is when we know we have a good harvest. So we harvest the Yams. This is also the time when we have all of our ceremonies for weddings, rank taking and other events. Because just like we need *Bwana* to perform the ceremonies, we also need Yams.

88. Winter, *Rango*, is the only time that we are supposed to have the heavy rains. The heavy rain makes the soil soft and it is easier to harvest the Yam. Also, the rain washes away all the leaves and the vines that have gone black and dry, and helps feed the soil for the

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next garden within the next seven or more years. The Yam needs dry conditions to grow well, so that's why it grows during the other seasons and we harvest during the rainy season. Everything is in balance. But these days, because of climate change, we are getting heavy rains all throughout the year.

89. So that is how our seasons are linked to the Yam and how Yam is grown. You have to respect the Yam. It is the best of all the food. For us Malingi is the King Yam. It is the one that is the most important of all the other varieties. We have a ceremony for the Yam also. We do it on a personal, family and communal level too.

90. In Pentecost, all men and women can plant Yam. For us, it is a whole family thing, a communal thing to do. The men and women work together to prepare the garden, plant the yams, all of that. You can have just the husband and wife and children, or the whole family, or the whole community. Planting Yams, caring for Yams, and eating Yams, it is a communal thing.

91. We also have a conservation system that is linked with the Yam and male ranking ceremony. This happens when a chief who is qualified and has attained level five (Vira) of the 10 levels of the male ranking system performs a pig killing ceremony. What he has to do is kill about 10 male pigs including one or two pigs with full circled tusks. Then he stays in the Nakamal for 10 days without washing. After 10 days he can go and swim in the water or the sea to wash away his ceremonial paints. If the newly titled chief decides to conserve an area (*Umwa*) for Yam gardens he and the chief who gave instructions and advice in the ceremony will take the water he washed with and pour it in the Umwa. That area then becomes a *Aragogona* and is sacred. It is then left to fallow for seven, ten, twenty or more years. The Aragogona belongs to the chief who went through the ceremony but ownership of the land remains to tribe he belongs to. While the Aragogona fallows, it is left alone entirely, nobody will walk through it, cut trees or take any other resources from it.

92. After the period of fallowing ends, the chief, owner of the Aragogona will allocate plots to relatives, fellow villages and others in nearby villages. The plots in the Aragogona varies in sizes, some could be 20, 50 or 100 plots. The plots have existing boundaries used over many generations until today. For the new Yam garden plots to be cut and cleared, the chief' will choose one of his maternal brothers, cousins or nephews to *luaraitena* (give right for) the cutting and clearing of the plots with a Bwana. The ceremony is performed in the Aragogona. The chief's plot would be the first plot to be cut and cleared, dug and planted with yams.

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93. On the day of the first harvest, the chief will perform a peace ceremony with a male pig with a full circle tusk to the relative that performed the luaraitena. This gives the right to open the Aragogona and harvest the yams. Yam harvest begins with that of the chief first. All the people who have plots in the Aragogona will give a *Bwana* each to relative that performed the luaraitena as well as received the pig from the chief. The people who have plots can invite anybody to come in and dig from their gardens on that day. After they harvest, everyone goes to the nakamal and they have a big feast and then that is it. It has to happen that way.

Impacts of Climate Change on the Yam

94. Like I said, the Yam is a really resilient food. We can keep them in the ground and continue harvesting during a later season, and even after we take the Yams out of the ground, they will stay good for a whole year. So in Pentecost it should never be the case that we have no food, because we should always be able to have Yam stored in the soil, garden huts and at home. But so many things have happened. The weather and the seasons have changed, and this has disrupted the Yam cycle, so the Yams have become a lot less in terms of quantity and quality.

95. This is because the seasons are disrupted. People are no longer able to follow the seasons. As I said earlier, our rainy season has always been during the winter. That was the only time of the year when we got heavy rains. But now the rains are coming whenever. They are coming, for example, in October. At the same time, there are also too many cyclones happening. That's the time when the Yams are just starting to grow. Also yams are still in the last stage of maturation, and then the heavy rains and cyclones come and destroy them.

96. This has caused a severe reduction in production. Because of the rains and cyclones, we are not getting enough Yams. The Yams themselves are small. And the number of Yams per mound is small too: the harvest is small and not plentiful.

97. Like I was saying before, this scarcity of food is changing the whole character of our people. People are not able to share food like they used to, because they don't even have enough for their children and themselves. You have no choice but to go to the family with just one yam, to go to the Nakamal with one Yam, but you should be going with a full basket.

Signed by Jeannette Lini Bolenga

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Prepared at Pango, Vanuatu on 15 November 2023.

Signed: _____
Jeannette Lini Bolenga

Witness: _____
Brittien Yosef
Lawyer, Melanesian Spearhead Group

Date: 14 March 2024

_____
Signed by Jeannette Lini Bolenga

Witness: _____
Britien Yosef
Lawyer, Melanesian Spearhead Group

Prepared at Pango, Vanuatu on 15 November 2023.

Exhibit 20

I, Camilla Noel, from Luganvillle, Espiritu Santo, Vanuatu, solemnly affirm and declare:

Background:

1. My name is Camila Noel, and I am 23 years old. I was born in Luganvillle, in Espiritu Santo, Vanuatu.

2. I now reside in Port Vila, Vanuatu where I moved to in 2014, in order to pursue further studies as well as a career in the Department of Environmental Protection and Conservation as an Assistant Ozone Officer, away from my home village.

3. I recently returned from Fiji in 2023, after having graduated from The University of the South Pacific in 2022 with a Bachelor of Science in Environmental Science.

4. Apart from my studies in Fiji, I have lived in Vanuatu all my life.

5. I am a citizen of Vanuatu, and I provide a statement to the International Court of Justice on the impacts of climate change that I have experienced as a young person in Vanuatu.

6. My testimony is based on direct knowledge, the experiences that I have gone through and the knowledge that has been passed on to me from my ancestors.

7. I speak English, and I have given my testimony in English.

Life in Santo.

8. I grew up in Santo for most of my childhood. It has always been peaceful there where everyone moves at their own pace without a rush. We are about an hour boat ride away from the mainland.

9. A lot of the people in Santo do not have office jobs so their day-to-day tasks revolve around their own home life. Life is much easier to adjust to and everyone helps each other. Some people may say that we in Santo do not have much, but we have each other, that is what we have.

10. My parents have always attempted to merge my upbringing with the environment while growing up in Santo. My mother planted beautiful flowers around the house and in her garden so I always felt connected to my environment. They taught me that when the world applies its external pressure on me, then I can always find solace in nature. This was for whatever I perceived as external pressure, be it an argument, or a disagreement at work, or just a usual tough day; I had been raised with the mentality to retreat to my environment. The simplest things we would receive from nature, like the shade from a tree coupled with a cool breeze on a hot, sunny day. The children from the neighbourhood and I would always rush down to the sea and play there.

Signed by Camilla Noel

Witness: Philip Toaliu
Attorney - Republic of Vanuatu

Prepared at Port Vila, Vanuatu on 12th March 2024

11. I was taught by my parents that I will never be alone because I will always have nature and I can rely on it for my peace of mind. That is why whenever I find myself returning home from Port Vila, I am always excited. Indeed, there are beaches here on the mainland, but there is something different about the waters in Santo. Perhaps it is because my family and everyone I love are there and that makes it different.

12. I was raised with the mentality that if we take care of our environment, our environment will take care of us, so the least we could do was show our appreciation and not harm the environment. This mentality is not unique to me because that is how everyone was raised back home. The natural environment we grew up in has become a place of solitude that we retreat to in times of hardship.

My experience with the climate crisis.

13. The first time I had ever heard of "climate change" I believe I was in year 8 and I was still living in Santo. I had no idea what it was and it was only touched on briefly by people talking about it, but it was then when I heard of it first.

14. It was not until I went to Port Vila in 2014, for further studies when I was exposed to more resources in high school. We were taught of the causes and impacts of climate change from social science to geography.

15. However, learning about something and witnessing it first-hand are two very different experiences. In 2015, Cyclone Pam struck Vanuatu and I was attending boarding school in Port Vila at the time. Nobody was prepared to be struck by a Category 5 cyclone. It came at night. I was lucky that my cousins took me out of boarding school to stay at their home before it happened but I recall that some students remained back in school. This was the first time I had ever experienced a cyclone and I was so afraid. The house we were in was made of solid cement so imagine my fear when I could feel its walls literally moving and shaking.

16. That would have been the reason I woke up, if it was not for the flooding. I was asleep on the floor when the water came in from beneath the shutters. Half of the house was flooded and I was literally floating in my own house. I touched the walls and it was vibrating from the strong winds and dripping wet from the rain that had found its way through the wind. This went on through the entire night. I could not see anything outside but I could hear it all. I could hear the roofs of houses flying overhead and smashing into our house. I could hear surrounding pine trees cracking and giving into the strength of the cyclone.

17. I was not the only child in the house, my 8-year-old nephew, my cousin's son, was also there. I tried to reassure him that he would be fine because his mother was there. Then I realised that I was without my parents and I began to ask myself "what if something happens to me?", or "am I going

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to be alive the next day?". I was just scared and all I could do was hold onto my nephew until the morning, and try not to show that I was scared.

18. The next day was sunny and everyone's first instinct was to see who they could help despite everyone having had the worst experience of their lives. I saw people just sitting in defeat outside their roofless houses. We stood from atop a hill and we could literally look into people's houses that were situated below. The lower communities especially had all their belongings scattered. I could see the worry in people's faces. The worry of how they would rebuild from this. Keep in mind that I had only witnessed the capital, Port Vila, and I could only imagine what the rural communities looked like. I saw mothers trying their best to put up shelters for their children and it made me wish I were older so I could help or if I had money, to provide it to them, but all I could do was pray for them.

19. Not much has changed since 2015 in terms of how Vanuatu has been affected by cyclones. I was not in my family home when Cyclone Harold struck Santo in 2020, but my parents were. The strong winds uprooted our veranda and damaged so much of the islands' infrastructure. My studies in high school and onwards have given me the ability to observe the way the environment changes more closely, such as longer dry seasons and water accessibility issues, and things have only gotten worse.

20. It saddens me because I see that, as soon as my people start to rebuild and move forward, disaster hits.

How the climate crisis has affected me as a Ni-Vanuatu youth.

21. As a young person, I am forced to think twice about my future. I am forced to think about my future house and whether or not I will be able to afford a house that can withstand any cyclone. I wonder if the government will be able to assist its people because things seem to get more expensive every year. Will my children be safe and have somewhere to stay?

22. I want my children to live here in Vanuatu and see what life is like here. It is an easier life here. However, considering my experiences with the effects of climate change, I am not sure if I would be able to support my family here in Vanuatu. Every time I plan for the future, it must always revolve around the impacts of climate change. It is just unavoidable.

Signed by Camilla Noel

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23. For example, when considering buying land, it has to be in an area that I can quickly move away from during a disaster; or when I am building, I must shoulder the expenses of a cyclone resistant house and it has to be big enough to shelter extra people. I have to also consider resources such as building near a water source but considering that it is close enough to road access for emergency evacuations. These considerations may be difficult now, but it would be absolutely devastating for those in the future if we do not address the climate crisis today.

24. I do not want to see my people struggling again because it hurts. Even the youths that are still so young today; they did not sign for a world this damaged and chaotic. It's not just cyclones, because it's food and water accessibility, longer dry seasons, and sea level rise, and relocation. It is not just one thing.

25. For the youths of today, I think they will be forced to push themselves past their limit. They will be forced to work harder than us. They must, to ensure that the future that they will lead, is a future that they themselves bring into existence.

26. It is worth mentioning the psychological effects that the climate crisis has on me and the youth of Vanuatu. Nature used to speak to me and I would listen, but now the connection I had nurtured with my environment is slowly being lost. This is because the environment is changing and becoming unrecognisable. Nature is no longer the place of refuge it once was. Instead I am afraid. I see great loss when I see the areas that are affected by sea level rise. Those families are being forced out of their homes and are made to adapt to the areas they have relocated to because, in a way, they have left their culture behind.

Why I began advocating for the ICJ Advisory Opinion Campaign.

27. I saw the potential that the Pacific Islands Students Fighting Climate Change campaign had to request an advisory opinion from the ICJ and for how the Pacific youth had been leading this from the very beginning; it was inspirational. It was fascinating to see young people take such an amazing campaign to the international stage, from a small classroom in our Pacific.

28. Even though I do not have a background in law, I wanted to learn more. I sort of see myself as a teacher when I return home because I am always educating my family about my work and answering any questions they have. The family I come from is not quite educated, so I have always taken the opportunity to go to school, educate myself on anything and everything, and when I return, I am a teacher to them; they rely on me.

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Attorney - Republic of Vanuatu

Prepared at Port Vila, Vanuatu on 12th March 2024

29. So, when I saw the work of Pacific Islands Students Fighting Climate Change, I thought to myself that these individuals are doing a big favour for our Pacific youths, I can be a part of it. I can understand more and then I can return home and be a teacher yet again. I just wanted to help. So I joined them.

What I want from the International Court of Justice as a young person.

30. After meeting all the obvious demands such as providing legal clarity and other issues of financial aid, I want to see the push for educational measures here in Vanuatu. I believe that is where we are lacking the most. Providing the appropriate materials to allow for grassroots level communities; and for these aids and measurements to have an emphasis on rural communities. I can only ask for the things I see that are absent here in the grassroots and that is shelter, appropriate educational material, opportunities for young people to develop. I take notice that this is a funding issue and perhaps that is what I am demanding from the International Court of Justice–to provide an opinion that addresses the remedies that my people are owed for all the harm they have experienced as a result of the climate crisis..

31. I want our young people to be brought to the core of the solution.

Message to Judges of the International Court of Justice.

32. We are already on the verge of an uncertain future, and not just for us young people, but for everybody. We only ask that you deliver an advisory opinion that ensures a guaranteed future for us. Give us hope for a better future. Without tackling the fundamental inequalities which cause environmental degradation, we cannot achieve true climate justice. The climate crisis is a human rights crisis and as we come together with the voices of indigenous people, youth and marginalised communities, we hope for an advisory opinion that will give us justice and also achieve intergenerational equity so that there will be hope for our future generations.

Signed by Camilla Noel

Witness: Philip Toaliu
Attorney - Republic of Vanuatu

Prepared at Port Vila, Vanuatu on 12th March 2024

Exhibit 21

I, Mangau Iokai, from Yakel Village, Tanna, Vanuatu solemnly affirm and declare:

Background:

1. My name is Mangau Iokai, I am 78 years old. I was born in 1946 in Yakel Village on the island of Tanna, Vanuatu.

2. I am a Vanuatu national and I provide a statement to the International Court of Justice on changes to the weather and cyclones, the loss of the Yam, and what these changes mean for my Kastom.

3. My testimony is based on my direct knowledge and my knowledge based on Kastom, which has been passed down to me from my parents, grandparents, great-grandparents, and ancestors.

4. I speak *Nahvwaal* as my local language. I have given my testimony in Nahvwaal through a translator, John Kalwas. This written statement has been read back to me in its entirety in *Nahvwaal*. I have confirmed that the content of the statement is accurate.

5. This statement uses italics for words in my local language.

6. I have lived in Yakel Village all of my life. I have 14 grandchildren and seven great-grandchildren. All of them are living in Yakel Village.

7. Yakel Village is a Kastom village. This means we have chosen not to adopt Western ways of living but maintain our traditional ways. The center of our community is the *Imalul*. It is a place for the community to gather and also a place where we commune with the spirits. It is our place of governance and law. It is an open area surrounding by large Banyan trees. The *Imalul* was not made by man, it was put there by our Supreme God, *Kalbapeng*.

Changes in the weather

8. I've seen big changes in the weather over my lifetime. Before, I knew the weather pattern. But now, even though I am living in my homeland, it feels like I am living in a foreign land. It is strange. I don't know my place anymore.

9. In the past, we had a balance of rain and sun, and when I went to the garden to harvest, the crops always gave me enough. But now things are out of balance. We have too much rain and too much sun, and we don't get enough harvest. I have noticed this change more since Cyclone Pam in 2015.

10. From when I was young, I made the garden at the same time each year, and after the planting the rain would always come at the same time and help the plants to grow. But now, the rain is coming at the wrong times. For instance, it is already coming when I am planting. It is unpredictable.

Signed: Mangau Iokai -

Prepared on January 12, 2024

Witnessed: 1

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Office of the Attorney General, Republic of Vanuatu

11. The rain that came used to be a good rain, it gave my garden just enough water. But now, the rain that comes is a bad rain. It gives too much water and rains for too long. It washes away my garden and causes the crops to rot.

12. Before, we had good sun. When the crops were growing it was sunny and the crops were growing very well. But now, the sun is too strong and it is too hot. Because of the bad sun we have, the crops and the trees are dying. The sun is too strong. It is too hot for our crops to survive.

13. Because of these changes to the weather, our crops do not produce enough to eat. Due to food shortages, we are mostly eating Taro and the *Nimahnim* leaves, which are special leaves that only people on Tanna eat. Sometimes we have other crops, but it was not like before. Because of the food shortages, our health is not good like it was before.

14. When I was a little boy, I used to follow my father to the garden. My father did the real gardening, and I copied what my father was doing. That's how I learned how to do the gardening. By the time that I was a young man, I started to garden on my own. That's how we've always passed on our knowledge of gardening from generation to generation all the way back to our ancestors.

15. In my time, when I was young, I could follow our traditional pattern for gardening. Now with the weather change, I am seeing it is very difficult for my children, my grandchildren, and my great-grandchildren to learn or follow our gardening traditions, and to pass on the same knowledge.

The Yam is central to our Kastom

16. The Yam is the most important crop in our Kastom. I can plant all other crops, including Taro, Taro Fiji, Kumala (sweet potato), but out of all of the crops, Yam is the most important. We consider it to be the King of all crops. Of all the crops that I have in my garden, I need to have the Yam.

17. *Kalbapeng*, our Supreme God, gave us all of the Crops. The Crops first came to us as spirits that took the shape of Stones and these Stones also sometimes took the shape of human beings. The story is that when the spirits came to us, they came to the Eastern side of Tanna first, and then they traveled to the Western side of the island. The Yam spirit is male and all other Crop spirits are female. The Yam spirit and the Taro spirit are like husband and wife.

18. While the Spirits were traveling over to the West, they stopped and had a meeting at *Ianapik* this is at a creek which is a boundary between two areas. While the Spirits were there, two others came into the meeting. The first was *Nuwing* who is male, and who is the Spirit of the Wildcane. *Nuwing* is the Chief of the Yam because Wildcane is needed for Yam to grow. The other was *Nukia* who is female. *Nukia* is the Spirit of the entire garden, and is also the Chief of the Taro.

Signed: Mangau Iokai -

Prepared on January 12, 2024

Witnessed: 2

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Office of the Attorney General, Republic of Vanuatu

19. At the meeting, *Nuwing* and *Nukia* decided to split the Taro and the Yam. Taro went to the south of Tanna, following the land downwards, and Yam came to our region, which is known as *Tanna Azul*. *Tanna* means the soil or the ground and *Azul* means big, so in English the name of the is region is big land, it also means rich soil, because our land has always been so fertile.

20. After the Taro and Yam were separated, the Taro and all the other Crops left Tanna and went across the sea as far as the Americas. But the Yam stayed here, it was our only crop.

21. The Taro and all of the other Crops stayed in the Americas for a long time. But eventually, Taro began to miss her husband, the Yam. The Taro started to cry and wanted to come back to Tanna.

22. The Taro and all of the other Crops journeyed back to Tanna. Two different types of Taro were captain of the ship on the way back. The *Tahveta* Taro captained the ship when the seas were rough and the *Nawanwalah* Taro captained the ship when the seas were calm.

23. After their journey, the Taro and the other Crops landed on Tanna at a passage called *Iakilkaak*, which is down at the coast on the black sand beach. *Iakilkaak* means "the place where they disappeared," because this is where they left Tanna when they went to the Americas. It is also the place where they came back.

24. When the Taro and all the crops came ashore, they looked at the land and saw the mountains. They were talking among themselves about who would go to live on the mountains, because up there it is cold. The Taro responded that she would be the one to go and live in the mountains, and two other crops followed her up there: the *Wrurpei*, which is a type of banana, and *Kauvnak*, which is island cabbage. They followed the Taro up the mountains because they knew one day in the future when we are doing the ceremonies, Taro would be part of the ceremonies and, if they followed her, they would be too. And so, for ceremonies there has to be Taro, *Wrurpei*, and *Kauvnak*. The ceremonies are a time for husband (Yam) and wife (Taro) to meet.

25. So now, taking the story to our time, you can see why the Yam is our most important crop: because he stayed. When all of the other crops went to the Americas, he was the only one who stayed on Tanna. That is why the Yam is the King of the crops and the most special one.

26. This is also why Yam is essential to our Kastom and ceremonies. We include Taro and other types of crops in ceremonies, but Yam is always essential and is the only crop in our most important ceremony, the *Toka*.

My Spiritual Relationship to the Yam

27. In my village we have special people called *Tupunis* who have a special relationship with a particular crop, species, or element, and hold sacred knowledge about that the thing. For

Senior State Counsel
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example, we have a *Tupunis* for Taro, a *Tupunis* for Kava, and a *Tupunis* for the Weather. A *Tupunis* is also like a Chief. In other parts of Tanna, there are also *Tupunis*.

28. In my village, Yakel, I am the *Tupunis* for the Yam. I am responsible for looking after the Yam. I hold this position because my family is spiritually connected to the Yam through a Chiefly lineage. The spirit of Yam flows through my ancestors, my family and me.

29. The first *Tupunis* were spirits, as I explained in our story of the Yam, Taro and other Crops given by *Kalbapeng*. When the spirits were traveling, they took the form of Stones, but when they reached our place, they manifested as human beings. These were the first Tupunis. My first ancestor was the spirit of the Yam. He manifested as a human being in Yakel and my family has been here ever since, taking care of the Yam crop. I am also the custodian of the sacred Stones. I have these ancient Stones from way back.

30. As *Tupunis*, I am responsible for ensuring we get a good crop of Yam. I use sacred Stones to commune with the spirits, and to ask them to look after the crop and make sure that my community has enough harvest. The Stones are hidden in a secret place. The ritual that I perform is too sacred to talk about and I am unable to share it. It is only my family that can perform the ritual because the spirit of the Yam is in us and we have the Stones.

31. The Stones were given to my ancestors from *Kalbapeng*. The knowledge of how to use the Stones was also given to my ancestors from *Kalbapeng*. The knowledge has been passed down through my family. I learned about the Stones and how to use them from my father.

32. Only I can commune with the spirit of the Yam in this way, but all men confer with the spirits when they are planting yam. The men perform a ceremony called *Tamafah* at the *Imalul* every time we plant Yam. The ceremony is performed with a chicken and Kava. You kill the chicken and drink the Kava and that is how you make a connection to the spirits to ask for a good harvest. Kava is the gateway to the spirits. The knowledge of how to perform this ceremony is passed on from father to son. I have taught my sons how to do it.

The Yam has disappeared

33. The Yams we harvest have been getting smaller and smaller. I noticed this slowly happening before Cyclone Pam, but afterward the change happened much faster. Before, they were the size of a house post (approximately 3m). But they shrunk to the size of my hand and wrist (approximately 20cm). Four years ago, the Yam vanished altogether. We have been trying to plant each year, but no Yams come.

34. I think the changes of the weather I have observed have caused the Yam to vanish. I have been gardening all my life and I know the weather. Especially the rain has changed. Since Cyclone Pam in 2015, we have been getting too much rain and at the wrong times. It is causing the Yam to shrink and die. Yams do not like too much rain. The rain that is coming now is too heavy. It causes the leaves of the Yam to fall off, and the crops are turning bad.

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There is something special about rain. In the past we had good rain, which the Yams drank and used to grow strong. But now we have bad rain that is killing the Yams.

35. I have been farming my whole life. I have been following the same practices I have always used. These practices were passed down from our ancestors. I learned these farming practices from my father, who learned them from his father.

36. When I plant Yam, the first thing that I do is clearing the bush. Then I leave the cleared land there for some time so that it will get dry. Next, I use fire for burning dry trees and dry leaves and then I do the plowing. After that I start planting Yam. The process for planting is that I have to dig into the ground, dig further, further down. When I plant Yam, my intention is that the Yam tuber will reach the bottom of the hole. But because of the changes in the weather and, especially because we are getting too much rain, the Yam tubers have not been filling the holes. They've been getting shorter and smaller until they vanished.

37. Even though the Yam has vanished, we are still trying to plant it. But our gardens are not like before. We used to plant Yam in very big mounds almost as tall as a man. Now we have very small Yam mounds. They are no bigger than 10cm. This is because each year we use the tubers from the last season to plant, and each season the yams grew tinier and tinier. It is not what it used to be.

38. Each season, I change the location where I plant the Yam. I also use a local plant *Lilahng*, which enriches the soil. Despite these efforts, the Yam doesn't grow. No matter where I plant or what I try, it won't grow.

39. The stem of the Yam needs a support to grow. They cannot grow on the soil because it is too hot for them and they die. We use Wildcane to build beds for the Yam. This is why, in our stories, Wildcane is the Chief of the Yam—because the Yam needs it to grow. The beds used to be much bigger and much longer because the Yam stems would creep along the beds, back and forth, to and fro, and when you harvest it you have big crops. Now, the Yam stems are much smaller and won't grow. We've had to make our beds much smaller. In some cases, we don't build a bed for the Yams at all. When we plant, all we get is a single, shriveled stem. It won't grow, so there is no point in building a bed. Even when we plant the Yams on the same day, some grow a little bit and we can make a small bed, and some don't grow at all. But no matter what, we don't get a harvest.

40. In recent years, because of the cyclones, we've been experiencing a shortage of Wildcane. Even with our much smaller gardens, we don't have enough Wildcane to build the beds. When we don't have Wildcane, we just go cut sticks and use them to prop up the Yam plant. It doesn't work as well. Wildcane is the chief of the Yam. It is for the Yam. But now Wildcane is nowhere to be found and we are just using wood. It isn't right. This is also a spiritual wound because it severs the connection between the Wildcane and the Yam. Likewise, the disappearance of the Yam has left the Taro all alone. She doesn't have her husband anymore

Signed: Mangau Iokai

Prepared on January 12, 2024

Witnessed: 5

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41. In the past, we had very big Yam gardens. And when we built them, we would get the entire village to help plow and build the mounds. The mounds were so big it would require the entire village to help. Our gardens now are so small, planting them is the work of one person, or two persons at most.

42. The size of a person's Yam garden reflects their status. It is a matter of respect. An elder of the village or the Chief should have the biggest garden, and young people who are just beginning to garden should have gardens that are much, much smaller. But now everyone's gardens are the same size: the size of a beginner's garden. It's sad to see the size of the Yam gardens. This effects relationships and doesn't give the elders the respect they are entitled to.

43. Now that the Yam has vanished, my heart is broken. My connection with the Yam spirit is broken. Before, through my family and my ancestors, I was able to lean on the spirit when I needed it. But now I don't have anything to lean on. It just feels like empty space. Because the spirit is no longer there, I feel empty. I am walking around like an empty shell. I feel that I have failed in my duty that has been passed down from my ancestors, to my grandfathers, to me.

44. Even though the Yam is gone, I will continue doing the ritual with the sacred Stones as it is my duty. The Stones are part of me, my connection to the spirit. If I don't continue the ritual, I will get sick.

45. Even though the Yam is gone, I keep trying to grow it. I will try to pass the knowledge that has been passed down to me to my sons. I will teach them how to plant the Yam and how use the Stones and commune with the spirit. But because the yam is already vanished, I don't know if they will continue the practice. It is not the same without the Yam.

46. When I had the big Yams, and brought them to the *Imalul* in my heart I was very happy. Now I feel empty.

Use of the Yam in Kastom

47. There is only one spirit of the Yam, but he has given us many different varieties of Yam. Some Yams are big, including *Mtuak*, *Norahvamua*, and *Neuksugar*, which is a sweet yam. There are several varieties of *Neuksugar*, including *Neuksugar Nalmeta* and *Neuksugar Haowon.* These Yams grow to be around 3m. Some other Yams are smaller, like the *Naupi*, *Namiau*, *Naklak*, which are round Yams. We also have the *Kalaka, Yati*, *Se Kuaseramoni*, *Magras*, *Matuk*, *Kulanlulah*, which are little but long yams. Some of these names are also used for the names of men. This is because the Yam is inseparable from us. It is our identity.

48. We plant some Yams for eating. Other yams are essential for our important Kastom ceremonies. Our most important ceremonies include male circumcision ceremonies, wedding ceremonies, the *Niel*, and, most important of all, the *Naukial*. *Norahvamua* and *Neuksugar* are the most important for ceremonies because they are the biggest Yams. They

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are the King of Kings. When the Taro went to the Americas and was crying it was because she missed these Yams, because they were her husband.

49. Male circumcision is an important ceremony for us. The Yam and other crops are used for this too, where there will be a celebration. The young boy, around the age of 6 will stay in the *Imalul* with other men from the village for 3 months. During this time, they are unable to see women. They will learn a lot of Kastom, undergo the circumcision (which is conducted by special knowledge holders) and heal there.

50. We have Kastom marriage. We are unable to marry within our village. It is Kastom for the bride to come to the village through marriage through the Kastom roads. The Kastom roads are a mutual relationship between two villages. Kastom marriages are essential for maintaining those relationships, At around the age of 20 to 25, a decision will be made for marriage with another village and the Chief of the other village will decide on whether it is a good match. There is a large gift given to the family of the bride. This must include Yams.

51. The *Niel* is a ceremony of giving. We have the *Niel* when we have an abundant harvest with lots of surplus crops. During the *Niel* we give any leftover crops from our garden that we don't need as a gift to someone else, maybe another family or another village. It is an important way that we maintain and strengthen relationships. It also shows our status as a gardener. When the harvest is not good, there is no *Niel*.

52. The *Naukial* is our most important ceremony. It is performed only every four or five years. It is a ceremony of dance. The ceremony itself involves four days of dancing and feasting. Everyone wants to be there for the whole four days because it is our most important ceremony.

53. Like how there are many different events performed during the Olympics, there are many different dances performed during the *Naukial* -- *Nao*, *Kaausascivah*, *Nasal*, *Napan*, *Ninimouio*, and *Toka*. Of these, the *Toka* is the most important because it's a male dance. It is essential to our governance. It is during the *Toka* that we decide who is *Ialmalu*, who is the high chief of our village. The *Ialmalu* is a symbolic leader, like a monarch. To perform the *Toka*, we must have Yam. It is only the Yam that is used in the *Toka*, this is how important it is. The practice for the *Toka* takes a full year. All of the other *Nikaowar* are female, so we eat the Yam but also can eat any other crops. The *Toka* is male and we must eat the Yam.

54. The Yam plays a vital role because the Yam is the chief of the crops and the *Toka* is the dance to decide the *Ialmalu*. The Yam also gives us the energy to us to dance for all four days.

55. During the *Toka*, if there is a dispute about who should be *Ialmalu* we do a test to determine who it should be by deciding who should wear huge feather (*Kweria*). The people who are dancing the *Toka* hold up the *Kweria*, and when it passes over the candidates, they can feel

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whether they are worthy or not. It is a spiritual test. If you are not the real *Ialmalu* and you are crowned with the *Kweria* you will get very, very sick.

56. Now that the Yam is gone, the *Naukial* is not being done as much anymore. I am not sure if it can survive into the future.

57. Since the Yam has vanished, I am still doing the Kastom ceremonies, but I am using a different crop, Taro. It isn't right. When I am doing Kastom rituals it is very important that I have Yam. When I did the Kastom ceremony with the Yam, it was good and right. When I brought Yams to the *Imalul* to perform the ceremonies my heart felt happy. But now, although I am still performing the ceremony, it doesn't feel right in my heart. The ceremonies are worthless without the Yam.

58. The Kastom I am practicing is here. It is for this place. It is connected to the *Imalul* which was put here for us by *Kalbapeng*. I can't go get Yams from another place to use in the Kastom ceremonies. It wouldn't be connected to our place or our spirits.

59. We have stayed with our beliefs, even though other religious beliefs have come to Tanna. Now it is hard for us without the Yam.

60. Before, we also used the Yam to trade with people from the coast. I traded Yam for fish. But since the Yam has vanished, we don't do any trade with the coastal villages anymore. Those relationships are broken. Instead, when I want to eat fish, I have to buy it with money from the shop. I get money by selling Taro at the markets.

61. As I said, the Yam is our most important crop. Now that the Yam has disappeared, the spirit is telling me that the other crops will disappear in the near future too. I can see the changes happening to them now, I am worried for the future of my village, and for my grandchildren and my great-grandchildren. I am worried they will have nothing in their gardens and will not be able to maintain our Kastom. In some ways, as I have said, there has already been a severing because we cannot grow Yams and our Wildcane is hard to find.

Cyclones have become more destructive

62. In my lifetime, I have seen big changes in the cyclones.

63. Like I am a *Tupunis* for Yam, we also have *Tupunis* for the Weather. They are responsible for looking after the Weather. They used to be able to stop the cyclones from hitting us, but they can no longer. Whenever we have a cyclone coming, they go inside a special hut and do a sacred ritual with the sacred Stones for the Weather that would stop the storm from coming. It used to work, but now the rituals are not working anymore. The power is broken.

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64. The cyclones have grown more intense. The winds are stronger and the rains are heavier. I observed the cyclones becoming more intense starting with Cyclone Uma in 1987, but the worst was Cyclone Pam in 2015.

65. Before, when the cyclones came, they didn't damage the houses. But now the cyclones that are coming are doing a lot of damages to our houses.

66. During Cyclone Pam, my house fell down. All of the houses in the village fell down. Everyone had to go to Iepkisip, which is another village, to seek shelter in a "Tanna House." The Tanna House is a special type of house that is built to withstand cyclones. It was difficult to get to Iepkisip because so many trees were fallen all over the road.

67. While Pam was raging, there were so many people inside the Tanna House that we all had to stand. There was no room to sit. The house didn't fall over and we survived the night, but everything else was destroyed. During the twin cyclones, Kevin and Judy in 2023, the same thing happened again.

68. Our ordinary houses are made out of local materials. We use Wildcane stalks for the structures and Wildcane leaves for the thatched roof. Before, both our houses and the Wildcane would survive the cyclone, but now it is just the opposite. The cyclones not only destroy the houses but also destroy the Wildcane we need to build them back. We have to use axes and knives to cut materials from the fallen plants, but there are not enough materials to build what we need.

69. The cyclones are also damaging the trees that we need to build the Tanna Houses. We need a specific type of tree that has a curved trunk. Before the cyclones would pass and the trees would survive, but now they've all been destroyed.

70. Before when the cyclones came, they were beneficial to us in a way. The cyclones would prune the overgrown fruit trees. The trees would get twisted together and the cyclones would straighten them out. After the cyclone passed, the trees would still be growing, and because of the pruning, more fruit trees would be able to grow. But now, the cyclones are destroying all of the fruit trees.

71. It takes about a full year for fruit trees to grow back and bear fruit now after these bigger cyclones. I wait to eat the fruit, but just when they are about to bear fruit, another cyclone comes and destroys them again. The fruit trees cannot recover. This is not how it was before. This is a big loss for my village because we are spiritually connected to the fruit trees and they provide staple foods for us – Breadfruit, Coconut, *Namanmbe*, *Nantau*, and Banana. After the twin cyclones Kevin and Judy in 2023, all of the banana plants were destroyed. I haven't tasted a banana since. The banana plants are growing back but it's not too healthy. At least they are still giving a little bit of fruit, but they aren't nearly as big as before.

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72. It's the same for the crops in our gardens. Before, some crops would survive the cyclone. For example, even after Cyclone Uma, we still had crops growing. But after Cyclone Pam, it is just the opposite. Pam destroyed all of the gardens and all of the crops.

73. Starting with Cyclone Uma, a lot more rain comes with the cyclones and this causes landslides. Before Uma, we never experienced a landslide. But whenever we have cyclones now, we get landslides. The landslides damage our gardens.

74. My entire garden was destroyed by a landslide last year, during the twin cyclones, Kevin and Judy in February and March 2023. We used to get landslides only during major cyclones like Pam and Uma. But now we get landslides during smaller cyclones like Kevin and Judy too. This is because Cyclone Pam in 2015 cleared the whole area. It was just something waiting to happen. The trees that were on the slope helped to hold the soil together, but after Pam destroyed them, the garden became vulnerable to landslide. With the trees gone, the soil gets washed away easily.

75. Ever since Pam, the crops have never grown back as well. I think this is also related to the landslides, because when there is a landslide, they take all of the rich soil away and leave only the tough bedrock to garden on.

76. In the past, once the cyclone passed, we still had enough to eat. But now, when the cyclones come, they damage all of the food and we have to wait for the government to give us aid. We have to wait for about 3 months.

Visit to the United States of America

77. In 2008, I visited the United States of America. I went to New York, Montana, and Illinois. When I was in Illinois, I saw factories. I saw smoke going up from them that was very thick, the same as clouds.

78. When I saw the smoke, I knew it was bad. I knew it was affecting the gardens in my area. I knew my place was affected more than in the United States. In the United States, the products from the factory are going into the houses and are protected. But here we depend on our gardens which are outside. They are directly affected by the smoke. When it goes up into the atmosphere, its effect comes down here and harms us.

79. I'm very happy to be sharing my story with the International Court of Justice. Now our living has gone very differently and we are suffering. We have to say something to the world in order for things to get better. I want to tell the Court that they have to do something good for the people. If they do something good, I would be happy about that. I don't want them to do something bad that will harm our people.

80. I have asked the lawyers to come back and tell us the decision of the Court.

Signed: Mangau Iokai - Prepared on January 12, 2024 Witnessed: 10

Senior State Counsel, Office of the Attorney General, Republic of Vanuatu.

Tour of the gardens

81. I took the lawyers and the Attorney-General of Vanuatu on a tour of my gardens and other gardens in the village. I showed them different things. They took photos and videos and said that they will include them in the information that will be before the Court.

Signed:
Mangau Iokai

Witness:

Christine Lava
Senior State Counsel, Office of the Attorney General

Data:
12 January 2024

Signed: Mangau Iokai - Prepared on January 12, 2024 Witnessed: 11

Senior State Counsel
Office of the Attorney General, Republic of Vanuatu

Exhibit 22

I, Naus Iaho, from Yakel Village, Tanna, Vanuatu, solemnly affirm and declare:

Background

1. My name is Naus Iaho. I am a national of Vanuatu. I live in the village of Yakel on the island of Tanna in Vanuatu. I am 62 years old.

2. I have been asked to give a testimony to the International Court of Justice about how the weather is changing and how this affects the practice of traditional medicine in my village.

3. I speak my language Nahvwaal, I have given my statement through an interpreter John Kalwas, who can speak Nahvwaal. He read this statement to me in Nahvwaal and I agree with the content of it.

4. My testimony is based on my direct knowledge or my knowledge based on Kastom, which has been passed down to me from my parents, grandparents and my ancestors.

Traditional medicine

5. In Yakel, we have traditional herbs that we use for medicine. A very important medicine is an herb that we use to help young women to get pregnant.

6. I am responsible for preparing that medicine. Only myself and one other woman in my village, Linet Iawain, know how to prepare the medicine.

7. I am asked to prepare the medicine every time a woman wants to have a baby. They ask me every time because the medicine is so important.

8. The knowledge of the medicine and how to prepare it was passed from my ancestors, to my mother, and then passed on to me. The knowledge of the plants and how to prepare them is secret and sacred. It is too sacred for me to talk about in more detail.

Changes to the rain is damaging medicinal plants

9. Before, it was easy to find the herbs that I use for the medicine, but now, it is hard to find those herbs.

10. I think this is due to the bad rain that is coming and making the plants die off. The bad rain is too heavy. In the past, when we had good rain and the medicinal herbs grow very well. When the bad rain is coming it makes the plants die off. The bad rain affects the leaves, the leaves die and are falling off due to the bad rain. This is because when we get too much rain, the soil is absorbing too much water. That's why it is affecting the plant.

11. These changes started with Cyclone Uma. Before Cyclone Uma, it easy for me to make the medicine. When Cyclone Uma came it destroyed some of the medicine, but it was still there for me to do the medicine, up until Cyclone Pam. But after Cyclone Pam so many of the plants have died that it is hard for me to do the medicine.

Senior State Counsel
Office of the Attorney General

12. When someone asks me to do the medicine, I used to always be able to make it. But now, when I can't find the herbs, sometimes when they come and ask me, I cannot make the medicine.

13. Making the medicine is my sacred duty. It's something that I must do. If a woman is asking me to make that medicine so that she can get pregnant, it is a must for me. I have to look everywhere for the plant, so that I can make the woman pregnant. When I can't do it, to me it is a failure.

14. I worry about the future when there won't be any plants and it will be impossible to make the medicine. The knowledge that I have about the medicine, I have passed on to my daughters. I am worried that when I am gone, my daughter won't be able to keep practicing medicine because the plant is dying.

15. The last thing that I want to say is that we humans came to this planet, this world, to reproduce. When they are not able to reproduce, people come to me for the medicine so they can get babies. Now I am so worried about the future when there is no more medicine to produce the babies. I am worried.

Signed: Naus Iaho

Witness:
Senior State Counsel
Office of the Attorney
Date: 12 January 2024.

Exhibit 23

I, Alpi Nangia, from Yakel Village, Tanna, Vanuatu solemnly affirm and declare:

Background

1. My name is Alpi Nangia and I am a national of Vanuatu.

2. I do not know my birthdate, but I know I am 64 years old.

3. I live in Yakel Village in the island of Tanna, Vanuatu. I have lived in Yakel all of my life. I am a farmer.

4. I have been asked to provide a statement for the International Court of Justice about the changes to the weather that we have been observing and how these changes have affected my Kastom.

5. I speak my language *Nahvwaal* and I understand some English. However, I have given my statement through an interpreter John Kalwas, who can speak *Nahvwaal*. He read this statement to me in *Nahvwaal* and I agree with the content of this statement. This is my testimony.

6. My testimony is based on my direct knowledge and my knowledge based on kastom, which has been passed down to me from my parents, grandparents and my ancestors.

Yakel Village, the *Imalul* and our governance system

7. We live strong in our Kastom. We have kept our Kastom and we are known in Vanuatu as a Kastom village because we decided not to adopt any other religious belief, like others in Tanna. We believe and practice what our ancestors believed.

8. I look after the *Imalul*. In pidgin Bislama it is called the Nakamal. In my belief, the *Imalul* is there for us to do our cultural living and is our community space. It is the most important place in the whole village. It is a central area in Yakel village. It is surrounded by large Banyan trees and there is an open area, which is compacted soil.

9. The *Imalul* is the place where we perform Kastom ceremonies, such as the *Niel*, *Toka* and male circumcision ceremony. When we perform Kastom ceremonies, we also dance. The *Imalul* is a big space for many people in the community to come and perform these dances. We are living here for those things, those ceremonies and we want those things to keep on going and we do not want them to disappear.

10. The *Imalul* is also our place of governance. There are three important positions in the *Imalul*. The person who represents the *Imalul* is the *Iaramara*, he is a High Chief. The *Iaramara* is like a symbolic head of the *Imalul*, like the King of England. He has the power but he does not say anything in the *Imalul*. There is also the *Ieni* who is the spokesperson for the *Imalul*. He speaks on behalf of the *Iaramara*. He is like the Prime Minister. There are also *Tupunis* who work for the *Imalul*. The *Tupunis* commune with the spirits and look after the well-being of our community. They are all Chiefs and come from Chiefly lines from father to son.

Signed: Alpi Nangia

Prepared on January 12, 2024

Witnessed: 1

Senior State Counsel
Office of the Attorney General

11. There are a lot of different *Tupunis*. We have *Tupunis* for Kava, Banana, Taro, Pigs, for the Fruits and Fishes down the river, they all have a *Tupunis*. There are *Tupunis* in other parts of Tanna too, like down the coast. People from the coast are *Tupunis* for shells and fishes.

12. Each *Tupunis* has sacred Stones which are the spirit of the thing they are responsible for. The *Tupunis* is also the Stone. The Tupunis, the Stone, and the spirit are all inseparable. If we want good Kava, for example, we tell the Tupunis for the Kava. He goes to get the Stones and then they do a ritual. They have something in the form of a ship and place the stone inside with water. When they have done that, they come to the *Imalul* and get the Kava and a chicken and they speak to the spirits. Hopefully then, we will have good Kava for drinking.

13. There is only one *Ieni*. They talk in the ceremonies, such as the *Neil*, male circumcision and the *Toka* ceremony. They also talk to the Tupunis, especially the Tupunis for gardening and they tell them they will do something for the gardening that produces food and they take that to the Imalul to perform the ceremonies. The *Ieni* makes sure that the Tupinis is growing enough for the ceremonies.

14. The *Iaramara*, the High Chief, is there during meetings and ceremonies, but he does not do anything. What the *Ieni* is saying is from the *Iaramara*. He is saying everything belonging to the *Iaramara*. If the *Iaramara* wants something, he tells the *Ieni* and the *Ieni* goes and says it.

15. Another role of the *Ieni,* is to conduct bilateral relations with other villages. The *Ieni* from different *Imalul* (which might be called a different name in other languages) will talk to another *Ieni*. The *Ieni* will not talk to the ordinary people. He only speaks to the other *Ieni* and whatever they say is between them. Ordinary people cannot address them. If ordinary people said something to the *Ieni*, something might go wrong in the community, so there is only speaking between the *Ieni* and the *Ieni*. While he is doing all the talks between the *Ieni* and the *Ieni*, the people are doing their own things – they are doing the gardening and some other stuff, while the *Ieni* are doing the bilateral leadership.

16. Every day the men of the village will meet at the *Imalul* to drink Kava and connect to the spirits. The women support this by providing food to the men, to give to the spirits. It is very important for the women too.

Changes in the weather and our gardens

17. Before when I was a little boy, we used to perform ceremonies such as male circumcision, weddings, *Niel* and *Toka*. We used to pick Kava and other crops in the garden and pick pigs. The Kava and pigs were very big. We had plenty of those things for our ceremonies. As I have gone through the years, these ceremonial things are getting smaller and smaller up until now. There are no more big pigs, there is no more big Kava, there are no more big Yams in the garden. The Yams have vanished altogether.

18. The sun and rain have changed. Before the sun was okay. It was good rain and good sun. But now the sun that is shining is not good for the crops and the rain that is raining now is not good for the crops.

Signed: Alpi Nangia Prepared on January 12, 2024 Witnessed: 2

Senior State Counsel
Office of the Attorney General

19. The rain that is raining now is destroying the crops and is doing all the landslides. It rains heavily but it washes away all the crops from the garden and we have landslides and it removes the stone from the riverbeds down to the sea. We did not have landslides when I was younger.

20. Before we had seasons for sun and rain. We have a special month for rain and a special month for sun. But up until now when it is the season for sun, the rain comes. When it is the season for rain, the sun comes. It is out of balance. It is not like before.

21. Because it is not raining or sun shining in the months it is meant to be, this is affecting the crops. Also, when it rains in the rainy season, it is heavier than before. It causes the crops to rot. It was not like that before.

22. Nowadays, when the sun shines. It is very hot and it is affecting the crops too. The crops are dying off.

23. The hot sun is affecting me too. When it is hot, it is hard for me to cool down. The hotter I am feeling, I have to go under the tree or I go down to the River for a swim. These are the only ways I have to cool down. But I am feeling the heat, which is different from before.

Yams

24. It has been 4 years since we have not been able to harvest Yam in Yakel. Since the time that we were having the Yam, I am happy because I can still taste the Yam. I miss the taste. It affects my hunger. Before when we had big Yams, we have big people. now we have little Yams, we have smaller people. This has happened slowly over time, but faster in recent years.

25. When we do not have the Yam and other crops, our body will grow weak and if we have a good garden, our bodies will be strong. Now our bodies are growing weak.

26. Now when there is no more Yam, I am not really feeling well because there are many things I do with the Yam, such as ceremonies in the *Imalul*, we do that with Yam. Yam is something that is related to the spirits within me. When I have Yam, I feel good. It makes may spirit also feel good. When I do not have Yam, my body is not feeling well and my spirit is also not feeling well.

27. It is the bad sun and bad rain that is affecting the Yam.

28. The name of the Yam is *Neok*, which is the name for all Yams. There are many varieties of Yams which are also the names we give to men. These are: *Namatuak*, *Noravenua*, *Neuksugar* (sweet yam), *Neuksugar Nalmeta* (sweet yam), *Neuksugar Haowan*. These varieties are the big Yams. Then we have littler Yams. *Naubi*, *Namiau*, *Naklak*, and *Kalaka*. The round yams are *Yati*, *Kuaseramoni*, *Magras*, *Matuk*, and *Kwanaolah*. All these Yams are gone. Now they are not here, we cannot perform that our Kastom ceremony anymore.

Signed: Alpi Nangia Prepared on January 12, 2024 Witnessed: 3

Senior State Counsel
Office of the Attorney General

29. *Kalbapeng* is the name of our Supreme God. The Yam is made by the *Kalbapeng*. *Kalbapeng* is a God from the Mountains. We believe all the stones from the Tupunis all come from *Kalpapen* to us. *Tupunis* is everything. The God, us human beings, and trees are all *Tupunis*. We are all connected and all one.

30. If any *Tupunis* disappear, there will be an effect. It affects our ceremonies. Hopefully, our children in the future, when they are doing ceremony, will have more Yams to make such ceremonies. Even though the Yam is gone, the Stones are still there. We will try our best to bring it back. I do not know how long it will be for the Yam to come back.

31. I keep trying to plant Yam, but in vain. It keeps disappearing. I tried to get Yam from other places to plant here, but it keeps disappearing.

Cyclones

32. Up until now, the cyclones are getting worse and worse.

33. Cyclone Uma was in 1987. During Uma, we had wind at night until morning and the same with Cyclone Pam in 2015, we had wind at night until morning. But Pam did a lot more destruction. It was the same amount of time, but more damage was done by Pam.

34. I was shocked and questioning – what is this? What type of cyclone is this? I have never seen anything like Pam. After Pam, I sat in the *Imalul* and could see far away. It had destroyed all the trees, destroyed everything. It destroyed all our crops. I was asking myself - is this another level or another type of cyclone?

35. The ones after Pam, Cyclone Judy and Cyclone Kevin came close together, it was also very damaging. I was shocked that there were two. Sitting down, I was thinking where will get the help I need because it destroyed so much.

36. Before Judy and Kevin, the Bananas were just giving fruits and the Taro and Coconut. After the cyclone, we eat the fallen Bananas, Coconuts and Taro and survived on that.

Message to the ICJ and States

37. When the lawyers and Attorney General came to talk to us about the ICJ and asked us to give a statement, we were more than happy and happy to spend time to talk about these things. I want to tell the world, now when we are doing things, we must be doing things together, not the English or Americans doing one thing and we another. We must understand each other and what they are doing that might hurt us here. We can get an understanding of what we are doing in the future. You and I are the same people. Even though I am black, we are the same people throughout the whole world.

Photos

38. The lawyer has taken photos of me and they said that they will give these photos to the Court.

Signed: Alpi Nangia

Prepared on January 12, 2024

Witnessed: 4

Senior State Counsel
Office of the Attorney General

Signed:
Alpi Nangia

Witness:

Christine Lava
Senior State Counsel, Office of the Attorney General

Data:
12 January 2024

Senior State Counsel
Office of the Attorney General

Exhibit 24

I, Jenny Toata, from Yakel Village, Tanna, Vanuatu solemnly affirm and declare:

Background

1. My name is Jenny Toata. My Kastom name is Narua. I am a national of Vanuatu. I live in the village of Yakel on the island of Tanna in Vanuatu. I moved to Yakel in around 1986.

2. I was born in 1967.

3. I have eight children. Seven boys and a girl and 19 grandchildren.

4. I have been asked to give a testimony to the International Court of Justice about how the weather is changing, how my garden and my life in the village is affected by these changes.

5. I speak my language Nahvwaal. I have given my statement through an interpreter John Kalwas, who can speak Nahvwaal. He read this statement to me in Nahvwaal and I agree with the content of it.

6. My testimony is based on my direct knowledge or my knowledge based on Kastom, which has been passed down to me from my parents, grandparents and my ancestors.

Changes to my garden

7. When I was young, I used to see my mother go to the garden and when my mother comes back, she had plenty of food to come back and it was shared among us and many other people. The food that we have from those days could sustain us for quite a long time.

8. Before moving to Yakel, I lived in Lankuengah village, which is the same language group as Yakel and is an inland village in the same region as Yakel.

9. I started a garden as soon as I moved to Yakel and it gave good crops and plenty of crops. It was like my mothers garden.

10. Around 1987, I started to see the changes happening over time. I remember because this is when Cyclone Uma was. Anyway, even after Uma, it was a slow change but I am noticing it more in recent years.

11. I saw the changes in my yams, taros, kumula and the produce of those crops were starting to get smaller.

12. The food that I am harvesting now, it is getting smaller and it is not the same as before. It used to sustain us for a long time, but now it just lasts for a day.

13. The things that are affecting the crops are the rain and the sun. When the rain comes, it is supposed to be good for the crops and help them to grow, but now the rain is too heavy for the crops to survive. The sun shining is also supposed to help the crops grow, but now it is too strong and too hot. The crops do not grow as well as before.

Senior State Counsel
Office of the Attorney General

14. The weather pattern before was predictable, But now the rain comes when it is unexpected and same as the sun. The sun comes when it is supposed to rain. Before the weather had a pattern. I assumed the weather pattern would be the same as before and now it is different. It is bad for the crops.

15. Before when I do the gardening, the rain comes, it is a normal rain and now it is more heavy. Now when it rains, I have soil erosion and it is effecting my gardening. When it rains, due to soil erosion, the soil buries the crops and they cannot breathe and you cannot get a good harvest.

16. Now there are a lot of landslides too. I started to see them happen over time also from Cyclone Uma onwards and now there are more.

17. When I was doing the gardening, I used to plant crops, and plant fruit trees such as oranges. But my garden was destroyed by a landslide during Cyclone Pam in 2015. This has affected me and my children.

18. At that time, during that landslide I was sad, because it was time for the praying for the yam and we could not do that ceremony. At the time, during the landslide, I was expecting that we would do the ceremony for the yams, but then the landslide damaged the garden for the yams, I just took the kava to the Nakamal without yam. It felt wrong.

19. After Cyclone Pam, we had a lot of hunger. Yam is part of my day-to-day food and I also couldn't eat it. We depended on what was left, such as cassava, but this cassava was also not good and was rotten and I could only eat some of it. I also had a little bit of Kamala and our special leaves. It was not enough and I was hungry. So were my children.

20. The crop that I love most is the yam. The yam is completely gone from Yakel. I am so scared that there is no more yam. I am not happy that the yam is gone.

21. The yam was much harder to grow after Cyclone Pam in 2015, but now it has been gone for about 4 years.

22. I like yam so much, because I do most of the kastom ceremony with yams, like Niel, circumcision and other ceremonies.

23. I am still doing the yam garden, but it is so small. I am trying to keep it going but I am unable, I do not want to lose it, which is why I keep trying. It is the bad rain. It is so rainy. Also with the sun, it is not a good sun because it is shining on the crops.

Changes to my garden location

24. Before I was a healthy person, because my gardening was close by.

25. After the landslide destroyed my garden, everything changed. I can no longer garden close by. Instead, I have to cross a ravine at the bottom and climb all the way to the other side of the valley. I have to go way down the ravine, where I have to cross a

Senior State Counsel
Office of the Attorney General

river at the bottom of the ravine and then go all the way back up the other side of the valley. The walk is very steep. It takes me almost a full day to go there and come back I only have 30 minutes to 1 hour to garden. I must load the produce on my back and walk back with it and that effects my knees and my hurts my back also.

26. My daily routine when I go to the garden is I must do some chores at home, whether doing the dishes or feeding the pigs. When I am done, I have to walk to the garden which takes a long time, only to be able to garden for a short time. I have to be back in the village before 4pm when the men start to drink kava in the Nakamal.

27. I used to go to the garden daily, but now sometimes I feel too tired and cannot go up anymore. This is affecting my ability to feed myself and my families.

28. If there is something that is very important at the Nakamal, I will have to prepare myself a day or two beforehand. Before, I used to walk short distances. It is not like that anymore. It is a hardship on me.

29. The weather is making it hard to get to the garden too. Because of the heavy rains the river often floods. When the river floods, I cannot go to the garden.

30. When the heavy rain comes, that is when the river floods. When it rains, I am unable to go. For an example, the day before yesterday and yesterday, there was rain. When it rains that hard, I cannot get across.

31. I do not know what to do. When this happens and I do not go to the garden, I need to look for something to eat and to feed my family. But there is nothing to eat. We will only have leaves.

32. I have a husband and he has a garden. I used to depend on him to get food from the garden. Now he is getting old, too old to get food from the garden. My husband is relying on me.

33. Sometimes, my children will feed me when I am too tired to walk to the garden and back and sometimes my children will cook for me too.

34. I would like to tell that Court that they have to put a stop on the gas emissions that are ruining our gardens. They are living in continents and we are living on tiny islands. When they are doing these things, it effects my village, me, my family, my children and my grandchildren.

Signed: Jenny Toata

+

Witness:
Okaru
Senior State Counsel
Office of the Attorney General

Date: 12 January 2024.

+

Okaru
Senior State Counsel
Office of the Attorney General

Exhibit 25

I, Sera Nawahta, from Yakel Village, Tanna, Vanuatu solely affirm and declare that:

1. I am a Vanuatu national, living in Yakel village in Tanna. We live a very traditional life, from the time of the ancestors.

2. I do the medicine for fever and headache and joint pains. This medicine is disappearing due to heavy rains, which are different to what the rains used to be like when I learnt this medicine.

3. I use customary knowledge and plants for this medicine.

4. Before, when the people came to me to do the medicine, it was not difficult for me to find the medicine. I had plenty of that particular plant to do that medicine. After Cyclone Uma in 1987, I still have the plants but after Cyclone Pam in 2015 the plants are disappearing. It is hard for me to do the medicine. Also due to the rains that are falling, there are bad rains that are making the plants die and not grow. It is hard for me nowadays to do medicine.

5. The bad rain comes and it will wash the plants. I was thinking that the plants will be Okay but the sun comes and the leaves become yellowish and fail.

6. It is a bad rain because when it falls it is so heavy and it is destroying the plant. It did not rain like this before.

7. My great grandfather taught my grandfather who taught my father-in-law and then my father-in-law taught me. Men or women can do this medicine. But only few people, including myself know this medicine.

8. Now, because of the changes in the weather, I was going to teach my daughter about the medicine but due to the weather this is happening. I do not know whether I am going to teach my daughter about the medicine or not. I would like my daughter to learn this medicine so she can serve the community by saving their lives when they are sick. If the plant is not growing anymore, she may not be able to find the plants to practice the medicine.

9. Because the medicine is for fever, headache and joint pains, I am asked a lot for this medicine. For the elders, if they have joint problems, can do that also to help them. For the fever, I work with people who are very sick in the community and I do this medicine for them.

10. This is essential medicine for the community and I am worried about the community because if the community is getting sick I am there to make the medicine for them. I am there to serve my community. Without the plants to make the medicine, I cannot look after the community's medical needs.

Signed: Sera Nawahta

X

Witness:
Senior State Counsel
Office of the Attorney General
Date: 12 January 2024

Signed: Sera Nawahta Prepared at Lenakel, Tanna, Vanuatu on 12 January, 2024 Signed: Witness 1

X

Senior State Counsel
Office of the Attorney General

Exhibit 26

I, Johnny Loh, from Yakel Village, Tanna, Vanuatu solemnly affirm and declare:

Background

1. My name is Johnny Loh and I am a national of Vanuatu. I live in the village of Yakel on the island of Tanna in Vanuatu. I have been living in Yakel all my life.

2. I was born in 1963.

3. I have 16 grandchildren and eight great-grandchildren. All of them live in Yakel.

4. Gardening is a key part of life at Yakel. I am a gardener. I eat what I produce. My crops provide most of the food that I eat. Crops are also essential to my Kastom. I grow crops for the many important ceremonies that we have in the *Imalul*, which is a central meeting place in the village. Our cultural life, politics, governance, and religious beliefs centres on the *Imalul*.

5. I have been asked to give a testimony to the International Court of Justice about how the weather is changing and how many of our crops are affected by these changes.

6. I speak my language *Nahvwaal*. I have given my statement through an interpreter John Kalwas, who can speak *Nahvwaal*. He read this statement to me in *Nahvwaal* and I agree with the content of it.

7. Where I use terms from my local language in this statement, it is in italic.

8. My testimony is based on my direct knowledge or my knowledge based on Kastom, which has been passed down to me from my parents, grandparents and my ancestors.

Gardening

9. I have been gardening by myself since I was 15. Before that, I would go to the gardens with my mother and father and they taught me how to garden.

10. I grow Taro, Kava—which we call *Nikkaowah* in my language, Banana, Kumala, and, before now, Yam.

11. Each growing season, I move my gardens to different areas, to allow the last area where I had my gardens time to rest, before I use it again.

12. I also use a cutting from a local plant, which acts as a fertiliser. In my language, we call it *Lilahng*. I will use this plant when I notice that weeds do not grow in the soil, I know that the soil is not good. I must go and take the plant and use it on the soil so that it can enrich the soil. This has been our tradition for generations. It worked for my parents and my grandparents.

13. At the time that I started to do my garden, that was when I was 15 years old, I was harvesting big Yams. Recently, the Yam started getting smaller and smaller. About four years ago, the Yam vanished altogether.

14. Every other crop that I grew too, was big.

15. All of my crops have started to get smaller and smaller.

16. I took the lawyers and the Attorney-General and the translator for a tour of my gardens and other gardens in the community. I talked to them about my crops and some of the other crops in the gardens and showed them the different crops. They took photos and video of me showing them the different crops and the problems I and others are having. They told me that they will do a statement that will show these photos and some of the videos.

17. For example, the Banana. The Banana plants used to give much more fruit. Before, when I planted Banana, the bunches of Banana would be much bigger and there would be many more fruits. The branches would be full of Bananas and would hang down much lower. It is not healthy if it does not drop from the top to the bottom. Now, only a few Bananas grow at the top of the plant.

18. The same with the Coconut. Before, I used to get big Coconut fruits. But nowadays, it's getting smaller and smaller. We don't have big Coconuts anymore. The leaves are also dying. I've observed this change over the past four or five years. It never happened before.

19. The Taro has been affected too. These days, it is very common to see sick Taro leaves. Healthy Taro leaves are a vibrant green and are so big you can use them as an umbrella when it rains and not get wet, Now, they are small, have turned a yellow-brown, and have holes in them.

20. The plant we use for Laplap is also dying. Like the Taro, the leaves used to be vibrant and so big we could use them for an umbrella. We still grow them now, but the leaves don't look healthy, they are smaller, they die off easily.

21. We also have a tree called *Nigulk*, it bears a tasty fruit that everyone loves. Right now, in January, it is supposed to be in season. The branches should be so heavy with fruit, but there are none. This is because while the tree was flowering, heavy rain came and washed away all the flowers. The rain is not supposed to be heavy like that.

22. My *Nikkaowah* started to fail just before Cyclone Judy and Kevin hit us in February/March 2023. Now it is all dead. *Nikkaowah* is essential to our Kastom. It is how we commune with the spirits. I was planting my *Nikkaowah* for ceremonies at the *Imalul*. Now that the *Nikkaowah* is dying off, I can't perform those ceremonies anymore. I'm trying very hard, because we must have *Nikkaowah* to do the ceremonies, but no matter what I do, the *Nikkaowah* keeps dying.

23. These changes started around the time of Cyclone Uma, which was in 1987. After this cyclone, my crops have been slowly getting smaller. But it was after Cyclone Pam in 2015, that I have noticed that things are getting worse, including the Yam, which got smaller and smaller and now can't grow anymore.

24. I still practice resting areas and use the *Lilahng* to make the soil rich, but it is not giving any good results.

Signed: Johnny Loh JOHNNY

Prepared on January 12, 2024

Witness: 2
Senior State Counsel
Office of the Attorney General

25. Tanna has always been an island with plenty. Our land is naturally fertile. Our people were never hungry. We always had food in the garden. Our people were very self-sufficient in terms of subsistence farming. We had lots. But it is very different now. The harvests are getting smaller and smaller, and every time you have a small harvest, you have less and less to plant.

Observations about the weather

26. There are three changes to the weather which I have observed. First, the cyclones come and moves the trees. Second, is the sun, and then the third is the rain.

27. Since Cyclone Uma, we've been experiencing cyclones that are much more severe. Pam was the worst. It removed all of the trees from some of the sloped areas where we garden. The trees are important because they hold all of the soil together. Without them, we get landslides. We started having landslides after Cyclone Uma. We used to have landslides only when we got the strongest cyclones, like Pam and Uma. But now, because all of the trees are destroyed, we get landslides when we have smaller storms, or even too much rain.

28. We used to plant some of our gardens in a sloped area. The soil was rich. But the landslides took all of the topsoil and all that is left is the bedrock. We can't plant there anymore.

29. A good number of people used to do their gardening on that slope. But now these people have no place to do their subsistence garden. They have to borrow land to do their garden, but the size of the land is much reduced because they are using part of someone else's land. It is no longer their land and their garden. To lose custom land like this, is to lose everything. Your customary ground is your mother, it provides everything that you need. It is to lose the past until now and the future. It is like death. This loss of land is also causing hunger in our community.

30. The sun is also affecting the crops. We used to have a good sun that would help the crops grow, but now when we have sun, it is too strong and too hot. It causes the leaves to burn and the plants to die.

31. The same with the rain. Before, we had good rain that the crops would drink and use to grow strong. But now we are getting too much rain. It is too heavy and lasts for too long. It washes away the leaves and the fruits and causes the crops to rot.

32. Everything is out of balance. Before, the sun and the rain gave us just what we needed, and our gardens flourished. But now both the sun and the rain are too strong. It is all wrong.

The Imalul

33. I perform the ceremonies of the *Imalul*. There are many different ceremonies.

34. Each of the ceremonies require different crops. The Yam is the King of the crops and plays a central role in all ceremonies. Yam is the King of all the crops because when all

the root crops are put in *Niel* and if only a Yam or more than one Yam is put into in the *Nail* it adds value to the *Niel* because Yam is considered as the King of all crops.

35. However, *Nikkaowah* is also important. *Nikkaowah* is how we access the spirits. It is like a gateway to the spirits. We need the *Nikkaowah* because that is how we talk to the spirits.

36. I go to the *Imalul* every day, in the afternoon/early evening, and it is my Kastom for the men of the village to do so. It is also Kastom for me to take *Nikkaowah* with me, as all men who attend should. All the *Nikkaowah* will be prepared together and shared among us. We drink it in coconut bowls. We each have our own bowl.

37. Each evening when the men go to the *Imalul*, we will drink the *Nikkaowah* which is social, but it is an important bond between elders and children. This is where the young boys and men meet to learn about the Kastom and ways of life.

38. Sometimes we will perform a ceremony called the *Tamafah*. We drink the *Nikkaowah* and commune with the spirits to ask them to look after our crops. Drinking *Nikkaowah* is like a prayer. We pray for the garden crops.

39. I am worried about the *Nikkaowah* because the crop has been failing. I used to be able to take *Nikkaowah* to the *Imalul* daily, but now I can't now because my crop failed. I still go to the *Imalul* even if I don't have enough *Nikkaowah*, and those who do share. But sometimes there is not enough *Nikkaowah* among all the men in the village to perform the *Tamafah*.

40. We used to perform the *Tamafah* daily, as is our Kastom, as it has always been. But now, because there is not enough *Nikkaowah*, the *Tamafah* is an on and off thing.

41. Before, when I was doing the *Tamafah*, I felt like my prayer was something meaningful. But now, because I am not doing it as much as I did, I do not feel like I am connecting with the spirits. Something feels broken.

42. I do not know when the *Imalul* started, but it has been there a long time up until now. It is our way of life. When the sun moves to a certain place in the sky, it's time for the men of the village to come to the *Imalul* and drink *Nikkaowah*.

Worries About the Future

43. Because the Yam has already vanished, I am worried about all of the other crops. I am worried they will disappear too. I want them to be there for my children, my grandchildren, and future generations so that they have something to survive on and so they can practice our Kastom.

44. I am worried too because we are losing all of our arable land, which we use for gardening. When all of the arable land is gone, where will our people garden in the future? How will they survive? I am worried for my children and my grandchildren.

Office of the Attorney General
Senior State Counsel

45. I've been living here my whole life, but I've been hearing stories about factories far away putting up big smoke. I don't want the big smoke to come here and harm my *Imalul* and my people.

46. To the Judges of the International Court of Justice, I want to say: The changes are causing us to really suffer. If it is the big factories that are causing all of these changes, I want the Judges to put a stop to the factories putting up the big smoke.

Signed:
Johnny Loh
JOHNNY

Witness:
Christine Lava
Senior State Counsel, Office of the Attorney General

Date:
12 January 2024

Exhibit 27

We, Linet Iawain, Yalitea Iakaho, Sera Nawahata, Nelly Pilia, Nau Iaho, Nancy Iacitan, Sera Naburam, Yoba Mearangi, and Jenny Toata from Yakel Village, Tanna, Vanuatu solemnly affirm and declare:

Background

1. We are women from Yakel village. Our names and ages are: Linet Iawainn (51), Yalitea Iakaho (58), Sera Nawahata (48), Nelly Pilia (53), Nau Iaho (62), Nancy Iacitan (42), Sera Naburam (56), Yoba Mearangi (58), and Jenny Toata (61).

2. We have been asked to give testimony to the International Court of Justice about how the weather is changing and the impacts of this on our lives and our Kastom. We gathered together to share our views. Some of us have given individual statements. We are a community, and we feel more comfortable and more confident giving a statement together. We have chosen to share our voices as a group.

3. We speak our language, Nahvwaal. We have given our statement through an interpreter John Kalwas, who can speak Nahvwaal. He read this statement to us in Nahvwaal and we agree with the content of it.

4. Our testimony is based on our direct knowledge or our knowledge based on Kastom, which has been passed down to me from my parents, grandparents and my ancestors.

5. We do not know how to write so we have each signed this statement by marking an "X".

Impacts of changing weather on the duties of Women

6. As women, our Kastom duty is to do *Nahunu*. It is a big word with a big meaning. We will try to explain it in English as best as we can. *Nahunu* means bringing food and water to the Nakamal for the men to drink Kava there. The Nakamal is the centre of our village life. The men go there every evening when the sun is in a certain position to commune with the spirits and ask them for a good crop. The women bring the water that the men need to prepare the Kava. We bring the food because the Kava is bitter and it is needed to clear the throat of the bitter taste. The *Nahunu* is a duty that women owe to the Nakamal.

7. As women, we have to do the *Nahuna* every night. Before, it was easy for us to perform our duty because our gardens were close by and full of food. But after Cyclone Pam in 2015, landslides have destroyed our gardens. We can no longer garden close by. Instead we have to cross a ravine to get to another valley on the other side. We have to walk

Signed –
Linet Iawain +
Yalitea Iakaho +
Sera Nawahta +
Nelly Pilia +
Naus Iaho +

Signed -
Nancy Iacitan +
Sera Naburam +
Yoba Merarangi +
Jenny Toata +

Signed: Witness
Senior State Counsel
Office of the Attorney General

down a steep mountain to the river at the bottom of the ravine and then walk back up the other side. It takes almost the whole day to get there and back.

8. The trip is so long to get to the garden and back that sometimes we cannot make it back to the village in time to do the *Nahunu*. When we are not able to perform our duty. We are feeling unhappy and sad that we are not doing those duties for the Nakamal.

Impacts of changing weather on food shortages

9. On top of that, the changing weather is causing our crops to shrink. The rain is too much and the sun is too strong. They are killing the crops. The repeated landslides and cyclones also destroy the crops. As a result of all these changes, we don't have enough food. Some of us have observed these changes since Cyclone Uma in 1987 but things have gotten much worse since Cyclone Pam.

10. The Yam is our most important crop. Because of all of these changes to the weather, especially the rain, the Yam has vanished entirely. It's been four years now with no Yam.

11. Before, we were thinking that we would be able to live in the same way as our grandparents and perform our duties. But it is hard for us to perform those duties because of the weather we are getting now, which is leading to a shortage of food from the gardens.

12. One of the roles of women in our community is to go down to the river to get fish and prawns.

13. Before, we could go down to the river whenever we wanted prawns and we got lots of them. But now, we can start in the morning and go until the afternoon and we are trapping maybe five prawns total. That's it.

14. The prawns have washed away due to landslides and floods, which happen when we get cyclones and when the rain is too heavy.

15. Prawn is a staple of our diet and we must have prawns to eat. When we don't have prawns, it affects our health. It is affecting the growth of both our children and adults. We are getting smaller. We are afraid that if we continue without having our staple foods, it will make us sick.

16. The heavy rains and landslides have also washed away all the fish and eel from the river. The flooding has washed away the stones from the riverbed that the fish use for

Signed –
Linet Iawain
Yalitea Iakaho
Sera Nawahta
Nelly Pilia
Naus Iaho

Signed –
Nancy Iacitan
Sera Naburam
Yoba Merarangi
Jenny Toata

Signed: Witness
Senior State Counsel
Office of the Attorney General.

breeding, so the fish population can't recover. Now we can't get fish at all. There is nothing.

17. Starting from Uma up until now, that's when all the prawns and fish have washed away. After Uma, some of the prawns and fish were washed away, but still they were coming back. They weren't gone entirely. From 2015, they disappeared quickly because of the rain and cyclones. We were waiting for the fish and the prawns to grow to a size that we could eat, but they weren't able to because the other cyclones came through and washed them away before they could grow.

Impacts of food shortages on community cohesion and gender-based violence

18. Because of the shortage of food, the community has changed a lot. Before we lived together peacefully, but now we have lots of quarrelling among men because of the shortage and the children are not having enough to eat.

19. The shortage of food and the cyclones are also disrupting the harmony between husbands and wives. And sometimes things get violent. Because of the stress of the shortages, men shout at us and swear at us and threaten us.

20. We want to go back to the way things were before. We were living in a different environment back then and there was harmony between us. We want that to come back.

21. The food shortages are also affecting our health. Our lifespans are getting shorter. The women are dying younger and they are not reaching the age when they are supposed to die.

22. These times are very hard. We are trying to do our best but things are only getting worse.

Impact of food shortages on Kastom

23. The food shortages are also impacting our ability to perform Kastom ceremonies.

24. Before, we had a hunting area where we could go for wild chicken and pigs. But now we don't have that anymore. The cyclones have destroyed the hunting places for chickens and pigs. During Cyclone Uma, we had little landslides. But the landslides that occurred during Cyclone Pam were much bigger and destroyed the entire place. We can't hunt there anymore.

25. With that place gone, we don't have any source of meat. If we want to eat meat, we have to eat the pigs and chickens we are raising in the village for use in ceremonies.

Signed –
Linet Iawain
Yalitea Iakaho
Sera Nawahta
Nelly Pilia
Naus Iaho

Signed -
Nancy Iacitan
Sera Naburam
Yoba Merarangi
Jenny Toata

Signed: Witness
Senior State Counsel
Office of the Attorney General.

26. Because of the disappearance of prawns and fish, the destruction of our gardens and hunting grounds, and the decline of our crops, we have very little food. We have very few options.

27. Because of the shortages, we are eating the ceremonial pigs and chickens. These animals are meant to be used for Kastom ceremonies at the Nakamal.

28. For this reason, we cannot perform our Kastom ceremonies until we have money to buy a pig or can find one. But often we cannot get the animals we need. We are avoiding doing the ceremonies when we are supposed to do them, and with each one we miss this is building up, it is causing us a lot of worry. We are thinking, where will we get the meat for the ceremony? Because we are not performing the ceremony, we feel like we owe something to the Nakamal. We are feeling bad.

29. We are feeling very depressed and worried. Some women in the community have become so worried about the Kastom ceremony they are supposed to be doing that they are having strokes.

30. When we are not able to do the Kastom ceremony, we feel shame. We feel like we are are isolated from the rest of the community. We feel wrong. But we can't help it.

31. This affects our husbands too, because the ceremonies belong to both men and women. But the worry is greater for women. Women marry into Yakel from other villages, and when we perform custom ceremonies, especially the male circumcision ceremony, we are supposed to give back to our fathers and brothers in the other village. For the woman, it is for their family, their brothers they are giving back to. The burden is falling on them really strongly, because they want to make sure they are pleasing their family. The ceremonies are about relationships. The male circumcision is a way of paying respect and giving thanks to the woman's family for sending her to the village.

32. It is a must for us to do the male circumcision ceremony, especially for the first born boy. If a women doesn't do it, that is a source of shame for her. She will feel very bad inside. She will be unhappy, worried, and depressed because she wasn't able to perform that ceremony.

33. The Yam is our most important crop and is essential for all of our Kastom ceremonies. Now that we have no Yam, if we want to do the ceremony, we try our best to get Yam from our families living in other villages. But if we can't get Yam from our families, we perform the ceremony without the Yam. Starting from Cyclone Pam until now, that is when we have been forced to perform the ceremonies without the Yam.

Signed –
Linet Iawain
Yalitea Iakaho
Sera Nawahta
Nelly Pilia
Naus Iaho

Signed -
Nancy Iacitan
Sera Naburam
Yoba Merarangi
Jenny Toata

Signed; Witness
Senior State Counsel
Office of the Attorney General

34. Performing the ceremony without the Yam doesn't feel good. It doesn't right. We have a word to describe the way it feels to do the ceremony without the Yam, but there is no English translation. The best way we can describe it is to say the ceremony is devalued. But that doesn't really capture the depth of our feeling or the meaning of doing the ceremony without yam.

Impacts of changes on transmission of culture

35. For us in the village, we are practicing what are grandparents taught us. We are doing it. We are also telling our children, especially the women and the girls, to do the same. But due to Western influences, it is getting harder. Because of the food shortages due to the changing weather, life is getting hard. Our children are looking elsewhere for a different life. They are leaving the village. As mothers, this makes us feel so sad, because we want them to keep our Kastom and our way of life.

Message for the Court

36. Today, the lawyers have come here to ask us questions and to get our views and about what we have to happen. What we want is to go back to the way things were so we can live a better life.

37. Seeing the changes in the climate has given us a lot of worries and we want to tell the Court to put a stop to this and how this is affecting us. If the Court can make it stop, it will make us more happy in the way that we will be living.

Prepared at Lenakel, Tanna, Vanuatu on 12 January 2024.

Signed –
Linet Iawain
Yalitea Iakaho
Sera Nawahta
Nelly Pilia
Naus Iaho

Signed -
Nancy Iacitan
Sera Naburam
Yoba Merarangi
Jenny Toata

Signed: Witness
Senior State Counsel
Office of the Attorney General

Exhibit 28

I, Jimmy Namile, from Iautapunga Village, Tanna, Vanuatu solemly affirm and declare:

BACKGROUND

1. My name is Jimmy Namile. I am 71 years old. I was born on November 12, 1952 in Louwangou Health Center, on the island of Tanna, Vanuatu. I live in Iautapunga Village within Naurarimine Tribe.

2. I am a Vanuatu National and I provide a statement to the International Court of Justice on changes in the weather I have observed, my experience living through cyclones, including category 5 Cyclone Pam, and my concerns for my grandchildren and future generations.

3. I speak Nafe, as my local language, as well as Bislam which is one of Vanuatu's national languages. I have given my testimony in Bislama and Nafe through a translator. This written statement has been read back to me in its entirety in a language I understand and I have certified its accuracy.

4. My testimony is based on my direct knowledge or my knowledge based on kastom, which has been passed down to me from my parents, grandparents, great grandparents, and ancestors.

5. Iautapunga is an inland village located near the volcano, which in my language is called Yasur, meaning God.

6. I have six children, four grandchildren, three great grandchildren, and one great-great grandchild. I also have one great-great grandchild on the way.

7. I am the Chief of the Naurarimine Tribe. My duty as Chief is to look after my tribe and to make sure the people have unity.

8. I have lived on Tanna in Iautapunga Village for my whole life. I have seen big changes to the weather in my lifetime. I have also lived through several cyclones. I have experienced the cyclones getting more intense over time and causing more damage to my community.

CHANGES TO THE WEATHER

9. The weather has changed a lot during my lifetime. During my days, for the first 50 years of my life, the climate was normal – we got just enough rain and just enough sunshine. We were able to grow enough food.

10. Things changed after about 2000 or 2001. Since then, we've been experiencing more intense rain and thunder, hotter and more intense sun, and more earthquakes. Because of these changes we are no longer able to grow enough food. When the sun is strong, the crops are not able to produce. And then when the rain comes, the crops go rotten. The rain especially affects the root crops.

Signed: JIMMY

Prepared on 09/01/2024 at Ianakulu, Tanna, Vanuatu

CounterSigned: 1

Senior State Counsel
Office of the Attorney General, Republic of Vanuatu.

11. The rain no longer cools the temperature down like it used to. Before, the rain would cool everything down. Now, even after the rain we still feel hot. Because of this I often feel too hot and have a hard time cooling down.

CYCLONES

12. I've lived through several cyclones. In the past, before 1972, we didn't experience too many impacts from the cyclones. But since then and especially after Pam, the cyclones have intensified, and the impact has been very huge on the people.

13. In 2015, Cyclone Pam came and destroyed everything. All of the houses were flattened, even the cyclone shelters.

14. When Pam hit, I was in my house with my wife, six children, and four grandchildren. The grandchildren were aged from about seven to 13. The house fell down around us. We had to run outside and hide under a big banyan tree for shelter.

15. After the cyclone passed, everything was destroyed. We had nowhere else to go so we continued living under that banyan tree for about two weeks while we built back our house. We built a traditional house using local materials. We build the roof out of coconut leaves that had fallen. We had to use them quickly before they rotted. We made the wall out of bamboo that had been knocked over by the storm, and held the house together using nalaus, which is a rope made out of a local plant.

16. All of the rain from Cyclone Pam caused graves to be washed away. Graves belonging to my grandfather, my father, and my brothers all washed away. My heart was broken when the graves were washed away. I cried.

17. The grave site is a tabu because that's where the spirits live. By washing away the graves, the cyclone disturbed the spirits. In our kastom we believe disturbed spirits bring sickness and disease.

18. In kastom, after the graves were washed away, I had to go get new soil and put it back where the graves were. I then had to go get a kava and a pig, and kill the pig at the Nakamal to stop the spirits from walking around, to put them back at peace. I wasn't able to do that until the water dried out and the soil was really dry. The nakamal is the centre of life for the village. It's a gathering place for performing ceremonies and rituals for everyone in the village.

19. Pam also destroyed all of our gardens. All of the crops for the whole village were gone. We had no food. The women would go look for anything they could find to feed the children in the debris. Any food they found in the debris went to the children. I ate the dried coconut flesh and the stem of the Taro Fiji plant. This part of the plant isn't really edible. It burns your throat if you try to eat it. It is very painful. But we were starving. We

didn't have any other option. I baked it on a hot stone to reduce how painful it was to eat, but it didn't help that much.

20. Our village is on a hill about 100 or 200 meters from the side of a valley. All of the rain from Pam caused the valley to fill with water. The waters raised right up to our village and even breached the Nakamal where some people were seeking shelter. Those people had to move.

21. We kept gardens on the other side of the valley, about 1 kilometer away. After Pam, I went there to check to see if there was any food. Normally we would walk through the valley to get to our gardens. But because the valley was flooded, I had to swim. I made a raft and paddle out of bamboo and paddled across the flooded valley. But when I got there, I saw that the gardens were destroyed. The water and the winds had rooted out all of the crops.

22. We lived like that, with no food, for about one month, until the government was able to get rations to us.

23. It was also hard to get fresh water. All of the flood water was stinking because of the rotten leaves. To get drinking water we used plastic water bottles to collect water from our water catchments. But we had to wait for the rain to come. While we were waiting for clean water to come, we had to drink from the flood water. I didn't get sick from the water, but the children did. They got sick and experienced flu-like symptoms.

24. After Pam, we slowly tried to recover. It was hard because the gardens were not giving good produce like they used to. Then, in 2019, we got hit by another cyclone and had to start recovering all over again. The same again in 2023, we got hit by the twin cyclones, Judy and Kevin, within one day of each other, and had to start all over.

25. The children really suffered. After Pam they couldn't go to school for three to four months. The same thing happened after the twin cyclone in 2023. My grandchildren were frightened by living through Pam and they still have that feeling whenever there is heavy rain or storm.

26. The changes we are experiencing is making life difficult. The hotter and rainier conditions plus the repeated cyclones is making it hard to grow food. When I was young, we used to have lots of fruits, taro, cassava, kumala (sweet potato). But now there is nothing.

27. In the future I will be dead already, but I worry for my grandchildren and great-grandchildren. I wish these changes to the weather and cyclones would stop.

28. Climate change is really affecting our way of life, but we didn't cause it. It is caused by all of those big countries emitting gases. I wish they would stop so we can continue to enjoy our way of life.

Signed: JIMMY

Prepared on 09/01/2024 at Ianakulu, Tanna, Vanuatu

Counter-Signed: 3
Senior State Counsel
Office of the Attorney General, Republic of Vanuatu.

Exhibit 29

I, Werry Narua, from Port Resolution, Tanna, Vanuatu solemnly affirm and declare:

Background

1. I am a Vanuatu national and I live in Port Resolution on the island of Tanna in Vanuatu. The Kastom (custom) name for Port Resolution is Irepao.

2. I provide a statement to the International Court of Justice on the changes to the weather patterns that I have observed and experienced in Port Resolution and the impacts that this is having on my Kastom and on my home.

3. I speak Nafe, as my local language, and French, Bislama and English. I have given my testimony in English.

4. I have provided some photos to the lawyers and the lawyers took some photos when they visited my village and my place. I would have liked to have attached them to this statement, but there are no printing facilities for the photos and they will be provided to the Court in another way.

5. My testimony is based on my direct knowledge and my knowledge based on Kastom, which has been passed down to me from my parents, grandparents and great grandparents and my ancestors.

6. I am 45 years old. I have 4 children. My eldest daughter is Esdher, who is 14, the next eldest is my son Nowar, who is 13. Mary, another daughter is 8, and my youngest daughter Elizabeth is 5.

7. I come from two Chiefly lineages. My younger brother is the High Chief of Irepao, who makes the decisions for our village. My older brother is a Tupunis, which is a special type of Chief with special knowledge. His special knowledge is about the banana. In our tradition, I assist both brothers in their roles. My lineage provides me with a special status within the village, including entitlements related to yam and special knowledge and privilege related to banana.

8. I am a farmer. I grow all kind of bananas and other crops. My family and I have traditional and specialised knowledge about all aspects of the banana, including using it for traditional medicine.

9. I am also a manager of the Yacht Club at Port Resolution, which is owned by the five Tribes that live around the bay of Port Resolution.

Port Resolution and Irepao

10. Port Resolution has a lot of history and is very beautiful. It is a peninsula, where there is a curved inlet which is a Bay, and on the other side is the coast, including beaches. My village and my land is on a cliff, which overlooks the Bay of Port Resolution.

11. Port Resolution was named after the ship Resolution, which was the ship that Captain Cook was voyaging on when he anchored there in 1774. When Captain Cook came ashore, my ancestors met him. Captain Cook picked up the soil and asked the name. My ancestors told him it was Tanna, which means soil in my language. Tanna is now the name of the whole island.

12. Port Resolution was also the first place that the missionaries landed when they came to Tanna in around 1938/39.

Signed (Werry Narua): Prepared and signed on 12/01/2024 at Lanakulu, Tanna, Vanuatu. Witness: Senior State Counsel Office of the Attorney General

Kastom crops

13. We still live strong in our Kastom at Port Resolution. I am also a farmer and I rely on my crops for my subsistence as well as for my cultural living. Ninety percent of what I eat and what my family eats is from the garden. We do not rely on things in the shops. If we want to get something from the shops, we have to go to Lenakel which is 2 hours each way on difficult roads, which often flood or are damaged by the rainfall. The roads are flooding more now because of the heavier rains.

14. In my Kastom, there are specialised farmers who have a special role and specialised knowledge about growing certain Kastom crops. We call these Tupunis. These are Yams, Taro, Kava, Kumala (sweet potato), Cassava, Banana, Breadfruit and other fruit trees. We also call these knowledge holders Tupunis, which mark how special they are in my local language and refers to a kind of sacred medicine. Anything that is important in my kastom is Tupunis, like certain birds, fish, chicken and pig are also included. My older brother is the Tupunis for the banana and I assist him and I have special knowledge about the banana.

15. Bananas and other Tupunis crops are used for ceremony because they are sacred. For kastom weddings, the husband pays a bride dowry to the bride's family which will consist of mats, pigs and the Tupunis crops. All the extended family and village of the bride will put in crops, mats or pigs to support the Kastom wedding. This binds both families and villages together, which is also a basis for social cohension and peace.

16. For male circumcision, my first-born son must be circumcised around 6 to 8 years old. My extended family and village will provide Tupunis crops, mats and pigs for the circumcision ceremony. This ceremony is so important, that we start to prepare 1 to 2 years before the date of the ceremony to ensure we have enough Tupunis crops, mats and pigs. Again, this binds the families and villages together and I will also pitch in when someone else in my village needs crops, pigs and mats for their Kastom ceremonies.

17. Yam is considered the King of all foods in our Kastom and it is offered to the high status people in our village and around the island when it is first harvested on 1 April. Because I am from a Chiefly line and my high status, my family and I are offered the first harvest Yams. 1 April is a major date in our kastom, where we celebrate the first harvest of the Yam, with a traditional feast including dance.

The Banana

18. I know how to plant banana, which is based on a seasonal calendar and traditional knowledge that was passed down to me. We used to have many varieties. For example, we have *Nariram*, *Taiketoga*, *Sarawei*, *Kwankun*, *Nparius*, Finger, *Yatir*, and *Kawiren*. We ended up using an English name for the Finger variety of the Banana, but in our tradition all of these Bananas are my Ancestors and are extremely important to me. These Bananas are either eaten raw or are cooked. For example, the Finger Banana is eaten raw as a fruit, whereas the *Nariram* and *Kwankum* are cooked green. Both the Nariram and Kwankum are used in laplap, which is a savoury traditional food in Vanuatu.

Signed (Werry Narua):

Prepared and signed on 12/01/2024 at Iqnakulu, Tanna, Vanuatu.

Witness: Senior State Counsel Office of the Attorney General

19. We have a story about the first Banana from Port Resolution. I will only tell part of the story because it is very long. The story of the Banana is linked with origin of living. We believe that at the very beginning the people who lived in the very old days were not humans but were the birds or other living creatures. There was the sea snake, which is black and white. The sea snake ended up marrying a local bird, but I do not know the name in English. In my language it is *Piray*. That bird used to live on the side of the mountain, called Enkahi. The sea snake was from another place, but it married the bird and they lived together in that area and they had two children.

20. Those two children grew up and then they were playing around with other children, but the other creatures in the village were jealous about sea snake and bird. They wanted to kill the sea snake and this is the origin of jealousy. The sea snake actually knew that there was something going on and suspected that there was hatred between him and other creatures. He warned his wife and two children that if anything happened to him, they would have to cut off his head and bury his head close to his house. He told them to build a fence around it and they were to make sure that they cleared and cleaned the area every morning. You can see that this story is related to our everyday life, building a fence is about building gardens and clearing it and cleaning it everyday, is about our need to visit the gardens daily.

21. The other creatures wanted to kill the sea snake and they went to the Nakamal where Kava drinking happens, even to this day. They put a poison in the Kava and invited the sea snake to come. They gave the Kava to him and then he died. After he died in the Nakamal, the other creatures sent a message to his wife and children about his death. The bird and her two children went to the Nakamal to collect him and, following his instruction, they took him back to their home and cut off his head and buried it and built a fence around it, at the side of their house. They looked after the burial site in the the way that he instructed them to do. So they looked after the burial area every morning. Then crops began to grow. The first is the coconut.

22. The reason that the Coconut comes first is the promise that the sea snake made to the bird that he would he would "still be on your side." When the wife opened up the coconut, it looked like a head with a mouth and two eyes, which she kisses to drink.

23. Then comes the Banana, which is closely related to the Coconut. This is why it came second. The Coconut trunk and the Banana trunk are similar. The Coconut is male to us, and the Banana is female.

24. Next is the ocean, as there was no ocean at the time, so the ocean forms at this time. And then the sand, the coral, and the fish, and all the creatures and things from the ocean come up.

25. The Banana grew up and the mother (the bird) started to harvest the Banana and used the dried Coconut flesh to make milk to have with the green and the ripe Banana. At one time, while the mother went to her garden, she told the two sons if they are going to play with other children, they much not show them all the things that had grown in the fenced area - it was sacred and only for them. It is still the case that our gardens are to be secret. She prepared the Banana and the Coconut cream and showed them when they were hungry how to make it.

26. When the two children were playing with the others, they went to get the ripe Banana and took it out to the playing ground. They started to share. The other children did not have Banana at the time or creamy Coconut milk and the other children wanted to know what it is and how it was prepared. They start telling the whole story about what is secret inside the fence. And then they disobeyed what their mother said ,and they took the other children inside the fence.

Signed (Werry Narua):

Prepared and signed on 12/01/2024 at Ipnakulu, Tanna, Vanuatu.

Witness:
Senior State Counsel
Office of the Attorney General

27. All the children went inside and started to play around the ocean and started to destroy the reefs and the fish, and they were getting all the coconuts down. The mother came back in the afternoon and she saw that everything inside the fence was not in order. She was very disappointed and told her two sons that this property was meant to be for their private use, but because they had allowed everyone to be a part of it, she broke the fence.

28. This allowed the ocean to run and break down the land and created the Bay at Port Resolution, where I live. The mother took other Bananas and crops and sent them out, even Coconut. All these crops were bigger varieties. Only some things were left at Port Resolution and these were smaller varieties. The only things we have left are a few bBnanas and other Tupunis crops, such as the Coconut, Yam, a nut, and fruits and a few things from the ocean. That is why Bananas are very important to us.

29. This is also why the name of our village Irepao, which means the land of the child. When the mother broke the fence, the two children tried to prevent all the things inside the fence from leaving, but they were unsuccessful and were only able to keep some of the crops and ocean foods in Irepao.

30. As part of my special status and relationship to Banana, my family and I can decide when to plant Banana and others in the community must wait until we have first planted the Banana, then they can grow Bananas too. No one can plant Banana until my family and I do. When it comes to harvesting, no one can harvest Banana until my family and I harvest the Banana. This is the same for the other Tupunis or kastom crops, though there are others within our village and all of Tanna with specialised knowledge and status related to these other crops.

31. I normally plant Banana in March. I harvest them in the following February. By March, we start to plant the shoots, which starts the new process again. I have been doing this since I was a teenager. However, my parents used to take me out to their gardens from when I was really young, when they would transfer the knowledge to me about how to grow Bananas and other crops. I would watch them, and I would copy them and they would also talk to me about the Banana. The garden was an education.

Changes in weather, decline of our varieties of Banana and Yam

32. I have seen a lot of changes to the weather. I grow Banana and, as I said above, there were many varieties of Banana and I gave the name of eight varieties above. Since I have been growing Banana I have noticed major changes in the weather. The weather is more extreme. It rains more or it is drier and hotter than what it used to be. It has gotten worse over the last five to six years. This confuses the Banana and it fruits outside its season. The fruit is not as good quality now that the weather patterns have changed and become confused.

33. Some varieties do not grow anymore in my area. They stopped growing around 7 years ago, but I noticed these varieties were in decline for about 10 years beforehand. This more extreme heat stops the banana from fruiting successfully. I tried to find these varieties from other parts of the island to regrow them in my area, but this did not work. The varieties that have disappeared and that I can no longer grow include the Sarawei, Finger and Yatir. These is a deep spiritual loss because these Bananas are my ancestors and are part of the origin of my place.

34. Further, the cyclones are more intense than they were before and the Banana is very vulnerable to cyclone damage. We have always had a cyclone season, which is between December and

Signed (Wery Narua): Prepared and signed on 12/01/2024 at Ipnakulu, Tanna, Vanuatu. Witness: Senior State Counsel Office of the Attorney General

March, but cyclones are much stronger than they were before and last year a cyclone came in the offseason in November 2023.

35. For the Yam, when they were offered to my family as part of the first harvest, they used to be massive. Some were as tall as a metre and a half. Now, the Yams are much smaller. They are tiny, around 50 to 70cm. I grow Yams too. I think the problems is that there is too much rain now and too much humidity. The Yam can only take a little bit of sun and a little bit of rain, which is why we plant close to the dry season, when it is cooler. This is all changed and there is no balance now in the rain or the sun, which is why the Yams are not like before. All the other crops are suffering too.

Loss of traditional medicine

36. Our Bananas also have traditional medical uses. The medical uses are an important part of my specialized and traditional knowledge about the Banana, particularly the use of the different leaves, fruit, the trunk and roots. Each variety has different medicinal uses. The loss of the Sarawei, Finger and Yatir Bananas meanwe can no longer access the medicine they provide.

37. Traditional medicine is still very important in my village and the whole of Tanna. If someone is sick, a person will visit a traditional doctor and that doctor will say what medicine is required. The Banana is one of the medicines. Because my family and I have a special relationship to and knowledge about the Banana, they will come to us to ask for the medicine. There is a whole Kastom exchange that accompanies this request. They will take the traditional medicine, which will cure their sickness.

38. The loss of the varieties of banana means that we are unable to fulfil this traditional and important function as custodian of the Banana and this means that without the traditional medicine, the sickness cannot be cured.

Our gardening traditions ensured continuing abundance of fish on the coral reefs

39. We have a season for fishing in our traditions, which is from April until September/October. The fishing seasons are also connected to our Yam season, which also starts in April. The fishing seasons stops when we plant Yam (which is in around September/October). At that time, we apply restrictions on our method on catching fish.

40. In our knowledge systems, we know that after November it is the breeding season for the fish, so we restrict fishing at that time, and, as I said, this coincides with Yam planting. We call this a seasonal calendar, where the seas and our lands are linked through the seasons and our traditions. This is our traditional way, which is how our ancestors did it, our great grandparents did it, our grandparents did it, and how my parents did it and how we still maintain it.

41. We have different types of fishing methods, which relate to the fishing season (April to September/October). During the fishing season, people can fish with a net or diving speargun. From around September/October, people are prohibited from using those fishing methods and are restricted to using a fishing line, traditional spear and a poison arrow. This restricts how many fish any one person can catch and ensures that the fish are able to breed and repopulate during their breeding season, which keeps our seas and reefs sustainable. It is a Kastom form of resource management and harvesting which has been passed down to us from the generations.

Our reefs are dead and the fish are almost gone

Signed (Werry Narua): Prepared and signed on 12/01/2024 at Ipnakulu, Tanna, Vanuatu. Witness: Senior State Counsel Office of the Attorney General

42. Fish is one of our main sources of protein and is very important to us as a coastal village.

43. When I was a child, I remember that the reefs were close to the shore, only around 3m from the beach. The coral was colourful and living. There were different shaped coral and a lot of fish.

44. One of the important eating fish is the Blue Parrott fish, which we call Makum in local language. There were plenty of these around the reef when I was a child and a teenager. I used to hunt the Makum with a spear when I was a teenager.

45. We used to also have the Trocar, which is a very large green sea snail. It is a delicacy for us and is very yummy.

46. I have been swimming and exploring the reef all my life, I can see the changes and know when coral is living and dead. The coral now is either severely damaged, but mostly dead. This is from the cyclones, the sun and the soil runoff from the landslides, which have become more frequent in recent years. I really started to notice the changes in the reefs in my early twenties.

47. I know the land. I know the sea. I have been learning about the land and the sea and observing both since I was a child. My grandparents and my parents passed on their knowledge about the land and sea to me as well. This is special knowledge that I have, so I am confident that what I am observing is happening and is different to what I saw and experienced before my twenties.

48. Because we are getting more frequent cyclones, the coral never has time to recover, though the bleaching from the sun and the soil runoff are also major factors in the ill health of our reefs.

49. The reef is not coming back. It is slowly disappearing. It is dying.

50. I have noticed that there are less and less fish. When I was a teenager there are plenty of fish and lots of different types of fish. There are no longer any Makum or Trocar near the shore on our reef.

Creation of Community Conservation Areas

51. The village decided to create some marine conservation areas using the Government's community conservation area (CCA) laws, which we did about 2 years ago. I am the chairperson of the committee that looks after the (CCA).

52. We decided to act because we were concerned about the loss of marine species and the damage to our reefs. We also wanted to ensure that we could enforce the restrictions in these CCAs because people were coming from outside our area to fish and they are not respecting the traditional calendar and traditional resource management, where we place restrictions through our customary law on fishing and harvesting seafood.

53. The marine conservation areas are protected by national law. Some of the CCAs are 'no take zones', where no fishing is allowed at all. Some of the CCAs are regulated, to ensure sustainable fishing.

54. I saw some species returning, such as the Trocar but not in the same numbers.

55. We are trying our best to see if we can have our resources recover, but if the reefs cannot recover from the damage caused by the sun, run-off, and cyclones, our marine areas will remain

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impoverished. This makes me upset, because I know what our reefs were like when I was a teenager, when they were colourful, alive and full of life.

56. I have observed the coral in all of the CCAs for the last two years and the reefs are not recovering as they should. This is because they do not have enough time to recover before a cyclone hits. I am also concerned that coral bleaching is a factor and this might also mean that the reefs are unable to recover at all if it keeps getting hotter.

Relationship Tapunis

57. Our crops and seafood are very important in building and maintaining connection to extended family, Tribes and friends. Before, I had a lot of Banana, which I could contribute to traditional feasting, Kastom ceremonies or funerals. When my crops are destroyed, I can't help or contribute. This makes me ashamed. I have been struggling to meet my obligations for the last 3-4 years.

58. It also means that I can't go and visit relations or friends, as I should go with something in my hand in our tradition. Without food, it is hard to do that.

59. Not being able to fulfil my obligations and relationships through food affects the relationship and undermines the entire fabric of our society - our traditional connections and obligations.

60. Exchange of food also helps to keep the peace between our different villages and Tribes. Our traditional trading partners (Tribes) are inland. For example, we are meant to take something from the ocean, because these inland tribes cannot otherwise get access to seafood. But Banana is also very important, because it grows better in the coastal areas. We get Taro and Kava from these inland Tribes, which we can't grow well on the coast and which is very important to our Kastom.

61. Kava is an important drink for the governance of our village, where it is drunk in the Nakamal. The Nakamal is the traditional parliamentary house in the Tribe. We still use the Nakamal today and Chiefs can pass traditional laws for the governance of the village. Kava is a central part of all business of the nakamal, which is why this trading system is so fundamental to our law and governance.

62. This trading system is now collapsing. This is due to the death of the reef and the slow decline of our crops, including the Banana. The impact that the change in weather is having on the inland crops, is also a factor in this collapse.

Cyclones

63. I said above that the cyclones are getting more intense since Cyclone Pam in 2015. This affects more than my Banana crops and the reef. They can cause big waves, from the storm surge. I have noticed this getting worse as the sea rises, which I have also observed over my life. The waves are bigger. During Cyclone Judy and Kevin, the waves were around 5 metres high.

64. During Cyclone Pam most of the traditional houses in my village were destroyed. I was in Australia at the time, and my wife and children where inside the house. They survived and my house was fine. But it was devastating for the village. I came home two weeks later, and I saw the destruction. I could not figure out where the homes used to be, so much of the village had been destroyed.

Signed (Werry Narua):

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Witness:
Senior State Counsel
Office of the Attorney General

The Yacht Club

65. The cyclones have also destroyed our yacht club, which is an important institution in Port Resolution.
66. Because of its history, Port Resolution is an icon for Western sailors, and it is also close to Yasur, the name we call the active volcano on Tanna, which Cook writes about sighting in his journal. We also had a local Dugong, a very important cultural species for us, living in the Bay, because there was a lot of seagrass. Many yachts come to visit between April to November. We also have a lot of boat rallies, which might include up to 20-30 boats.

67. My dad and his cousin set up a Yacht Club in Port Resolution in 1990, when I was still at school. When my dad and cousin first built the club house, it was one simple round hut. It had a sleeping hammock for visitors if they wanted to stay in, and we also started to sell beer. It became a much-loved place for the sailors to come.

68. My dad and my cousin also built some simple bungalow for guests to sleep in. All up, we had 9 bungalows.

69. In 1999, I built a new club house, which included a restaurant, with the Port Resolution community. Part of my decision to do so, was because I noticed that the cliff had become less stable because of landslides. This was because the rain has gotten heavier, and because the cyclones are stronger now, and cause big waves to hit the cliff. It took us many years to build the new Yacht Club because we did not have much money to buy all the materials, and we had to ship materials from Port Vila, which is on another island in Vanuatu.

70. The Yacht Club is very important for the five Tribes living on the Peninsula of Port Resolution. I have permanent staff and I have temporary staff. The temporary staff are rotated around the different Tribes. This helps them to get some income, as there are few other cash employment opportunities on the island.

71. Some of the Bungalows were destroyed by Cyclone Pam.

72. In 2019, we took another hit because of Covid and the Vanuatu Government had to shut the borders. We did not get any visitors during this time. On 1 July 2022, the Government reopened the border and a few yachts started to visit us again that season, but not very many. However, the numbers started to gradually build up.

73. In February 2023, just before the yachting season was to begin, the two Cyclones Judy and Kevin hit Port Resolution and destroyed the Yacht Club. This was from the strong winds. Cyclone Judy was Category 4 when it hit Tanna at midnight on 1 March 2023. Cyclone Kevin was also Category 4 when it made landfall on 4 March 2023.

74. All the remaining Bungalows were destroyed too.

75. I built a basic temporary structure made of wood for the Yacht Club so I could still cater to the 2023 season. We have not been able to rebuild the Yacht Club to where it was or with restaurant facilities. We had 200 boats visiting from April to November last year. There were also four different rallies in 2023.

76. I estimate that it will take 6-7 million VATU to rebuild the Yacht Club, which is around $70,000-$80,000 Australian dollars.

Signed (Werry Narua):

Prepared and signed on 12/01/2024 at Ipnakulu, Tanna, Vanuatu.

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Senior State Counsel
Office of the Attorney General

Landslides and coastal erosion

77. As I said above, there are more landslides than before. The more intense cyclones and heavier rainfall causes landslides. We did not have landslides when I was younger.

78. We've also experienced more coastal erosion due to the rising seas. When I was a teenager there were many trees along the coast in the Bay and on the other side of the peninsula, including the Banyan tree. These coastal trees have been destroyed by the rising sea. They get rooted out by the water. This causes more coastal erosion too because the roots held the soil together.

79. This soil is also ending up in the sea and affecting the reef.

80. The cliff where I live has had many landslides. It used to go down to the sea as a gentle slope. Now it is a sheer drop. It is a cliff. This cliff keeps receding and I am worried that this will not stop.

Passing on my kastom to my children and the collapse of our way of life

81. My children attend school. On the holidays and weekends I will take them to the ocean and show them how to fish. I tell them that things are different now and that I used to fish differently. I also take them to the garden, and teach them about Bananas and growing other crops. They still learn, but not what I learnt because our environment has changed so much.

82. Because some of our traditional varieties of Banana has disappeared, they will never see them or know them. They will not know how to grow them, to look after them or their medicinal uses. This makes me extremely sad, because this is a knowledge that has been passed down through the generations and I am unable to pass this onto my children. I am frustrated because it is beyond my control and I have been unable to continue to grow these bananas, despite sourcing these varieties from other parts of the island to attempt regrow them. This failed.

83. I am worried about the future for my children, even my grandchildren as they will live a very difficult life compared to what I am living now. We have a name for Tanna, which is Tanauta, which means the land of plenty. I saw the abundance when I was a teenager, with our healthy reefs and crops but that has changed now. I believe I am seeing the slow collapse of our gardens. This also means the fabric of our society is slowly declining due to the change in the weather. We live close to the land, we know when things are not well. Everything is at risk.

84. I am also worried about Port Resolution and its historical significance, which covers our Kastom, Captain Cook and the early missionaries. We are at risk of losing this.

Message to the Court

85. My message to the International Court if Justice is that I am concerned about my future, and for future generations. I have been seeing all these changes and the impact over the course of the 45 years of my life, I recently realised that all of the changes are gradually building up and it will get worse. My concern is about the livelihood of my children that are alive and their unborn children. If you are able to stop it, to keep our culture alive and our future generation - stop it.

Signed (Werry Narua):

Prepared and signed on 12/01/2024 at Ipnakulu, Tanna, Vanuatu.

Witness:
Senior State Counsel
Office of the Attorney General

Statement taken at Lenakulu, Tanna, Vanuatu on 12 January 2024.

Signed:

Witness:

10

Signed (Glory Harry)

Prepared and signed on 12/01/2024 at Lenakulu, Tanna, Vanuatu

Witness
Office of the Attorney General

Exhibit 30

Obligations of States in Respect to Climate Change
(Request for Advisory Opinion)

Expert Report of Dr Fabrice Wacalie

Lecturer LIRE
University of New Caledonia

Introduction

1. My name is Fabrice Wacalie and I am a teacher-researcher in Oceanic languages and oral literature at the University of New Caledonia in the 'Laboratoire Interdisciplinaire de Recherche en Education' (LIRE). My expertise is limited to New Caledonia, although I do like to explore other indigenous cultures in the Pacific.

2. I have attached my curriculum vitae as Annexure A to this Report.

3. In this report, I want to show the relationship between biodiversity and Oceanic linguistic diversity and therefore the need to preserve both.

Background

4. I've always been fascinated by Oceanic languages and cultures. I attach great importance to the meaning of words in indigenous languages. It shows the particular way in which a people look at the world around them.

5. Beyond the communication aspect, I see languages as an incredible reservoir of knowledge. Languages in themselves represent an endless well of knowledge and a beautiful representation of human intelligence, the heritage of humanity. To illustrate this, in my mother tongue, *Drehu*, spoken on the island of Lifou (Loyalty Islands, New Caledonia), social organization is based on a custom called *qenenöj*. When we break down this term, we get 'qene' door / 'nöj' country. So we understand from this term that by practicing custom, we open ourselves up to the world.

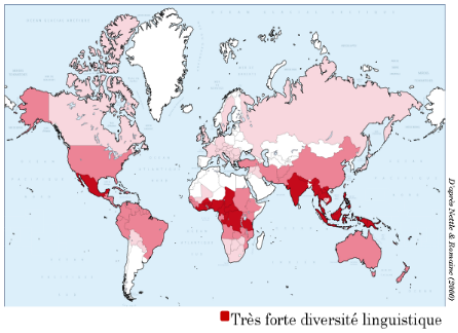
6. It was my interest in these elements of my own culture that inspired me to make them my profession as a researcher. By taking this path, I think that my indigenous kanak vision can add another dimension to my research. In fact, I can analyse the components of my culture and give an inner vision that complements the research undertaken by outside researchers who, to this day, have travelled all over our territories to study our societies. My research has always been an opportunity for me to raise awareness of and share my own unique indigenous concept.

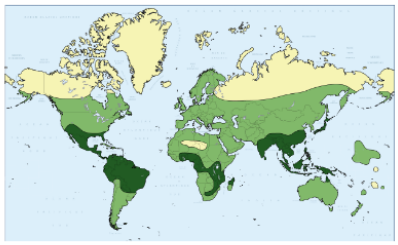
Preserving languages to preserve biodiversity

7. According to UNESCO, *"there is a fundamental link between language and traditional knowledge related to biodiversity. Local and indigenous communities have developed complex classification systems for the natural world that reflect a deep understanding of their disappear when a community begins to speak another language."*

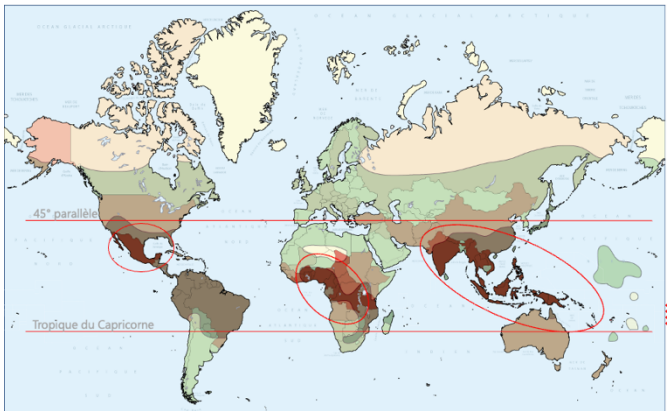
8. This is why we believe it is necessary to preserve languages. They play a part in preserving nature by transmitting important elements of knowledge about plants, trees, etc. particularly in taxonomy.

9. The maps below, show the superimposition of the world's biodiversity and linguistic diversity.




Très forte diversité biologique

10. When we superimpose the two maps, we see that between the 45e parallel and the Capricorn Tropic there are at least 3 diversity hotspots, which also happen to be linguistic diversity hotspots.

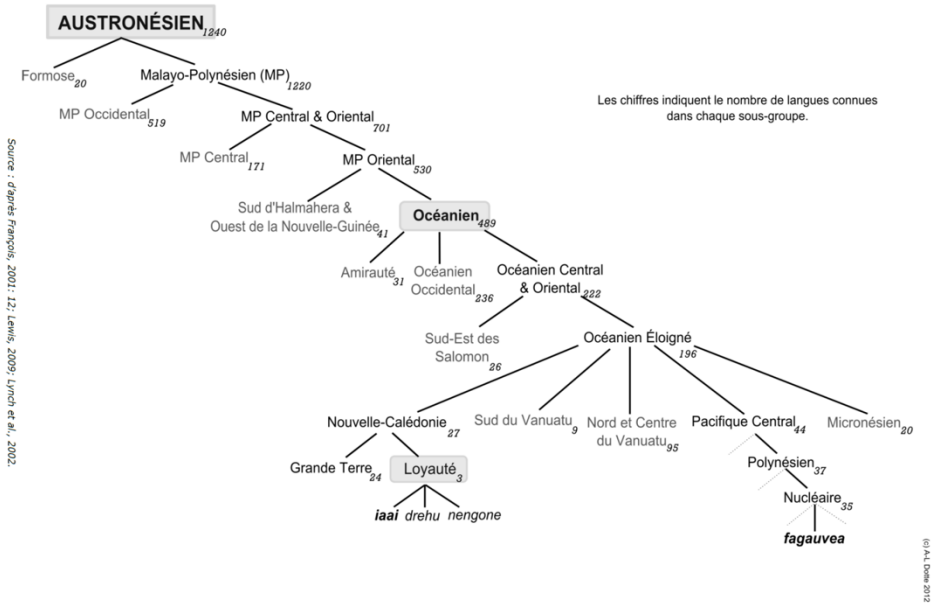


Source: Dotte to Nettle & Romaine, 2000

11. So the most biologically diverse regions of the world are also the most linguistically diverse. And this is far from coincidental. For thousands of years, mankind has used languages as a mnemonic to preserve the knowledge elements of their cosmology and as a means of transmitting its ancestral knowledge.

The linguistic diversity of the Pacific

12. This part of the globe (about a quarter of the planet's surface area) is home to a third of the world's languages, or almost 20% of global diversity. The 3 most widespread language family are: the aboriginal languages of Australia (around 200 languages), the Papuan languages (around 750 languages) and the Austronesian languages (around 1,200). There is a disproportionate distribution between the number of languages and the number of speakers, with 95% of the world's population speaking 5% of the languages (the "big languages": English, Arabic, etc.) and only 5% of the world's population speaking 95% of the languages (the "small languages" : iaai, maohi, etc.)



Source: Lynch et al., 2009

13. Among the Austronesian languages and the East Malayo-Polynesian group, we find the sub-group of Oceanic languages. These include Melanesian languages (360), Polynesian languages (40) and Micronesian languages (20). The Melanesian region is the densest linguistically speaking. Islands such as Vanuatu have more than 130 languages.

Linguistic diversity under threat

14. In New Caledonia, the Academy of Kanak Languages officially lists 28 kanak languages, 11 dialects and 1 creole. This diversity is currently undermined by at least two factors, one internal – the small number of speakers – and the other external – the hegemony of the "major languages" brought about by Christianisation and colonization. In New Caledonia, 16 of the Kanak languages are endangered according to Unesco criteria[1]. The absolute number of speakers is the main cause, with some languages having very few speakers (*sishëë*, spoken in the La Foa region, had just 20 speakers in 2019, according to the ISEE).

[1] Unesco takes 9 criteria into account : 1/ the transmission of the language from one generation to the next 2/ the absolute number of speakers 3/ the proportion of speakers in the population as as whole 4/ the use of the language in different public and private domains 5/ the reaction to new domains and media 6/ the availability of language learing and teaching materials 7/ the attitudes and language policies of institutions 8/ the attitudes of members of the community to their own language 9/ the type and quality of documentation.

15. Efforts are being made to preserve them for as long as possible, particularly through artistic and cultural mediation, but also through educational mediation (Dotte & al., 2022). In this territory, despite the recognition of the Kanak languages "as a language of instruction and culture", French is gradually becoming the only languages parents choose for their children's education.

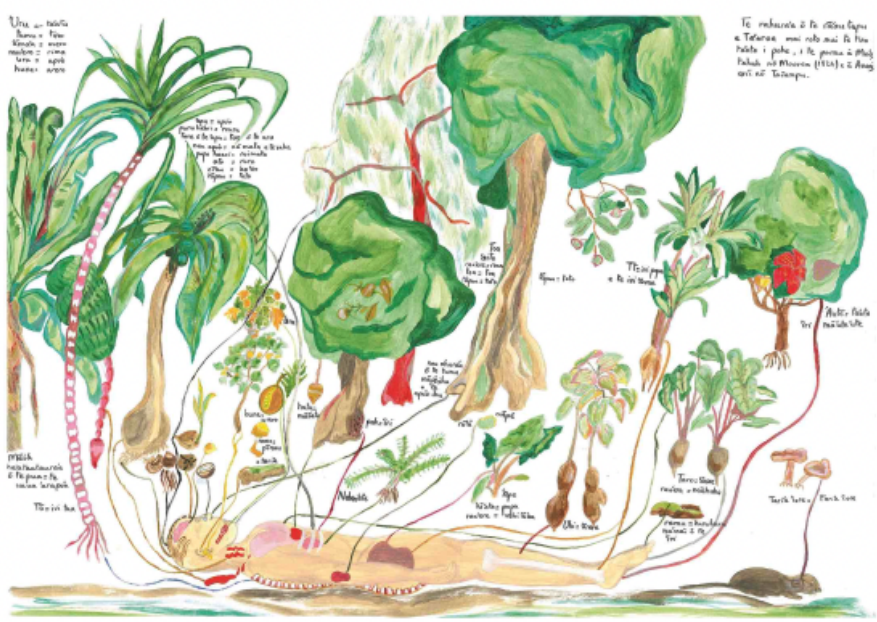
16. Intergenerational transmission is undermined by the reflex to favour French so as not to destabilise the child's learning. Despite scientists warnings about this false argument, many parents continue to pass on French even if they have not mastered it, which leads to even more difficulties for their pupils.

Preserving languages to preserve a way of thinking

17. In 2007, Saem Majnep, a researcher in ethnobiology, said, "Linguistic diversity tells us about prehistory, especially the prehistory of ideas, biological and ecological knowledge transmitted by traditional languages; the weaving together of language, culture and thought that people create with and in their languages, the variability of language itself."

18. Before the evangelisation of our territories, the relationship with nature was different from that of today. From a symbiotic relationship, it became hierarchical and condescending. The Kanak people of New Caledonia saw nature as a reflection of themselves (Roberjot, Della-Maggiora, 2016). Moreover, in these territories, the same linguistic terms are sometimes used to express human and natural realities.

19. Aufray points out that "the plant kingdom is at the heart of Oceanian representations. The growth of plants is paralleled by the human life cycle and the different parts of the plant are naturally related to the parts of the human body." He gives the following example: "In many languages, blood is equated with plant sap […]. In Bau (Fiji), *dra* is sap and blood. In Tahiti, the sap of ironwood or that of mape or rata is blood.



Anonymous source: drawing taken in front of Fare Natura, Moorea, Tahiti

20. We speak of cosmo morphism in that man imitates nature. Leenhardt points out that, *"*the kanak identifies with the world around him, particularly the plant word. The world lives in him, is in him*"*.

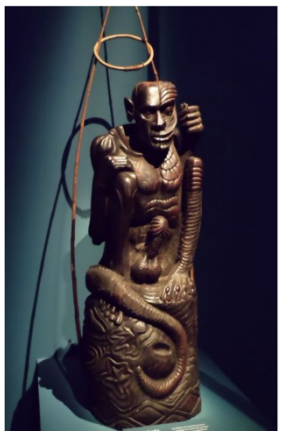


Image: Dick Bone, The Lizard-Man

21. For me, the image of the Lizard-man is representative of this Kanak cosmo morphism. Man and nature are linked. Another example, In the Kanak world, the calendar is based on the yam cycle. The terms designating the months of the year indicate the work involved in growing the precious tuber (e.g. *canalu* "February", *can* "stem" and *alu* "magnagna", designate the month in which the magnagna is harvested; *xomathipi koko* "march", *xom* "take", *athipi* "suspend", *koko* "yam", designates the month in which the yam is suspended). In addition, the taxonomy of plants refers to their function (e.g. *hmitre* medicinal plant: *hmi* sacred and *tre* existence.

22. I conclude this report with a reminder of the need to preserve the languages and cultures of the Pacific, because they contain an incredible amount of information that makes it possible to preserve nature, because by destroying nature, man destroys himself. He is sawing off the branch on which he is sitting.

Respectfully submitted on 12 mars 2024



_____

Dr Fabrice Wacalie

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Filmography:

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Annexure 1: Transcript of Interview with Fabrice Wacalie

Ref #: 121759

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Speaker 1 (00:00:32):

..

Speaker 2 (00:00:46):

You can translate, Anne-Sophie

Speaker 3 (00:00:48):

Of course.

Speaker 2 (00:00:50):

Ok, then I will introduce myself and some of the work that I'm doing here in New Caledonia.

Speaker 3 (00:01:03):

So I will present - - will introduce myself as well as also provide feedback on what I'm currently working on here in New Caledonia.

Speaker 2 (00:01:14):

My name is Fabrice Wacalie. I'm a teacher-researcher in oral language and literature at the University of New Caledonia.

Speaker 3 (00:01:25):

Er Fabrice Wacalie a lecturer at the University of New Caledonia specialising in language - in oral language and literature.

Speaker 2 (00:01:40):

And I am, I work as a researcher into topics on oral Kanak languages and literature.

Speaker 3 (00:01:54):

As a researcher I'm working on oral Kanak languages and literature ...

Speaker 2 (00:02:10):

And I'm here at l'UNC. It is the training institute for primary and secondary school teachers in New Caledonia

Speaker 3 (00:02:25):

So attached to the School of Education, which is a part of the University of New Caledonia and I'm working with the training of teachers, it's primary and secondary school.

Speaker 2 (00:02:50):

And one of the interests of my research concerns languages not only as a medium of communication, but especially forms of thought within languages, or rather ethnolinguistics. So rather the linguistic –

Speaker 3 (00:03:17):

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So a key element of my research is based on language and how it is used to communicate, also what are er it's kind of specific, it's how ... can be traditionally used -

Speaker 2 (00:03:49):

And so in this work, I'm interested in how in the different vernacular languages of New Caledonia are spelling, using the elements the nature and the environment.

Speaker 3 (00:04:09):

Ok, so in that work I am looking especially at how the different vernacular of New Caledonia ..., using the element of nature, the environment.

Speaker 2 (00:04:27):

And how, through their vernacular languages, indigenous people are producing knowledge

Speaker 3 (00:04:47):

How people ...

Speaker 2 (00:04:59):

Not only about the usefulness of plants, for example, in traditional medicine

Speaker 3 (00:05:09):

In a, for example a – er how plants can be traditionally used -

Speaker 2 (00:05:23):

And in general, the connection that humans can have with nature

Speaker 3 (00:05:36):

And more in general the link between man and nature.

Speaker 2 (00:05:39):And in fact, we started from the premise and it was research work that was carried out by Romaine. I will send the reference, but they talk about a really proven link between linguistic diversity and biodiversity.

Speaker 3 (00:06:09):

So this research is starting from a principle, a link, a really – a proved link between biodiversity and linguistic diversity, and Fabrice has also mentioned that there is a paper written by Romaine, he will share it with us.

Speaker 2 (00:06:35):

And we're trying to establish the link between languages and linguistic biodiversity. And this is a link that has been highlighted by UNESCO. That's why we use or rather feed research in this direction to establish this link between linguistic diversity and biodiversity.

Speaker 3 (00:07:04):



So there is this link between biodiversity and linguistic diversity has been well documented and highlighted by UNESCO, and so now Fabrice's work is really based on this produced work and how to ensure that among Kanaki and vernacular language they find the same kind of link.

Speaker 2 (00:07:38):

And we had the opportunity, with my colleague [...], whom you probably know from the SPC here in New Caledonia, to promote this link between language and biodiversity, so that public policies can also be oriented towards not only the preservation of biodiversity, but also linguistic diversity.

Speaker 3 (00:08:19):
[ENG]

Speaker 2 (00:08:56):

And so this is the subject of several publications. And we also did some papers with ... to present our work on the subject.

Speaker 3 (00:09:14):
[ENG]

Speaker 2 (00:09:24):

And I could send you the links to this work and possibly also the various communications that we have been able to make. But in any case, I would be happy to be able to participate in the preparation of this file with the elements I have. And, and here's what I can. I can say –

Speaker 3 (00:09:58):
[ENG]

Speaker 1 (00:10:13):
[ENG]

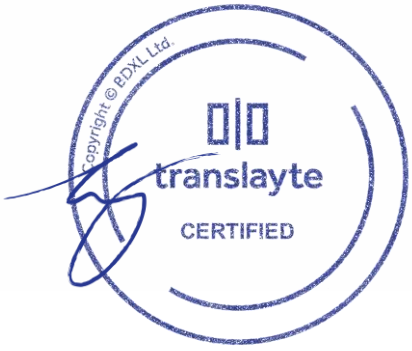
Speaker 3 (00:12:31):

You know, it's good. There is no need to translate in this sense,

Speaker 2 (00:12:35):
No? What she said before, no. But the question is, can you translate it for me?

Speaker 3 (00:12:41):
[ENG]

Speaker 1 (00:12:47):.
[ENG]



Speaker 2 (00:13:01):

Ok, most of my research focuses first on New Caledonia, but I'm also trying to highlight, by comparison, other practices of Melanesia, essentially Melanesia for the moment, for example, lately, I've been communicating about the importance of a traditional dish here in New Caledonia, which is called bougna. And in fact, it wasn't bougna as a culinary art, but rather the indigenous representations of bougna and how the bougna integrates our cultural practices. And so, based on the bougna, I was then able to do comparative analyses with dishes from Vanuatu, for example, dishes from Fiji, recipes also from the Solomon Islands. In fact, I have, I am starting from my base, i.e. New Caledonia, Kanak cultural practices and with the idea of comparing with what is happening elsewhere in Melanesia and in this research work, I was also able to make a comparison with New Caledonia, the … , Wallis and Futuna … the culinary practices of the Maoris, for example.

Speaker 3 (00:14:48):

[ENG]

Speaker 4 (00:16:30):

Yes Caledonia

Speaker 2 (00:17:06):

I need a translation.

Speaker 3 (00:17:09):

How are these languages, these 28 languages, are they - are they organised, are they spread over the whole territory or are they concentrated? There is more diversity in one particular province?

Speaker 2 (00:17:21):

Okay, no. They are actually spread all over New Caledonia.

Speaker 3 (00:17:27):

Yes they are spread all over New Caledonia between the three provinces.

Speaker 4 (00:17:34):

Oh

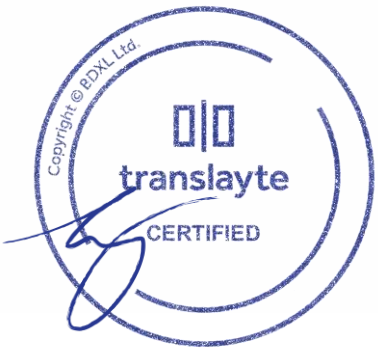
Speaker 2 (00:17:35):

Has languages more or less, how to say it we have the language. Drehu is my mother tongue. For example, there are 17,000 speakers. On the other hand, we have smaller languages with 20 speakers, for example, and the languages that are in danger of extinction.

Speaker 3 (00:17:56)

And Drehu, where does that come from?

Speaker 2 (00:17:58):



Lifou, the island of Lifou.

Speaker 3 (00:18:04):
[ENG]

Speaker 1 (00:18:35):
[ENG]

Speaker 3 (00:18:47):

How many dialects and languages do you think are already on the verge of extinction, out of the 28 that are in great danger?

Speaker 2 (00:18:57):
According to UNESCO, there 16 out of the 28

Speaker 3 (00:19:03):
So based on the UNESCO data sixteen out of the 28 are close to disappearing -

Speaker 2 (00:19:14):

So these are statistics that are backed by censuses. On the other hand, as linguists, we know that the language within the home is not used so much today. And because families tend to favour French to use.

Speaker 3 (00:19:42):
[ENG]

Speaker 2 (00:20:38):

It's a question of the link between biodiversity and linguistic diversity?

Speaker 3 (00:20:45):
Yes.

Speaker 2 (00:20:47):

Okay I quoted just now the work of Romaine which I shall send. And by the way, there's a world map that establishes that there's a formal link. All the places between the 45th parallel, for example, the Tropic of Capricorn. We have a kind of strip where there is a biodiversity that is really high. It's called a diversity hotspot. And in the same region, we find the highest degree of linguistic diversity.

Speaker 3 (00:21:38):
So I'm coming back to the research done by Romaine, and again I will share it with you after our discussion, there is a world map which shows clearly a link formally, establishing the link between the diversity that you can

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observe between the 45th parallel and the Capricorn – I don't know if you can see that, the line parallel to the equator, which is called a hotspot of biodiversity with language diversity.

Speaker 2 (00:22:25):

And New Caledonia, like Vanuatu, like all of the Pacific, as far up as Papua-New Guinea, one discovers that in this zone where there is the most biodiversity, the most linguistic diversity.

Speaker 3 (00:22:43):

So New Caledonia as Vanuatu as most of the Pacific countries and all the Melanesian countries are in that zone. Good?

FS

Does he have any theory that accounts for that? Out of interest.

Speaker 3

Do you have a theory which would explain this link between the diversity of languages and biodiversity?

Speaker 2

We have the theory put forward by Romaine. And so it is the works of Romaine that highlight this link formed between the two. And so links that were not only established but then taken up by the work of UNESCO, which has an important axis in its theme after the main idea, is that taxonomy, so the terms to name nature, they contain information. So we see it for example, in our, in my mother tongue, for example, when we take the name of a plant and when we dissect the name of the plant, by the way, there is already the name of the plant contains, contains the information of the use of that plant. And so, and in fact, it just establishes that populations needed to diversify. We're going to ... their point of view on, on the different elements, the different elements of nature. And so especially in Melanesia. However, it is much more pronounced. We will say in Polynesia that in forgiveness, it is much more marked in Melanesia than in Polynesia. This linguistic diversity has previously made it possible to preserve nature as much as possible. And so if we have a richness in terms of biodiversity, it's because we've had, we've been able to preserve linguistic diversity until now. And the fact that there are threats to biodiversity necessarily threatens linguistic diversity and vice versa.

Speaker 3 (00:25:44):

Ok, I'll do my best and again the main theoretician is Romaine and what has been found is related to taxonomy and how the ways you are calling the plants provides and strengthens the way that you are going to use that plant, it's going to be known for its different usage and so people do need to diversify the way to call these plants in order to have all the knowledge about how to use it, and this has been especially seen as really important in Melanesia, more than in Polynesia. Yeah I think that's it.

FS [SPEAKING ENGLISH]

Speaker 1 (00:28:02):

...

Speaker 3 (00:28:07):

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Could you perhaps be a little more specific by giving examples of which are in line with what you have just explained?

Speaker 2 (00:28:20):

Examples from my own culture or okay, for example, is there a term in Drehu for a plant that we use to heal ourselves. This plant is called “mitche” in the Drehu language. And in fact, “mi” means sacred and “che” means existence. And in fact, the term “mitche” contains information about the use of this plant. And so it's a plant that we use, for example, when to put around houses and this plant, it's used to protect the surroundings of a house, for example, but we also plant it around fields so that it can protect the fields. By the way, the field of the - we call it the “evil eye” in French which could actually destroy the crops.

Speaker 3 (00:29:34):

Yes. Ah so Fabrice, just gave an example in his own language, Drehu, so there’s a plant which is called “mitche”, and “mitche” in his language Drehu is – you have “mit” which means sacred and “che” which means existence, life, so this plant – these two words explain the way that this plant is used in traditional knowledge, how is it used? – it is used to be planted around houses or around gardens to protect the house or protect the garden against bad eye.

Speaker 1 (00:30:41):

[ENG]

Speaker 3 (00:30:50):

How do you translate the evil eye Fabrice, is that it's a little bit related to witchcraft at the risk of ...

Speaker 2 (00:30:59):

It's just someone, for example, who walks by and looks enviously at the time, I don't know how you're going to get out of the way

Speaker 3 (00:31:11):

It’s not really about sorcery, more about jealousy.

Speaker 1 (00:31:30):

[ENGLISH]

Speaker 3 (00:31:42):

And do you also have any examples related to animal species?

Speaker 2 (00:31:50):

So far, we've been able to work on biodiversity, on trees, plants, etc. What can be said about wildlife is that there are often names that are given in relation to the degree of maturity. In fact, it's not, it's not necessarily in relation to its use, but it's more in relation to the degree of maturity. For example, we're going to name, I don't know if you'll find the English translation, but the “bec-de-cane” according to the degree of maturity of the fish, it will have a different name.

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Speaker 3 and others (00:32:48):

Most of the research has really been done on plants, and biodiversity among flora, so they haven't done much research on fauna, but there's still an example based on the bec de cane fish, do you know this one? Sorry I just found the translation: C A N E B E A K It's a fish. Okay so this fish is differently called based on its level of maturity.

Fabrice, what's that? What's the point of giving it different names depending on how mature it is?

Speaker 2 (00:34:03):

Actually, in indigenous knowledge, you had to catch a fish at a certain level of maturity.

Speaker 3 (00:34:13):

Ah ok.

Speaker 2 (00:34:14):

As long as it didn't have it, it didn't have the right name. You would not fish for it. For example.

Speaker 3 (00:34:20):

Oh okay, good. So why this fish has a different name in vernacular language because in vernacular knowledge you can hook this type of fish, fish it only at a certain time, when they have reached a level of maturity so the people knew that when the name was a good one they could go and fish for it.

Speaker 1 (00:35:01):

[SPEAKING ENGLISH]

Speaker 2 (00:35:26):

Yams, yes, many yams. Here in New Caledonia in the Kanak culture in any case, but one is subject to the yam calendar and all customary events are governed by the yam calendar. For example, all our weddings take place during the yam harvest period.

Speaker 3 (00:36:04):

[ENG]

Speaker 1 (00:36:33):

[ENG]

Speaker 3 (00:36:44):

[ENG]

Speaker 1 (00:36:48):

[ENG]

Speaker 3 (00:37:07):

[ENG]

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Speaker 2 (00:37:08):
[ENG]

Speaker 3 (00:37:10):
Did you understand Fabrice? To what extent does the calendar -

Speaker 2 (00:37:12):
Yes -

Speaker 3 (00:37:13):

Natures, the empty calendar. This is the extent to which all the elements of nature are interconnected throughout the cosmos. And so the example that you gave us earlier about the fish bec-de-cane [*lethrinus miniatus*] fits in with the [...] calendar as well.

Speaker 2 (00:37:32):

Yes, yes. In fact, we have - the elements of nature are connected. So what we are teaching, for example to our students, is that in the past, man really had a strong link with nature, but with the arrival of religion, Christianisation and then colonisation, he has altered this link he had with nature.

Speaker 3 (00:38:19):
Yes definitely all of this is part of the cosmos and but what happened is that before traditionally man, woman, had a very strong link with the environment, with nature, but first came the missionaries and second colonisation which has weakened this link.

Speaker 2 (00:38:57):
And so, in fact, the elements of nature and man is an element of nature and interact with nature, but it is also nature that influences it greatly. And so, and so to really make that connection with nature, then I was really talking about the yam because it's really, we have a cult of the yam. Every year, we celebrate the yam festival, which is called the festival of yams. But when we were talking about maturity, for example, this is the case for other elements. For example, we fish for turtles, we eat turtles, but we really wait until the turtle is mature enough. We have a fish called the dawa as well. It also follows the yam calendar and is eaten at the same time as the yam. And so there are also flowering periods of certain trees, for example, which we will also learn in consideration because they are indicators for the fishing seasons, for example.

Speaker 3 (00:40:45):
Ah so man – man is just a part of nature and nature is influencing a lot the way we are living and especially for us as Kanaks yams – the yam event which is happening once a year is really the main highlight of the year but it is also giving some formation about other species, sometimes a fish called dawa and Fleur and Autumn the fish you know the black fish ... this is a dawa, this specific fish follows the yam calendar and is also mature and can be – you can go and take it, at the same time, a specific time in the yam calendar, and also some trees are giving flowers at certain – you link the flowers on specific trees in the calendar yam so I only give you indication and it's all linked.

FS: [SPEAKING IN ENGLISH]

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Speaker 4 (00:42:52):

Speaker 2 (00:43:10):
Can you translate?

Speaker 3 (00:43:12):

What is the role in its links between nature and man? What role do languages play?

Speaker 2 (00:43:29):

Ah, it plays a backup role for me. And that's why we insist a lot. We are trying to promote the preservation of languages. As I said earlier, the link is the information that languages contain about the elements of nature, about the elements of biodiversity. And so preserving languages means preserving, ultimately safeguarding biodiversity.

Speaker 3 (00:44:16):

... Can you hear me?

Speaker 2 (00:44:23):
Yes, yes.

Speaker 3 (00:44:27):
I'm going to turn off my camera because I feel like the internet is getting a little bit unstable. And just and after, I'm going to, I'm going to do the translation soi had to cut my camera, because here the internet is getting unstable, I hope you can still hear me? – so Fabrice to answer your question, what the language – which role languages are playing in that link between man and nature, it's first it's safeguarding and that's why the work of Fabrice is really to promote the preservation of these languages because these languages are giving all the information on biodiversity, and if these languages are disappearing it's also this biodiversity which won't be known any more.

Speaker 1 (00:45:59):
[SPEAKING ENGLISH]

Speaker 2 (00:47:10):
It's a question of methodology, yeah?

Speaker 3 (00:47:12):
Fabrice? Yes it's a question of methodology and I believe that ... who is the author that you are referring to?

Speaker 1 (00:47:28):
Tim Ingold. [SPEAKING ENGLISH]

Speaker 3 (00:47:34):

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Yes, so. So it's more the way in fact, what you were saying about the fact that the information that is contained that the languages about biodiversity and this link, actually, is her question. That's what is your methodology on the fact that this author made the connection in the fact that it reveals that what is in nature, through the passage of language and culture? Ah, do you also follow this same methodology or can you tell us perhaps about your methodology?

Speaker 2 (00:48:24):

The methodology is rather qualitative. That is to say, we question the elders. So resource person on the knowledge that they have not only names to name the elements, nature but all the knowledge that they have around these elements of nature. And so the methodology, it's mainly qualitative in the collection of information directly from personal resources.

Speaker 3 (00:49:09):

Fabrice explains what he is using as his methodology, his methodology is really qualitative, how he is working is interviewing elders about their knowledge of the names of the plants, of the species [CUT IN TRANSMISSION]

Speaker 1 (00:50:17):

Oh we've lost you ...

FS AND OTHERS: [SPEAKING ENGLISH]

Speaker 2 (00:50:19):

No

Speaker 1 (00:50:33):

[ENG]

Speaker 2 (00:52:11):

Yes.

Speaker 1 (00:52:16):

[ENG]

Speaker 2 (00:52:19):

Our methodology is very simple because we work information for the older people New Caledonia and we have a qualitative approach and we er - we work with older peoples in the Kanak population to have any informations er their knowledge is in Kanak nature, different elements of nature in New Caledonia and we work with a biologist, a Kanak, Pierre (Mauiac), he worked at IRD in New Caledonia, Institute of Research and Development and this person has information in the biological elements and me and another colleague Carroll, Françoise Carroll, anthropologist, er work with Pierre (Mauiac) on these thematics. And we have a pluri-disciplinary approach

Speaker 1 (00:54:22):

[SPEAKING ENGLISH]

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Speaker 2 (00:54:34):
Pierre, biologist, he works in medicinal plants.

Speaker 1 (00:54:49):
Ah yes

Speaker 2 (00:54:51):
And my colleague Françoise Carroll she is an anthropologist, she works in the Kanak representation of nature and me, just in the linguistic part.

FS:
[SPEAKING ENGLISH]

Speaker 2:
I don't have a name, in Drehu I don't have a specific name world to call nature, environment et oui.

FS:
[SPEAKING ENGLISH]
Speaker 2:
If we need to talk about nature we use the name of forest ..., sor and destin

Speaker 1 (00:57:10):
When you look at the forest [ENG]

Speaker 4 (00:57:31):
[SPEAKING ENGLISH]

Speaker 1 and others (00:57:50):
[ENG]
Speaker 2:
I don't have a global term.

FS: [NG]

Speaker 3 (00:58:47):
[ENG]

Speaker 1 (00:58:52):
[ENG].

Speaker 3 (00:59:45):



Yes, that. Fleur actually went on to explain that to give you an example of context, for example, at home, she has in her garden behind, there is a forest, but she would be unable to name the elements that make up this space, perhaps using a scientific language, but which she does not know. So she asks if rather than using the generic word "nature", which is ultimately what means everything and nothing in indigenous vernaculars. There are just words for – are there words to speak and to evoke nature, but in a much more precise way?

Speaker 2 (01:00:46):

Yes that's true.

Speaker 3 (01:00:50):

So yes the response is yes, definitely, there are different language in vernacular, in indigenous, to express all the different meanings of what we use as a nature - generic word.

Speaker 2 (01:01:17):

I, if I can just complete with one of the works of one of my colleague Anne … who works on classifiers in linguistics. And by the way, she highlights in her research work that we have in linguistics, it's the possessives according to what you have. There will be a particular possessive. And for example, if we take the example of the fish, the fish, I'm going to use a different word depending on whether the fish was caught by myself or the fish that I bought at the market. The fish that I have that I have caught, for example from someone and in fact, we're going to use different possessives. It is simply to say that originally we have a way of classifying the elements of nature. And when the French language arrived, it came with other ways of classifying and gradually, by learning the French language, we totally forgot our way of categorising the world around us.

Speaker 3 (01:03:11):

Yes. Okay I take the words, Fabrice's words, I am referring to some research done by one of my colleagues, Anne … and she is a linguist and she is working on the possessive, for example in vernacular language you have different terms used to address the way – er okay there are different terms in use to call a fish when it has been fished by myself or by someone else and er this person has given it to me or if I had bought it. And it means that, traditionally in vernacular language you have a way to classify elements among nature which is completely different from the classification which has been brought by the French language. And this classification, the French way to classify to replace, the older ways, the previous ways to classify the different elements. I hope you can hear me because my connection …

Speaker 4 (01:05:30):

[ENG]



Speaker 2 (01:05:41):

Yes, yes, lots.

Speaker 3 (01:05:44):

Fabrice can you -

Speaker 2 (01:05:48):

No no. I said earlier that the French language threatens linguistic diversity in New Caledonia because many parents no longer pass on their language to their children. They prefer to teach French because they think that the student will have difficulty in school and in the French language if they learn their mother tongue.

Speaker 3 (01:06:22):

So the French language threatens a lot language diversity in New Caledonia because in families parents are afraid of using their own language thinking that it might weaken the French of their kids and especially in their success at school, for example in which French is used so they prefer to avoid speaking the vernacular language and emphasise speaking the French language. So yes definitely it threatens linguistic diversity.

Speaker 4 (01:07:50):

[ENG]

Speaker 2 (01:07:51):

There is an impact.

Speaker 3 (01:07:53):

What are the ...

Speaker 2 (01:08:00):

Yes. So what's the impact? In New Caledonia, we are witnessing a real restructuring of the population and the indigenous population, particularly ... our youth, for example. In fact, we have a lot of young people who have fewer and fewer reference points in the Kanak culture in particular. So, for example, we have a lot of problems related to delinquency, insecurity, etc. We still have 99% of the prison population who are Kanak. And so there is a real problem with this transmission, not only of the language, but also of the Kanak culture. And there are young people who are really directly impacted. So that's the first point. And in relation to biodiversity, there is a lot of room for -

Speaker 3 (01:09:08):

I'll translate, just the start

Speaker 2 (01:09:09):

Yes

Speaker 3 (01:09:11):

So yes first of all of this is linked with what we call the de-structuring of the indigenous population of New Caledonia de-structuring in the ways especially for youth, they don't have the ... any more, they don't know the customs and we have the data that 99% of the population who is in jail is Kanak it gives you the sense of what we call and what we say by de-structuring. [ENGLISH]

Speaker 2 (01:10:12):

The second point about biodiversity is that, in fact, we are gradually witnessing a decrease in biodiversity, in particular perhaps not directly linked to the loss of languages, but to biodiversity. In fact, it's all the knowledge we have about plants that is gradually starting to disappear at the same time as languages are disappearing. And so there are, for example, a lot of plant names that have been forgotten because they have been replaced by scientific terms in Latin. And as a result, the fact that we have lost only our language has caused us to lose all the knowledge we have about plants. And so that's a real problem for us. So, at the moment, maybe the direct impact is the fires here in New Caledonia, the fires are destroying all the biodiversity of New Caledonia. And so that's an additional problem.

Speaker 3 (01:11:31):

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But how do you say, the fires?

Speaker 2 (01:11:34):

I was saying that there are also fires that have a lot of impact on biodiversity, itself, but on the other hand, the impact of the non-preservation of languages on biodiversity, it is rather all the knowledge that is within languages that is lost that ... languages -

Speaker 3 (01:11:55):

Yes of course. So regarding biodiversity in language, it's hard to say there is a direct impact, loss of language, loss of biodiversity, but what can be, what is probably is loss in terms of knowledge because when knowledge is disappearing its also knowledge related to some specific plant and species disappearing at the same time. So on biodiversity ... direct impact is the fire because there's a big fire in New Caledonia, but it's not related to language. That's something that Fabrice also wanted to highlight, really the link between language and loss of biodiversity, and the loss of knowledge around this biodiversity because people – some don't know any more how to spell species in their own language. They only know the scientific name of it. And to come back to what was said previously, it's also the way to use the language is lost.

F: [SPEAKING ENGLISH]

Speaker 3: Do languages beyond really impart knowledge relating to their use? Do the vernacular languages of Kanak also express the emotions and feelings that can be linked to these plants and this environment?

Speaker 2 (01:15:00):

Is -

Speaker 3 (01:15:01):

Yes are there terms -

Speaker 2 (01:15:03):

Actually -

Speaker 3 (01:15:04):

To express emotions.

Speaker 2 (01:15:06):

Yes, yes, yes, but may not be directly related to the plants themselves. But as far as I know, we don't have any terms that allow us to express feelings about nature. But on the other hand, what I can also say is that the link between nature and man, we have many terms that we use that are both related to man and linked to nature. For example, we have the same word for the leaf of a tree and the lung, we have the same word for the sap of the tree and the blood of man. In fact, we have terms like this that are not specific to humans, but that we use for both man and nature.

Speaker 3 (01:16:08):

The sap of a tree. And which is?

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Speaker 2 (01:16:10):

And the blood of a man, for example, if I -

Speaker 3 (01:16:13):

... for man,

Speaker 2 (01:16:15):

For example, if I say "ma", for example, I give an example in Djeru, maja, it means blood, it also means the sap of the tree.

Speaker 3 (01:16:31):

Okay yes. Okay, right so to respond to your question Fleur there's no really clear terms used to talk about emotion related to nature, specific species in Kanak languages, but the link between nature and man is in another way it it found in the use of the same terms, terminology, to talk about things in nature and something related to a man and for example – how did you say, the sap of a tree, you say sap?

Speaker 4 (01:17:47):

Yes

Speaker 3 (01:17:49):

Yes its also the same way to say the blood, it is maja, and there is another word which means leaf in a tree, and for a man it's the lung, it's the same word.

Speaker 4 (01:18:21):

[SPEAKING ENGLISH]

Speaker 3 (01:18:50):

Yes, maybe Fabrice is what you can give to your point of view on climate change and the link with languages and biodiversity. If you, if you have something to give a little bit of a general order?

Speaker 2 (01:19:12):

In general, yes, on climate change, it inevitably impacts our customary cultural practices. It also has an impact on languages because we have new things, new things, new elements coming to us from the outside and we have to name them. And so I think that, for example, in New Caledonia, in an impact that is really important on our coastline. And so the sea is eroding a lot of our beaches and we have islands such as the island of Ouvéa, which is highly threatened due to rising sea levels. And so we are in the process of thinking with the customary authorities to change our practices to try to limit the impact of climate change on nature. I'll give a small example as well, but our people used to take shells out of the sand to decorate their houses. The problem is that by taking these shells, we are actually reinforcing the impact of the tides on our beaches. And so the customary authorities, for example, have asked the people to stop taking these shells, because by doing so, in fact, they are also contributing to the rise in water levels in cultural practices,

Speaker 3 (01:21:49):

Yes a lot of things are said by Fabrice so climate change definitely in these new elements and it's impacting a lot on the coast, especially sea level rises and coastal erosion for example in Ouvéa which is one of the Loyalty

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Islands, and now it's, they are working to ensure that people living on this coast are also more aware of the impact that they are themselves by for example taking the shells to put on their houses to make it nicer, so ensuring that this is also not a good practice for them to do any more because of climate change. So this is general.

Speaker 1 (01:24:04):

[SPEAKING ENGLISH]

Speaker 3 (01:24:25):

So Fabrice, do you have any information to bring on the fact of this biodiversity that is disappearing because of climate change? What are the consequences for languages, if any? Oh also, you see, since you were talking about the disappearance of languages and the consequences that there are on biodiversity, but here, it's a little bit the opposite, that is to say from the fact. And we were told a lot when we were in the customary senate, that there are species, many species of shellfish, for example, that no longer exist on the coasts because of climate change. And what does that mean for languages as well?

Speaker 2 (01:25:21):

The consequences are direct for languages because we can only name what exists. And so inevitably, when elements of nature disappear, the words that are assigned to those elements will disappear as they go along. And so, earlier, I was talking about new elements that are integrating, for example, our society, for example, to say computer, it's a new element. We're going to find a word that allows us to name this new element, but on the contrary, when an element disappears, so inevitably, we're not going to either, we're going to gradually lose, in fact, the words that are associated with that element. And so we have, we know, linguistically, for example, we have a hundred words to describe the coconut palm,

(01:26:28):

For example, but there are no words for coconut palm, I think among the Inuit, because, by the way, they have very little to do with that element. So, but it's just to illustrate the fact that inevitably, if there's an element of diverse diversity disappears that's associated with that element, then it's going to disappear. I'll give just one example. But the canoe, for example, is disappearing from our practices. There is just one place in New Caledonia where it is preserved, but in all the other places in New Caledonia, the canoe has totally disappeared. So the words that are associated with the canoe are also disappearing.

Speaker 3 (01:27:19):

So yes definitely a direct impact on climate change and loss of biodiversity in language … because for example when there's a new element that you – you don't know how to name it you will try to find a new word for example, computer in vernacular language they had to find new words but if an element is disappearing the word related to this element will disappear as well, in Kanak vernacular language you have a hundred words to describe the coconut tree. Of course if you are going to the North Pole Inuits don't know how to describe the coconut tree because they don't have any coconut trees. But if the coconut tree is going to disappear all the words we know will disappear. And another example is the canoe which is about to disappear in most of the practice in the islands, people don't create and practise canoe so all the words which are associated with canoeing are also disappearing.

FS:

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Speaker 3:

Such a significant loss. Are there any species or species that are really extinct or are on the verge of extinction? Who is more appealing? that you are really afraid for?

Speaker 2 (01:29:59):

Oh here for example, we had some of the most iconic species, it's the cagou, the New Caledonia cagou, which is a really endemic species and which almost disappeared a few years ago, they managed to protect the environmental agents of the southern province. We managed to increase this bird tenfold, but we have really specific terms to name the term cagou, by the way, it has been Frenchified, but it is a term in the vernacular. Maybe that's the example I can give because it's quite iconic, the iconic bird of New Caledonia.

Speaker 3 (01:30:54):

There's a symbol of New Caledonia one of it it's a bird it's called cagou and this bird is endemic to New Caledonia and what we now call cagou, it's a vernacular term which has been translated in French but in French we use cagou from vernacular language so this bird was close to disappear so a lot of campaign and prevention and awareness and so now it's still alive but there's still a great … on the cagou.

FS:

[SPEAKING ENGLISH]

Speaker 3:

How do you feel as a Kanak, as a linguistic researcher, when these words disappear, what you can talk about your own emotions?

Speaker 2 (01:32:40):

I am saddened, of course, because it is human heritage. I say that it is even if it is a particular people, the Kanak people, who must preserve the elements of nature. But we are the guardians, not only for us, the Kanak people, but we are the guardians for all humanity of particular species. I was talking about the cagou, we are trying to preserve the cagou from disappearing, but in between its own name I mean, we were the Kanaks were placed there in a certain way to look after these species. So, in any case, we Kanaks, we see ourselves as the guarantors of this nature, but we don't protect it only for ourselves, we protect it … entirely.

Speaker 3 (01:34:00):

What feel is all about sadness of course because what is important to recall is that when Kanak … are trying to preserve his language or his species like cagou, it's not only for them, it's for the whole humanity, it's for our human heritage and so when we try to protect our biodiversity, our language diversity, it's really important to highlight that it's a human heritage for all of us. Thank you Fabrice.

FS: [SPEAKING ENGLISH]

Speaker 3:

To come back to Fabrice on how the social in fact, how the loss of languages impacts social well-being. And and I think you said it a little bit earlier, but if you can rephrase it?

Speaker 2 (01:36:37):

On social well-being?



Speaker 3 (01:36:40):

On yes, the ... and on identity also the representation of identity. You were talking about youth earlier.

Speaker 2 (01:36:52):

Yes, yes. So it's true that in fact in the main term for this, we call it the double contradiction and the double contradiction is for example, I'm Kanak, but all my practices are from another culture. For example, I say Kanak but I don't speak Kanak anymore, I don't practise Kanak custom anymore, but rather I speak French and I practise French culture. On the other hand, personally, I will reject French culture even though I speak in French and practise French culture. So that's why there's a double - double contradiction because I claim to be a Kanak, I have all my places in the Kanak culture in terms of identity. I hear but on the other hand, I don't practice the habits and customs of this culture anymore. On the other hand, I can reject French culture. Yes, but I speak in French, I practise French culture. I dress French, I eat French. In fact, there is a double contradiction.

Speaker 3 (01:38:26):

So there's a term that – which is in use, it's to talk about what is happening now in New Caledonia it's what we say double or dual contradiction it. It's to say I am Kanak but I don't know my own culture because all my practices in terms of what I wear, what I eat, what I speak, are French. But I hate the French culture. Do you know – is it clear?

Speaker 1 (01:39:43):

[SPEAKING ENGLISH]

Speaker 3 (01:40:20):

Compared with the older ones, how do they perceive this identity in relation to social cohesion? Fleur was saying, but I don't know if you agree that maybe young people are less interested in culture, but in any case for the elders who still have their bearings in Kanak culture, how is this identity expressed?

Speaker 2 (01:40:56):

I completely agree with what she says, in that young people are much less likely to go to the old people to gather information about culture from them. They are much more interested in what is happening from the outside. A simple example is that the elders, for example, would like to pass on tales, Kanak tales. But today, these Kanak tales are disappearing. And so I, for example, work in oral literature, I teach these tales at the university studies, finally, the young Kanaks no longer go to the old people to ask them directly for this knowledge.

Speaker 3 (01:42:07):

Yes. So yes Fleur so you - Fabrice totally agrees with you and especially for the elders and it's a big pain to see the youth are not coming to see them about story-telling, because what is important in Kanak culture is the passing on story-telling, Kanak story-telling, and as long as the youth are not interested it's something that might disappear at some stage, Fabrice in the university an expert in oral story-telling and transmission, so that's what he's doing. Most of the youth are not interested any more. And if I may Fabrice, sorry to intervene, but if I may this is really different from Vanuatu because in Vanuatu I can still – I can see amongst the youth an interest regarding story-telling, respect for elders and what they have to transmit.

Speaker 2 (01:44:05):



I was saying this, maybe it's not a generality, but in any case in Noumea where I work in the southern province, where the urbanity is strongest, they are much less interested, maybe on the islands, the islands ... and in the northern province. It's still okay because, by the way, in tribal circles, yes, it keeps pretty well. But here in urbanity, it's difficult.

Speaker 3 (01:44:39):

Yes. Yes it's important that we still have in mind that we can't say the youth are not interested in every way, in New Caledonia it's mostly in Nouméa er you know they are living their urban life, that's in the Loyalty Islands or in tribes where they are following a different life, youth might be more interested.

FS:

[SPEAKING ENGLISH]

Speaker 3:

Have there been movements among young people to preserve certain languages or have there been ... and movements?

Speaker 2 (01:45:58):

Oh yes, there are a lot of different initiatives at the individual level. So the regret I have is that there are a lot of initiatives, but these areas of individual initiatives, let's say, there is not a real movement where everyone is together to move in the direction.

Speaker 3 (01:46:23):

So yes there's a lot of different initiatives but they are the individual level and there'd not really a collaborative approach, community approach which would make much more sense, would have much more impact.

FS:

[SPEAKING ENGLISH]

Speaker 3:

Is colonisation a barrier to these initiatives?

Speaker 2 (01:47:02):

Well, in fact, we had in the Kanak community than we are more of a communitarian. So the main difficulty that we have today is that, in fact, there are many, many skills that are spread out. And so it doesn't actually help us to be united.

Speaker 3 (01:47:25):

Yes, so in the Kanak way of managing social life it is really based on the community level so it is really hard to be united because most of the initiatives are really made among the community and not really at the ... level.

Speaker 4 (01:48:01):

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Speaker 3 (01:48:18):

Has climate change also been a barrier to this, to these initiatives?

Speaker 2 (01:48:31):

Climate change, I don't think it's directly, I think it's more in New Caledonia. We have 1000 institutional layers, we have the government, we have the provinces, we have …, we have the Congress of New Caledonia. We have the state, the vice-rectorate, for example. We have many, many actors and a lot of skills that are distributed among the actors. And as a result, it makes it difficult to do public policy.

Speaker 3 (01:49:08):

Yes, so not really climate change … but it's important to have in mind in New Caledinia we have thousands of different strata of administration, we have community, we have mayor, we have provinces, we have congress, we have customary senate, so all of those different entities and authorities are most of the time not really well coordinated.

Speakers 1 (01:51:17):

[SPEAKING ENGLISH]

Speaker 3 (01:51:38):

Fabrice, thank you so much for your time. And then this precious information, Fleur said that depending on the transcripts of the interview transcript, maybe they will have other questions. But as they also said earlier, if we get the extension we are hoping for, we will come back to Caledonia. And at that time, we will also have another moment of exchange, hopefully in person. And Autumn, ask if you also had any other elements that you would like to share. And I'd add that you may have talked about Kanak tales, maybe you could send us something because we asked the customary senator for several of them. And in fact, they haven't been able to tell us that much, maybe by, I don't know. And a little bit of maybe I didn't feel like it was out of a desire to keep but rather a lack of references, maybe at times, I don't know,

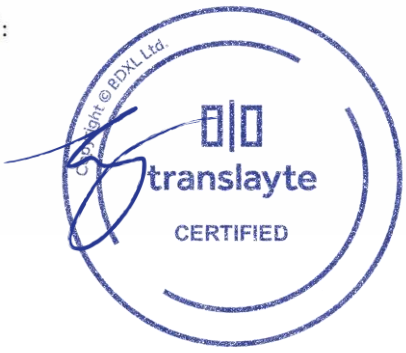
Speaker 2 (01:53:10):

Yes, no, but I will be, as I said at the very beginning, delighted to share all our work and especially on story-telling. I can also share with you the articles I mentioned during our conversation. I can also make them available to you and all the content I can have on the theme of the link between biodiversity and linguistic diversity. So yes, I'm passing on all the elements. On the other hand, if you have other questions afterwards, I am better at writing than speaking.

Speaker 3 (01:53:59):

Yes, yes. Ok, so Fabrice will share with us all the different documents that he has referred to during this interview. He is also more than happy to support us in really providing to the … the different elements which will highlight the link between biodiversity and language diversity and he has also – I have asked him if he could also share some Kanak story-telling, because he is also an expert in that and I remember that when we discussed with the customary senate member we requested that several times so Fabrice if you can share with us … Maybe if you have some specific areas where you would like him to provide some story-telling you can ask and Fabrice also give some precision about – it is easier for him to communicate in writing in English than -

Speaker 1 (01:55:34):



[SPEAKING ENGLISH]

Great a just time storytelling.

Speaker 3 (01:56:15):

You understood that?

Speaker 2 (01:56:18):

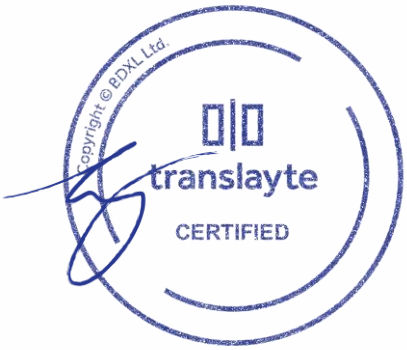
Yes, yes. I'll send all that.

Speaker 3 (01:56:20):

That would be fantastic. Thank you again for your time so much. I also learned a lot. It's a great pleasure to see you again and – thank you again very much Fabrice for your time, it's been as Fleur and Autumn said it's been very rich. Thank you again and we will exchange in writing,

Speaker 1 (01:57:09):

[ENG]



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Speaker 1 (00:00:32):
À

Speaker 2 (00:00:46):
Tu peux traduire anne-sophie

Speaker 3 (00:00:48):
Bien sûr.

Speaker 2 (00:00:50):
Ok, alors je me présente et je présente un peu le travail que je fais ici en avec Calédonie

Speaker 3 (00:01:03):
À will maser feedback en water le walk qui est New calédonien.

Speaker 2 (00:01:14):
Je m'appelle fabrico chally. Je suis enseignant-chercheur en langue et littérature orale à l'université de la nouvelle-calédonie

Speaker 3 (00:01:25):
À fabrice wali, le University of New calédonien spécialise etage and a in oral Lage and lit litre

Speaker 2 (00:01:40):
Et je suis, je travaille en tant que chercheur sur les thématiques des langues et de la littérature orale kanak

Speaker 3 (00:01:54):
À working en à oral, à en littérature, a kanak sa

Speaker 2 (00:02:10):
Et je suis ici à l'INS spa. C'est l'institut de formation des enseignants du premier degré du second degré en nouvelle-calédonie

Speaker 3 (00:02:25):
School of éducation, which of University of New calon work training of te it primary and secondary school

Speaker 2 (00:02:50):
Et un des intérêts de ma recherche concernant seulement les langues en tant que médium de communication, mais surtout les formes de pensée à l'intérieur des langues. Donc plutôt l'E linguistique

Speaker 3 (00:03:17):
Qui à watt à it it spécifique, what à waters the s bien and which

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Speaker 2 (00:03:49):
Fors. Et donc dans ce travail, je m'intéresse à la manière dans les différentes langues de nouvelle-calédonie nommement les les les éléments de la nature de l'environnement.

Speaker 3 (00:04:09):
Ok, so in am looping how vernaculaire of New calédonien à spelling, using the elment of nature the environment.

Speaker 2 (00:04:27):
Et comment, à travers les langues, les les autochtones produisent de la connaissance

Speaker 3 (00:04:47):
Haa people a

Speaker 2 (00:04:59):
Non seulement sur l'utilité des plantes, par exemple, dans la médecine traditionnelle

Speaker 3 (00:05:09):
En un, par exemple un

Speaker 2 (00:05:23):
Et de manière générale, le lien que les hommes peuvent avoir avec la nature

Speaker 3 (00:05:36):
Nature.

Speaker 2 (00:05:39):
Et en fait, on est parti du principe et c'est des travaux de recherche qui ont été menés par roman. J'enverrai la référence, mais qui parlent d'un lien vraiment avéré entre la diversité linguistique et la biodiversité

Speaker 3 (00:06:09):
Principal à link, à will prof link between a city and linguistique dva city fabricata paper rot by roman. Et

Speaker 2 (00:06:35):
Et nous essayons d'établir justement le lien qui existe entre les langues et la biodiversité linguistique. Et c'est un lien qui a été mis en évidence par l'unesco. C'est pourquoi on utilise, on alimente plutôt les recherches dans ce sens-là pour établir ce lien entre la diversité linguistique et la biodiversité

Speaker 3 (00:07:04):
Between city linguistique dive city as been à à fabric we isy beys a preus and how to en the à kanki the

Speaker 2 (00:07:38):

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Et nous avons eu la possibilité, avec ma collègue el la Diana, que vous connaissez probablement auprès de de laps ici en nouvelle-calédonie pour pour promouvoir au fait de ce lien entre langue et biodiversité, de manière à ce que les politiques publiques puissent s'orienter aussi vers non seulement la préservation de la biodiversité, mais également de la diversité linguistique.

Speaker 3 (00:08:19):

Il a fabrice awa one of ole comme à el yana be you have w, New calédonien en the project ou the es pici which was promoting the link be between a again bayot de city and and Howe public. Policy shoot considère isling age.

Speaker 2 (00:08:56):

Et donc cela fait l'objet de plusieurs de publications. Et on a fait aussi quelques communications avec ela Diana pour pour exposer nos travaux sur sur le sujet

Speaker 3 (00:09:14):

Joseph been se la publication nuel a un public speaking en work

Speaker 2 (00:09:24):

Et je pourrais vous vous transmettre les liens vers vers ces travaux et éventuellement aussi les différentes communications que l'on a pu faire. Mais en tout cas, je serais heureux de pouvoir participer au montage de ce dossier avec avec les éléments que je possède. Et, et voilà ce que je peux. Je peux dire

Speaker 3 (00:09:58):

Gazette work you en document

Speaker 1 (00:10:13):

Mari it it. Oui. State the back tas the à à cross, aux em.

Speaker 3 (00:12:31):

Tu sais, c'est bon. Il n'y a pas besoin de traduire dans ce sens,

Speaker 2 (00:12:35):

Non? Ce qu'elle a dit auparavant, non. Mais la question est-ce que tu peux me bien la traduire?

Speaker 3 (00:12:41):

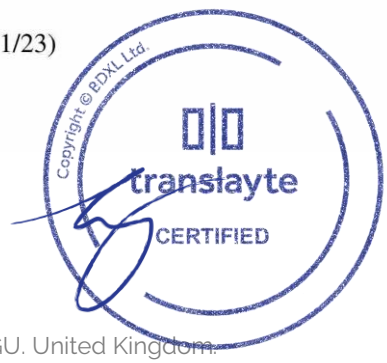
Ah, flapi j your question

Speaker 1 (00:12:47):

Skype en e cal, Mike sam quer with the the gring

Speaker 2 (00:13:01):

Ok, l'essentiel de mes recherches se concentre premièrement sur la nouvelle-calédonie, mais j'essaie aussi de mettre en évidence, par comparaison, d'autres pratiques de la mélanésie, essentiellement la mélanésie pour le moment, par exemple, dernièrement, j'ai communiqué sur l'importance d'un plat



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traditionnel ici en nouvelle Calédonie, qui s'appelle le bouga. Et en fait, ce n'était pas le bouga comme art culinaire, mais plutôt les représentations des autochtones sur le bouga et comment les boia intègrent nos pratiques culturelles. Et donc, sur la base du bouga, j'ai pu faire ensuite des analyses comparatives avec des plats van notés, par exemple, des plats de Fidji, des plats, également de saman à highland. En fait, j'ai, je pars quand même de ma base, c'est à dire lanouvelle Calédonie, les pratiques culturelles kanak et avec l'idée de comparer avec ce qui se passe ailleurs en mélanésie et dans ce travail de recherche, j'ai pu aussi faire une comparaison avec le houmou de wallis-et-futuna ou encore les pratiques culinaires des maoris, par exemple,

Speaker 3 (00:14:48):

Un sont in hol always, un tr highlight à what a bing down in New calédonien in time of pr comparative proche et spécial wi meja fort exemple à avoir recent le en traditionnel plate satisfaite et New calédonien which bua culinary but more in Times of a in représentation which a l. Toy a spécifique a plate how it it is ing the cultural pr and from me some com Salomon even Wang melangi working with comparing Wallis futuna maori

Speaker 4 (00:16:30):

Week cal un a,

Speaker 2 (00:17:06):

J'ai besoin d'une traduction.

Speaker 3 (00:17:09):

Comment ces langues, ces 28 langues, elles, elles s'organisent, est ce qu'elles sont réparties sur tout le territoire ou est ce qu'elles se concentrent. Il y a une plus grande diversité dans une certaine province.

Speaker 2 (00:17:21):

D'accord, non. Elles sont vraiment réparties sur toute la nouvelle-calédonie

Speaker 3 (00:17:27):

Yer sped OV à New calédonien beat w three provinc

Speaker 4 (00:17:34):

On

Speaker 2 (00:17:35):

A des langues plus ou moins. Comment dire on a la langue. Je jérôme ma langue maternelle. Par exemple, il y a 17 000 locuteurs. Par contre, on a des plus petites langues avec 20 locuteurs, par exemple, et des langues qui sont en danger d'extinction

Speaker 3 (00:17:56):

Et le dhou, ça vient d'où?

Speaker 2 (00:17:58):



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Lis fou l'île de li fou

Speaker 3 (00:18:04):
A et sa Fu somme à somme

Speaker 1 (00:18:35):
Of.

Speaker 3 (00:18:47):
Combien d'après toi, il y a de langues qui ont déjà qui sont déjà en voie d'extinction, qui sont en grand danger sur les 28.

Speaker 2 (00:18:57):
Ew, d'après l'unesco, il y en a 16 sur 28

Speaker 3 (00:19:03):
Sobe dans la unesco data sixtine over the t à une clause to the.

Speaker 2 (00:19:14):
Alors ça, ce sont des statistiques qui sont adossées à des recensements. Par contre, en tant que linguistes, on sait que la langue au sein des foyers se transmettrait peu aujourd'hui. Et parce que les familles ont tendance à privilégier le français dans la transmission

Speaker 3 (00:19:42):
Data statistique census coming from General waw a linguist etage vernaculaire à in the family. Because a par a privilège french.

Speaker 2 (00:20:38):
C'est une question pour avoir le lien entre biodiversité, la diversité linguistique.

Speaker 3 (00:20:45):
Oui.

Speaker 2 (00:20:47):
Alors je citai tout à l'heure les travaux de roman que j'enverrai. Et au fait, il y a une carte mondiale qui établit qu'il y a un lien formel. Tous les endroits entre le 45ème parallèle, par exemple, est le tropique du Capricorne. On a une espèce de bande où il y a une biodiversité qui est vraiment haute. On en parle justement de ho spot de la diversité. Et dans les mêmes régions, on trouve le plus haut degré de diversité linguistique

Speaker 3 (00:21:38):
À aft map, un cllie establishing the link parallèle and the Capricorne à donor et fugen the parallèle wi of bayo city Wiz lw dive city

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Speaker 2 (00:22:25):

Et la nouvelle-calédonie comme le vanuatu, comme l'ensemble du pacifique, en remontant jusqu'aux Papouasie-Nouvelle-Guinée, on se retrouve justement dans cette zone où il y a le plus de biodiversité, le plus de diversité linguistique

Speaker 3 (00:22:43):

À vanuatu à most of the Pacific country and Melanie country à in zone à. C'est bon, wa ma ah, est-ce que est ce que tu as une théorie qui expliquerait que ce lien entre la diversité des langues et la biodiversité?

Speaker 2 (00:23:24):

On a la théorie avancée par roman. Et donc ce sont les travaux de romane qui mettent en évidence ce lien formaient entre les deux. Et donc des liens qui ont été non seulement établis mais repris ensuite par les travaux de l'unesco, qui en a un axe important dans sa thématique après l'idée principale, c'est que la taxinomie, donc les termes pour nommer la nature, on renferme des informations. Donc nous on le voit par exemple, dans nos, dans ma langue maternelle, par exemple, quand on prend le nom d'une plante et quand on décortique le nom de la plante, au fait, il y a des le nom de la plante renferme, renferme les informations d'utilisation de cette de cette plante. Et donc, et en fait, il permet simplement d'établir que les populations avaient besoin de diversifier. On va dire leur leur leur point de vue sur, sur les différents éléments, les différents éléments de la de la nature. Et donc particulièrement en mélanésie. Or, c'est beaucoup plus marqué. On va dire en Polynésie qu'en pardon, c'est beaucoup plus marqué en mélanésie qu'en Polynésie. Cette diversité linguistique a permis auparavant de préserver au maximum la nature. Et donc si on a une richesse au niveau de la biodiversité, c'est parce qu'on a eu, on a pu préserver au fait la diversité linguistique jusqu'à présent. Et le fait qu'il y ait de menaces sur la biodiversité menace forcément la diversité linguistique et vice et versa.

Speaker 3 (00:25:44):

Ok, un douma best hugen et a ws has been found is taxonomie how the ways you colling plains pro provide and the to to people doux nied to causes plain in to have 11 indice à s a important in mélan mor

Speaker 1 (00:28:02):

À great de,

Speaker 3 (00:28:07):

Est-ce que tu peux peut être être un peu plus spécifique en en donnant des exemples de qui qui vont dans le sens de ce que tu viens d'expliquer

Speaker 2 (00:28:20):

Des exemples de ma culture à moi ou ok, par exemple, il y a un terme en girou pour une plante que l'on utilise pour se soigner. Cette plante là s'appelle mit angero en langue jeou. Et en fait, my signifient sacré et che signifie existence. Et en fait, le terme mit renferme l'information sur l'utilisation de cette de cette plante. Et donc c'est une plante que l'on utilise, par exemple, quand pour mettre autour des habitations et cette plante là, elle sert à protéger au fait l'entourage d'une maison, par exemple, mais on le plante aussi autour des champs de manière à ce que ça puisse protéger. Au fait, le champ du on appelle ça le mauvais regard in french qui pourrait au fait détruire les les les plantations.



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Speaker 3 (00:29:34):
D'accord. Ah. Son fabrice, un exemple the c à mche and mche in j is you mit with she a ance life plain tow plas the way that is biplan round house of gardens tout protect the house protect the gardens

Speaker 1 (00:30:41):
Against what say

Speaker 3 (00:30:50):
Comment tu traduis le mauvais regard fabe est ce que c'est un peu lié à la sorcellerie au risque de,

Speaker 2 (00:30:59):
C'est juste quelqu'un par exemple, qui passe et qui qui qui porte un regard envieux au fait sur le sur-lechamp je ne sais pas comment tu vas te débrayer

Speaker 3 (00:31:11):
It not Willy going sorcellerie, jalousie, histoire existence

Speaker 1 (00:31:30):
Et

Speaker 3 (00:31:42):
Et est-ce que tu as aussi des exemples liés plutôt aux espèces animales?

Speaker 2 (00:31:50):
Jusqu'à présent, on a pu travaillé sur la biodiversité, sur vraiment les arbres, les plantes, etc. Ce que l'on peut dire sur sur la faune, c'est qu'il y a souvent des noms que l'on donne par rapport au degré de maturité. En fait, ce n'est pas, ce n'est pas forcément par rapport à l'utilisation, mais c'est plutôt par rapport au degré de maturité. Par exemple, on va nommer, je ne sais pas si tu vas trouver la traduction en anglais, mais le bec-de-cane selon le degré de maturité du poisson, il portera un nom différent.

Speaker 3 (00:32:48):
Most of the plains and à pao city flora but style un exemple base dans the caniche canne the trans can c a n bases on in base. On is le of mathe ruty nmes a et fabrice, qu'est-ce que ça? Ça a quel est l'intérêt de lui donner différents noms en fonction de son degré de maturité?

Speaker 2 (00:34:03):
Au fait, dans les connaissances autochtones, il fallait pêcher un poisson à un certain degré de maturité.

Speaker 3 (00:34:13):
Ah ok.

Speaker 2 (00:34:14):
Tant qu'il n'avait pas, il ne portait pas le nom qu'il fallait. Il fallait pas le le pêcher. Par exemple.

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Speaker 3 (00:34:20):
Ok, on, c'est bon. So n why aen name in verac long wege it be because traditional of maturity the

Speaker 1 (00:35:01):
Et between ou

Speaker 2 (00:35:26):
James James ici, on veut Calédonie. C'est dans la culture kanak en tout cas, mais on est soumis au calendrier de l'igname et tous les événements coutumiers sont sont régis par le calendrier de lignum. Par exemple, tous nos mariages se pendant la période de récolte de lignum

Speaker 3 (00:36:04):
In New calédonien à Anders yam calender, event à weddings, qu' on est à peine during the time of the GA

Speaker 1 (00:36:33):
And

Speaker 3 (00:36:44):
Yes à Ken

Speaker 1 (00:36:48):
Y a un is is cosmical pour

Speaker 3 (00:37:07):
Uw tu as compris

Speaker 2 (00:37:08):
Fabrics, euh,

Speaker 3 (00:37:10):
En fait, dans quelle mesures?

Speaker 2 (00:37:12):
D éléments de la

Speaker 3 (00:37:13):
Natures, le calend vide. Voilà dans dans quelle mesure tous les éléments de la nature sont interconnectés à travers le cosmos. Et donc l'exemple que tu nous as donné précédemment sur le poisson bec-de-cane s'intègre avec le calendrier de l'ame également.

Speaker 2 (00:37:32):

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Oui, oui. En fait, nous, on a les éléments de la nature sans connectés. Alors dans les ce que nous apprenons, par exemple à nos étudiants, c'est que autrefois, l'homme était avait vraiment un lien fort avec la nature, mais arrivé avec l'arrivée de la religion, la christianisation et ensuite la colonisation à altérer ce lien qu'il y avait avec la nature

Speaker 3 (00:38:19):

De définit cosmos w à peine les ad environment nature first the mission the colon à weekend à siling ew.

Speaker 2 (00:38:57):

Et donc, en fait, les éléments de la nature et l'homme est un élément de la nature et interagir avec la nature, mais c'est la nature aussi qui l'influence grandement. Et donc, et donc pour établir vraiment ce lien avec la nature, alors je parlais vraiment de l'igname parce que c'est vraiment, on a un culte de Liam. Nous tous les tous les ans, on célèbre lignum ce que l'on appelle la fête de lignum ici. Mais quand on parlait de degré de maturité, par exemple, c'est le cas pour d'autres éléments. Par exemple, on empêche la tortue, on consomme la tortue, mais on attend vraiment que la tortue ait un degré de maturité suffisant. On a un poisson que l'on appelle le daw aussi. Il suit aussi le calendrier de l'igname et on le consomme en même temps que l'ame. Et donc il y a également des des périodes de floraison de certains arbres, par exemple, que l'on va apprendre aussi en considération parce qu'ils sont des indicateurs pour les saisons de pêche, par exemple,

Speaker 3 (00:40:45):

A y a même nature is a influencing the living un yam is it so giving some and the loin you fich à fors yam calenda en iso Matthew kenen a spécifique Times of the game calender or sa trees à gevin flowers lx flowers the calend hier, its

Speaker 4 (00:42:52):

What broad lk à

Speaker 2 (00:43:10):

Tu peux traduire

Speaker 3 (00:43:12):

Quel est quel est le rôle justement dans ses liens entre entre la nature et l'homme. Quel est le rôle joué par par les langues?

Speaker 2 (00:43:29):

Ah, elle joue un rôle de sauvegarde pour moi. Et c'est pour ça qu'on insiste beaucoup. On essaie de promouvoir la préservation des langues. Comme je disais tout à l'heure, le lien, c'est les informations que contiennent les langues sur les éléments de la nature, sur les éléments de la biodiversité. Et donc préserver les langues, c'est préserver, se sauvegarder finalement la biodiversité.

Speaker 3 (00:44:16):

Je vais un, vous m'entendez?

Speaker 2 (00:44:23):



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Oui, oui,

Speaker 3 (00:44:27):
Je vais couper ma caméra parce que j'ai l'impression qu'internet devient un petit peu instable. Et juste et après, je vais, je vais faire la traduction so, mais à quatre, ma caméra, because à k internet it skating instable ail, fabrice à ott, what wing between it the work of fabre to pro the because city a city

Speaker 1 (00:45:59):
Fabric a eu we re and.

Speaker 2 (00:47:10):
C'est la question de méthodologie, hein?

Speaker 3 (00:47:12):
Pas bref, oui, c'est une question de méthodologie et je crois que fleuve oui, which, oui, the a tout

Speaker 1 (00:47:28):
Ça

Speaker 3 (00:47:34):
Hier, ça. Donc c'est plutôt la façon dont en fait, ce que tu disais sur le fait que les infos qui sont contenues que contiennent les langues sur la biodiversité et ce lien, en fait, c'est sa question. C'est quelle est ta méthodologie sur le fait que cet auteur là a fait le lien dans le fait que ça révèle que ce qu'il y a dans la nature, à travers le passage de la langue et de la culture? Ah, est-ce que toi, tu suis aussi cette même méthodologie ou est-ce que tu peux nous parler? Peut-être de ta méthodologie?

Speaker 2 (00:48:24):
La méthodologie, elle est plutôt qualitative. C'est à dire qu'on interroge les les vieux. Donc personne ressources sur les connaissances qu'ils ont non seulement des des noms pour nommer les élèves, la nature et toutes les connaissances qu'ils ont autour de ces éléments de la nature. Et donc la méthodologie, elle est principalement qualitative dans la récolte d'informations directement auprès des personnes. Ressources

Speaker 3 (00:49:09):
Fabrice what is using a the méthodologie s is méthodologie zuli qualitatif how is working interview elders and the nmes the

Speaker 1 (00:50:17):
In

Speaker 2 (00:50:19):
No

Speaker 1 (00:50:33):



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À it the way of de distinction between is fis

Speaker 2 (00:52:11):
Méthodologie en flor

Speaker 1 (00:52:16):
Y a

Speaker 2 (00:52:19):
Méthodologie very because eu we work information for the orders people New calédonien un we have à qualitative approche un we oui. We work peoples in tanach population joa informations vers vers in kanak nature différents éléments of de nature in New calédonien un we work oui. A biologiste à Cana biologiste pierre Maui he work a d New calédonien Institute of research en development 10 personnes est n information in de bi biological élément un Carroll françoise Carroll anthropologue work thé have approche

Speaker 1 (00:54:22):
Y abeille

Speaker 2 (00:54:34):
Pierre biologiste in

Speaker 1 (00:54:49):
Plains

Speaker 2 (00:54:51):
Y un ma collègue françoise cayrol et cheeses anthropologues she work in représentation nature un ennemi une linguistique part name, un spécifique name world to to col nature environnement et oui. Need nature name of forest par exemple, la Bush par have a spécifique name, euh, sor and destin

Speaker 1 (00:57:10):
When Luc i a Luc the forest Luc the for

Speaker 4 (00:57:31):
Of a Brad

Speaker 1 (00:57:50):
Sno, exemple où

Speaker 3 (00:58:47):
It back

Speaker 1 (00:58:52):



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Et on right as any.

Speaker 3 (00:59:45):

Yes ça. Elle a fleur en fait et expliquait que pour te donner un exemple de contexte, par exemple, chez elle, elle a dans son jardin derrière, il y a une forêt, mais elle serait incapable de nommer les éléments qui composent cet espace, peut-être en utilisant un langage scientifique, mais qu'elle ne connaît pas. Donc elle demande s plutôt que d'utiliser le mot générique nature qui est finalement qui veut tout et rien dire dans les langues vernaculaires autochtones. Il y a justement des mots pour pour parler et pour évoquer la nature, mais de façon beaucoup plus précise.

Speaker 2 (01:00:46):

Oui, je confirme

Speaker 3 (01:00:50):

So a y deen a express hors mining of what we us a nature gener wead

Speaker 2 (01:01:17):

Je, si je peux juste compléter avec un des travaux d'une de ma collègue Anne lotte qui elle travaille sur les classificateurs en linguistique. Et au fait, elle met en évidence dans son travail de recherche qu'on a en linguistique, ce sont les possessifs selon ce que tu possèdes. Il y aura un possessif particulier. Et par exemple, si on prend l'exemple du fiche du poisson, je vais utiliser un mot différent selon que le poisson a été pêché par moi-même ou le poisson que j'ai acheté au marché. Le poisson qui m'a que j'ai que j'ai pris, par exemple chez quelqu'un et en fait, on va utiliser différents possessifs. C'est simplement pour dire que on a une façon fait. Les autochtones ont une façon très particulière de classer les éléments de la de la nature. Et quand la langue française est arrivée, elle est arrivée avec d'autres manières de classer et progressivement, en apprenant la langue française, on a oublié totalement notre manière de catégoriser le monde qui nous entoure.

Speaker 3 (01:03:11):

D'accord. Ok. Somme fabrice, w research, on of ma collègue à un lord dot linguist possess exemple à in vernaculaire Lage you 10 to. Ok, c'est à différents termes in news, tout col, le fish when it been a fich by myer oh, à give tomi en à iffa beau it n it, tradition in vernaculaire lw j tout classifi elment which complique les défuntes from the classification which which been broad by the french classification the to classifi a place the older ways pre view souhait ou classifi the els arami because ma connexion

Speaker 4 (01:05:30):

Of the french.

Speaker 2 (01:05:41):

Oui, oui, oui, beaucoup

Speaker 3 (01:05:44):

Vrai. C'est ce que tu pourrais. Voilà.

Speaker 2 (01:05:48):

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Non, non. Je disais tout à l'heure que la langue française menace la diversité linguistique en Calédonie parce que beaucoup de parents ne transmettent plus leur langue aux enfants. Ils préfèrent transmettre le français parce qu'ils pensent que l'élève sera en difficulté à l'école et dans la langue française s'ils apprennent leur langue maternel.

Speaker 3 (01:06:22):

Il a french langle l streets the lord d linguistique diversité New calédonien, because par à week en the french of the succès school, par exemple, the et et préfère tout eyd speaking, un vernaculaire the linguistique. Dr city.

Speaker 4 (01:07:50):

Yes,

Speaker 2 (01:07:51):

Il y a un impact.

Speaker 3 (01:07:53):

Quelle sont les non, non, je t. Prêt?

Speaker 2 (01:08:00):

Oui. Alors, quel est l'impact? C'est qu'on assiste en nouvelle-calédonie à une vraie restructuration de la population et de la population autochtone, particulièrement à notre jeunesse, par exemple. En fait, on a beaucoup de jeunes qui sont qui ont de moins en moins de repères dans la culture canat notamment. Donc, par exemple, on a beaucoup de problèmes liés à la délinquance, à l'insécurité, etc. On a quand même 99 de la population carcérale qui sont kanak. Et donc il y a une vraie problématique par rapport à cette transmission, non seulement de la langue, mais aussi de la de la culture taanach. Et il y a une jeunesse qui est vraiment impactée directement. Donc ça, c'est le premier point. Et par rapport à la biodiversité, il y a beaucoup de permet

Speaker 3 (01:09:08):

De traduis, juste le premier

Speaker 2 (01:09:09):

Point

Speaker 3 (01:09:11):

Comme ça fest y six d'ici the destructing of the district sing in the ways for you à the mac animal of the population jak et kivio à the of des city.

Speaker 2 (01:10:12):

Le deuxième point sur la biodiversité, c'est qu'au fait on, on assiste progressivement à une diminution de la biodiversité, notamment s'est peut être pas lié directement à la perte des langues, mais sur la biodiversité. Au fait, c'est toutes les connaissances que nous avons des plantes qui commencent à disparaître progressivement en même temps que les langues disparaissent. Et donc il y a par exemple,

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beaucoup de noms de plantes que l'on a oubliés parce qu'on les a remplacés par les termes scientifiques en latin. Et du coup, le fait d'avoir perdu seulement langue a fait perdre toutes les connaissances que nous avons sur sur les plantes. Et donc ça, c'est une vraie problématique pour nous. Donc, après en ce moment, peut être l'impact direct, c'est les feux chez nous en nouvelle-calédonie, les feux sont en train de détruire toute la biodiversité néo calédonienne. Et donc ça, c'est une problématique supplémentaire.

Speaker 3 (01:11:31):
Mais comment tu lis les feux? Je

Speaker 2 (01:11:34):
Disais qu'il y a aussi les feux qui qui ont beaucoup d'impact sur la biodiversité, elle même, mais par contre, l'impact de la non préservation des langues sur la biodiversité, c'est plutôt toutes les toutes les connaissances qui sont à l'intérieur des langues qui se perd que langues, elle ou

Speaker 3 (01:11:55):
Voilà. Ouais, d'accord. So regarding bayo deity and à it it to à give impact à Los of à the ls of city but wa be à Provan il se l in time of nage because when aage ising it lady to à some spécifique plan and spa city covent d in pa à the fire, because it not fabric Willy de lk between and Los of bayo city is the Los of bayo city. Somme dans nos how spell spécial in the on on ic ne back est-ce que est-ce que les langues au-delà de de vraiment donner de la connaissance relative à leur utilisation? Les langues vernaculaires de kanak elles, elles expriment aussi les émotions. Les sentiments qui peuvent être liés à ces plantes et à cet environnement

Speaker 2 (01:15:00):
Est ce

Speaker 3 (01:15:01):
Qu'il y a des termes

Speaker 2 (01:15:03):
En fait

Speaker 3 (01:15:04):
Exprimer les émotions.

Speaker 2 (01:15:06):
Oui, oui, oui, mais peut être pas directement liés aux plantes elles-mêmes. Mais à ma connaissance, on n'a pas de de termes qui permettent d'exprimer les sentiments par rapport à la nature. Mais par contre, ce que je peux dire aussi, c'est que le lien qui est entre la nature et l'homme, on a beaucoup de termes que l'on utilise qui sont à la fois liés à l'homme et liés à la nature. Un exemple, par exemple, on a le même mot pour dire feuille d'un arbre et le poumon, on a le même terme pour dire sève de l'arbre et le sang de l'homme. Au fait, on a des termes comme ça qui, qui sont pas spécifiques à l'homme, mais que l'on utilise à la fois pour l'homme et la nature,

Speaker 3 (01:16:08):

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La sève d'un arbre. Et c'est quoi?

Speaker 2 (01:16:10):
Et le sang de l'homme, par exemple, si, si je

Speaker 3 (01:16:13):
Dis pour l'homme,

Speaker 2 (01:16:15):
Par exemple, si je dis ma, par exemple, je donne un exemple eno maja, maja, ça veut dire 100, ça veut aussi dire save de l'arbre,

Speaker 3 (01:16:31):
D'accord? Ouais, ouais. Ok. Alors so à tout nature spécifique spécial in kanak the man is a in away it it found in the us of thu ce que sa the, sa

Speaker 4 (01:17:47):
Yes

Speaker 3 (01:17:49):
Y et it the moi tous ces the blood it it macha, which min life in.

Speaker 4 (01:18:21):
Et

Speaker 3 (01:18:50):
Oui, peut-être fabrice est ce que tu peux donner un peu à ton point de vue sur le changement climatique et le lien avec les langues et la biodiversité. Si tu, si tu as des éléments à donner un peu d'ordre général,

Speaker 2 (01:19:12):
En général, oui, sur le changement climatique, ça impacte forcément nos pratiques culturelles coutumières. Ça impacte aussi les langues puisque nous avons de nouvelles nouvelles choses, nouvelles, nouveaux éléments qui nous arrivent de l'extérieur et on doit les nommer. Et donc je pense que, par exemple, en nouvelle-calédonie, en un impact qui est vraiment important sur nos le littoral. Et donc la mer étant un est en train de gratter beaucoup de nos de nos plages et on a des îles comme l'île d'ouvéa qui qui est fortement menacée au Fein pour la montée des eaux. Et donc on est en train de réfléchir avec les autorités coutumières pour changer justement nos pratiques pour essayer de limiter l'impact du changement climatique sur la nature. Je vais donner aussi un petit exemple, mais nos populations avaient l'habitude de prendre des coquillages dans dans le sable pour embellir les maisons. Le problème, c'est qu'en prenant ces coquillages, on est en train de de renforcer en fait l'impact de des marée sur sur nos plages. Et donc les autorités coutumières, par exemple, ont demandé aux populations d'arrêter de prélever un prélever ces coquillages, parce qu'en le faisant, en fait, il il contribue aussi à la montée des eaux dans les pratiques culturelles,

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Speaker 3 (01:21:49):

Yes by impact l c à un spécialise à see verris and cost en no it the work to une chose that people living and co à by taking chers the house, tu m. Quitte nier à sorting good because et lorsque yes

Speaker 1 (01:24:04):

Of the con.

Speaker 3 (01:24:25):

Donc fabrice, est-ce que tu t aurais des éléments à apporter sur le fait justement de cette biodiversité qui disparaît à cause du changement climatique? Quelles sont les conséquences sur les langues s'il y en a? Ah aussi, tu vois, puisque tu nous parlais de la disparition des langues et des conséquences qu'il y a sur la biodiversité, mais là, c'est un petit peu la démarche inverse, c'est-à-dire à partir du fait. Et on nous l'a dit beaucoup quand on était au sénat coutumier, il y a des espèces, beaucoup d'espèces de coquillages, justement par exemple, qui n'existent plus sur les côtes du fae, du changement climatique. Et qu'est-ce que ça a comme conséquence aussi sur les langues,

Speaker 2 (01:25:21):

Les conséquences sont directes sur les langues parce qu'on ne peut nommer que ce qui existe. Et donc forcément, quand des éléments de la nature disparaissent, les mots qui sont attribués pour ces ces éléments vont disparaître au fur et à mesure. Et donc, tout à l'heure, je parlais d'éléments nouveaux qui intègrent par exemple notre société, par exemple, pour dire ordinateur, c'est un élément nouveau. On va trouver un mot qui permette de nommer ce nouvel élément, mais au contraire, quand un élément disparaît. Donc forcément, on ne va pas non plus, on va perdre progressivement, en fait, les mots qui sont associés à cet élément là. Et donc on a, on sait, au niveau linguistique, par exemple, on a une centaine de mots pour décrire le cocotier,

(01:26:28):

Par exemple, mais il n'y a pas de mots pour dire cocotier, je pense chez les inuits, parce que, au fait, ils ont très peu de rapports avec cet élément là. Donc, mais c'est simplement pour illustrer le fait que forcément, s'il y a un élément de la de diversité diverse disparaît qui est associé à cet élément, là va disparaître. Je vais donner juste un exemple. Mais la pirogue, par exemple, est en train de disparaître de nos pratiques. Il y a juste un endroit en nouvelle-calédonie où c'est préservé, mais dans tous les autres endroits de la nouvelle Calédonie, la pirogue a totalement disparu. Donc, les mots qui sont associés à la pirogue sont en train aussi de disparaître.

Speaker 3 (01:27:19):

So eu yes de définit le dare impact and the climate change and l of Bay city en weich a because for exemple w New New elment at New du donor à to name it you ult to fin New world par exemple, computer in vernaculaire lge it the New but if un élément où vernaculaire langlais, tu have world to dis scribe et cocon ne tre of course i fut going in Paul inuit dans à nos is canaux à which, une most of the pratis in the Island, un people dance à dont à tract can as a associated a can can est-ce qu'il y a des des espèces ou des vraiment qui qui ont disparu ou qui sont en voie disparaître? Qui qui s'interpelle davantage? Qui te sur lesquels tu tu crains vraiment?

Speaker 2 (01:29:59):



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Oh ici par exemple, on a eu certain l'espèce la plus emblématique. C'est le cagou, le cagou nouvelle Calédonie, qui est une espèce vraiment endémique et qui a failli disparaître il y a quelques années, ils ont réussi à les agents de l'environnement de la province sud. On réussit à décupler au fait cet oiseau, mais on a des termes vraiment spécifiques pour nommer en fait le terme cagou d'ailleurs, ça a été francisé, mais c'est un terme en langue vernaculaire. C'est peut-être l'exemple que je peux donner parce qu'il est assez emblématique. C'est un oiseau emblématique de la Calédonie

Speaker 3 (01:30:54):

A un symbole of New calédonien one of it bud it cagou et ni si bud is endémique de New calédonien w ou a ITA trans in french in french you c coming from às to tawa, son n it. Si le l peut le big street en comment qu'est-ce que tu ressens toi en tant que kanak en tant que chercheur linguiste, quand justement ces mots disparaissent, ce que tu peux parler un peu de tes propres émotions.

Speaker 2 (01:32:40):

Je suis attristé forcément parce que c'est le patrimoine humain. Je dire c'est même si c'est un peuple particulier, le peuple kanak qui se doit de préserver les éléments de la nature. Mais on est les gardiens, non seulement pour nous, le peuple Cana, mais on est le gardien pour toute l'humanité d'espèces particulières. Je parlais du cagou, on essaye de préserver le cagou de disparition, mais par en entre nom propre, je veux dire, on a été les canaques ont été placés là d'une certaine manière pour garder ces espèces. Donc, en tout cas, on nous Cana, on se voit comme les garants de cette de cette nature, mais on la protège pas que pour nous, on le protège pour lui prêter tout entière.

Speaker 3 (01:34:00):

What feel is is sadness of course because what is kanak been à wak training to preserve à is l spécial, la cagou it not forem it it it humanity langage divesity a etui les merci fabrice, pour revenir fabre sur la façon le social en fait, en quoi la perte des langues impacte le bien être social. Et et je pense que tu l'as un peu dit tout à l'heure, mais si tu peux le reformuler

Speaker 2 (01:36:37):

Sur le bien-être social

Speaker 3 (01:36:40):

Sur oui, l'entente et sur l'identité aussi la représentation identitaire. Tu parlais de la jeunesse tout à l'heure.

Speaker 2 (01:36:52):

Oui, oui. Alors c'est vrai que en fait en main terme pour ça, on appelle ça la double contradiction et la double contradiction. C'est par exemple, je suis tanach, mais toutes mes pratiques sont plutôt d'une autre culture. Par exemple, dis kanach mais je ne parle plus l'élan kaak je ne pratique plus la coutume tanach, mais je parle plutôt le français et je pratique la culture française. Par contre, personnellement, je vais rejeter la culture française alors que je parle en français et je pratique la culture française. Donc c'est pour ça qu'il y a une double double contradiction parce que je me revendique canaque j'ai tous mes repaires dans la culture kanak au niveau identitaire. J'entends mais par contre, je ne pratique plus les les us et coutumes de cette culture. Par contre, je peux rejeter la culture française. Oui, mais je parle

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en français, je pratique la culture française. Je m'habille français, je mange français. En fait, il y a une double contradiction. Quoi

Speaker 3 (01:38:26):

Ça vers news it to to wa penning nord et New calédonien man the you espie it w. D'abord leur du contradiction it. Tous ces am kanak eu bataille dans no my on k, because of the french

Speaker 1 (01:39:43):

On perspective

Speaker 3 (01:40:20):

Par rapport aux plus anciens. Comment eux y perçoivent cette cette identité par rapport à la cohésion sociale? Fleur disait mais je ne sais pas si tu es d'accord que peut-être les jeunes s'intéressent moins à la culture, mais en tout cas pour les anciens qui eux, ont leur repère quand même dans la culture kanak, comment ça s'exprime cette identité?

Speaker 2 (01:40:56):

Je suis tout à fait d'accord avec ce qu'elle dit dans la mesure où les jeunes vont beaucoup moins vers les les vieux pour recueillir auprès d'eux des informations sur la culture. Ils sont beaucoup plus intéressés au fait par ce qui arrive de l'extérieur. Un exemple simple, c'est que les les vieux, par exemple, voudraient transmettre des contes, des contes kaak. Mais aujourd'hui, ces contes kaak sont en train de disparaître. Et donc moi, par exemple, je travaille dans la littérature orale, j'enseigne à l'université scamp, mais les études, enfin, les les jeunes kanak ne vont plus vers les vieux pour leur demander directement cette, cette connaissance.

Speaker 3 (01:42:07):

Oui, d'accord. So yes a a fabrice by it the big ben to se the coming to s. What is pot in kanak is the ping en storytelling kanak storytelling Aslan a not a in univers un expert in or storytelling transmission parce que vanuatu a un style à cane, un man the us in trest the storytelling the respecte for the elders and what et have to transmitt ça,

Speaker 2 (01:44:05):

Je disais ça, c'est peut être pas une généralité, mais en tout cas sur nouméa là où je travaille en province sud, là où l'urbanité est la plus forte, ils sont beaucoup moins intéressés, peut être sur les îles, les îles et en province nord. Ça va encore parce que au fait dans les milieux tribales, oui, ça se conserve assez bien. Mais ici dans urbanité, c'est difficile.

Speaker 3 (01:44:39):

Oui. Yes it importante ou sil avait minds a you in avery way, New calédonien et mostly in nouméa in n livings life à l the following, différent life youmor and triste est ce qu'il y a des mouvements parmi les jeunes pour préserver certaines langues ou est ce qu'il y a eu des voilà des et des mouvements.

Speaker 2 (01:45:58):

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Ah oui, il y en a beaucoup. Alors le regret que j'ai, c'est que il y a beaucoup d'initiatives, mais ces initiatives individuelles, on va dire, il n'y a pas un vrai mouvement où tout le monde est ensemble pour aller dans le sens.

Speaker 3 (01:46:23):

Initiative individuel level a un collaborative proche community proche wi would mac. Ma more, sa wood have match impact est ce que la colonisation. Cest barrière à justement ces initiatives.

Speaker 2 (01:47:02):

Ben, en fait, on avait plutôt une ans dans le milieu canin qu'on est plutôt communautaire. Donc la principale difficulté que nous avons aujourd'hui, c'est qu'en fait, il y a beaucoup, beaucoup de compétences qui sont réparties. Et donc ça nous aide pas au fait à être unis.

Speaker 3 (01:47:25):

Oui, donc de of manage social life it Willy bas the community level so it it to be United the big

Speaker 4 (01:48:01):

À

Speaker 3 (01:48:18):

Est-ce que le changement climatique a constitue aussi une barrière à ce, à ces initiatives?

Speaker 2 (01:48:31):

Le changement climatique. Je pense pas qu'il est directement, je pense que c'est plutôt en nouvelle-calédonie. On a 1000 feuilles institutionnelles, on a le gouvernement, on a les provinces, on a lamérique, on a le congrès de la nouvelle-calédonie. On a l'état, le vice rectorat, par exemple. On a beaucoup, beaucoup d'acteurs et beaucoup de compétences qui sont répartis entre les acteurs. Et du coup, ça rend difficile au fait, les politiques publiques.

Speaker 3 (01:49:08):

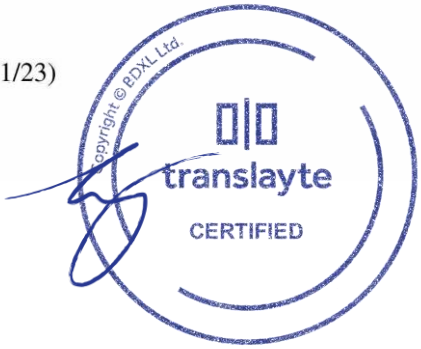
Oui, so it importante to mine in New stra of administration we à community we have à me provinc

Speaker 1 (01:51:17):

It qui

Speaker 3 (01:51:38):

Fabrice un grand grand merci pour ce temps. Et puis ces précieuses informations, fleur disait que en fonction des transcris de la transcription de l'entretien, peut-être qu'elles seront amenées à avoir d'autres questions. Mais comme elles l'ont dit aussi tout à l'heure, si on obtient l'extension que l'on espère, on reviendra en Calédonie. Et à ce moment-là, on aura aussi un autre moment d'échange, on l'espère en de vive voix et en présence. Et à automne, demander si de ton côté, tu avais également d'autres éléments que tu souhaitais partager. Et moi, j'ajouterai peut-être tu as parlé des contes kanak est-ce que tu aurais peut être des à un conte que tu pourrais nous nous envoyer quelque chose parce que on en a demandé plusieurs au sénateur coutumier. Et en fait, ils n'ont pas été tellement en mesure



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de nous en raconter, peut-être par, je sais pas. Et un peu de peut-être je n'avais pas l'impression que c'était par désir de garder mais plutôt par manque de références, peut-être à certains moments, je ne sais pas,

Speaker 2 (01:53:10):

Oui, non, mais je serai, comme je l'ai dit au tout début, ravi de partager tous nos tous nos travaux et particulièrement sur les compte. Je peux en partager aussi avec avec vous les articles dont je parlais au fil de notre conversation. Je peux aussi vous les mettre à disposition et tout le contenu que je peux avoir sur la thématique du lien entre biodiversité et diversité linguistique. Donc ouais, je suis tous les éléments. Par contre, si après coup vous avez d'autres questions, je suis meilleur à l'écrit qu'à l'oral.

Speaker 3 (01:53:59):

D'accord, d'accord. Ok, so fabrice, WIL wien document tour du ring interview. Ils ont saumons uny ou support à une Reding. Tous différents éléments à which, will à highlights link pit between bayo city, un Norwich city et naso à if et cou dans son cher somme à kanak storytelling. Because is bab fut have somme spécifique areas ou youla im to pro provide storytelling ask and si jeune à it is to communi in righting in

Speaker 1 (01:55:34):

Great a just time storytelling.

Speaker 3 (01:56:15):

Ce bon t'a compris un,

Speaker 2 (01:56:18):

Tu enverrai tout ça.

Speaker 3 (01:56:20):

Ce serait fantastique. Merci encore pour ton temps infiniment. J'ai aussi beaucoup appris. C'est un grand plaisir de te retrouver et il y agen à ma fabrice you and oui, oui. Continue à tout Exchange in righting,

Speaker 1 (01:57:09):

Ok. By by.



Exhibit 31

Obligations of States in Respect to Climate Change
(Request for Advisory Opinion)

Expert Statement - Professor David Lipset

12 March 2024

I, David Lipset, Professor of Anthropology at the University of Minnesota, 848 Goodrich Ave. St. Paul, Minnesota, 55015, United States of America, solemnly and sincerely affirms and declares on 12 March, 2024:

BACKGROUND

1. My name is David Lipset and I am a citizen of the United States of America.

2. I am a cultural anthropologist and my current position is Professor of Anthropology at the University of Minnesota, United States of America (USA).

3. I have had longstanding comparative interests in climate change and environmental anthropology, symbolic, political-legal, and psychoanalytic anthropology; masculinity, culture and modernity, marriage, courtship and romance, personhood and identity; and material culture with particular reference to art and the impact of digital technology on society. My CV is attached as Annexure A.

4. I have worked at the mouth of the Sepik River in Papua New Guinea (PNG), with the people of the Murik Lakes for 43 years. The Murik Lakes area is a cluster of saltwater lakes where the Sepik River meets the Bismark sea, in the lower Sepik River Region of PNG.

5. I have conducted research on regional exchange, masculinity, culture and modernity, masculinity and legal institutions, the national political culture of Papua New Guinea, digital technology and society, norms of museum collecting, sea-level rise and resettlement, local-views of climate change. Along with 28 peer reviewed articles, 12 book chapters, and about 100 or so book and video reviews, I have published works on the Murik Lakes people including two books, *Mangrove Man* 1997, *Yabar: The Alienations of Murik Men in Papua New Guinea* 2017, and the following co-edited collections, *Echoes of the Tambaran* 2011, *Mortuary Dialogues* 2016, and *Knots* 2023. I also published *Gregory Bateson: The Legacy of a Scientist* 1980.

6. This expert statement is based on my expertise and experience. I confirm that all the matters in respect to which I express my opinion in this statement are within my competence and

professional knowledge and experience. I have been asked to provide an independent statement, based solely on my expertise and confirm that my conclusions are unbiased, objective and impartial.

IDENTITY, PROPERTY AND CLIMATE CHANGE IN THE MURIK LAKES

7. The Murik Lakes people live on the coast, on narrow barrier beaches that have been subjected to sea-level rise since 2007, more or less. They are a fishing people who rely on wooden dugout canoes that they paddle into a large system of brackish lagoons and mangroves on which they rely for daily subsistence, firewood and housebuilding materials.

8. For the past 15 years or so, their barrier beaches have been regularly breached by storm-events and flooding from the sea during the wet season, from November to May. A great deal of private property has been lost during this time, including land, coconut palms and even cemeteries have been destroyed.

9. They have had to evacuate villages, sometimes during the middle of the night, to take refuge in fishing camps in the mangroves due to storm-events.

10. In 2019, a storm destroyed an entire mile of the Murik coast.

11. This situation has been going on into the present.

12. In February 2024, a friend in the Murik Lakes posted pictures on Facebook, depicting flooding that had extended across several hundred meters of the coconut groves and reached village houses. Permission was granted to provide copies of these photographs from my friend. I recognise this as Darapap village.



Figure 1: Darapap Village, February 2024



Figure 2: Darapap Village, February 2024

13. I have been aware of these events occurring for the last 17 years.

14. I can contrast my observations of the Murik environment between 1981-2001, during which time I made regular visits to the area, to 2014. During this time, I've observed that the sea-levels have been rising and regularly inundating the communities, knocking down coconut palms and, amongst other issues, causing coastal erosion.

15. In the Murik Lakes, if you lose your village, then you lose your identity in society and your community.

16. The damage to the environment and the damage to biodiversity by climate change are relatively straightforward questions, but when people are chased off their old village sites, then they're being chased away from their identities.

17. The people of the Murik Lakes build their houses on land that they have inherited from their ancestors. Land they claim as private property on account of their genealogical relationships to their ancestors. If that land is destroyed, if it's flooded and basically erased, then so too the people's material relationships to their ancestors.

18. From my expertise, I hold the opinion that property is equivalent to culture. There's no difference.

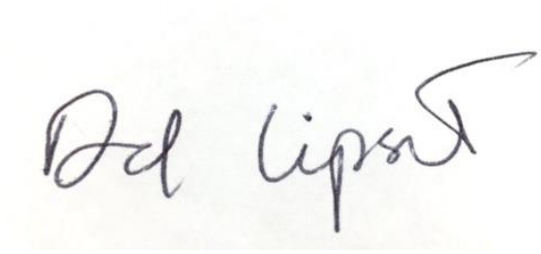
19. If cemeteries are flooded and the bones are just floating around randomly, then nobody knows whose bones they are anymore, much less where their ancestors used to be buried.

20. Since the beginning of the current century, urban-migration has increased dramatically, leaving some of the Murik villages very de-populated. Families have left to go live in the provincial capital, which is located about 60 miles up the coast to the west of the lakes, for employment, and access to services such as health and education. For those who are left,

schools have closed in some rural villages due to flooding of the grounds. This means entire cohorts of village children are being left behind because they do not have access to education.

21. But the vast majority of Murik people, living on their ancestral lands, are stoic about sea-level rise, and they say they don't want to leave. Historically, they have had a longstanding experience with storm events and with coastal erosion; and while they distinguish the contemporary situation of sea-level rise as being extreme and threatening, and putting them in a vulnerable position, they view the prospect of resettlement as a kind of defeat. This is sometimes referred to in some literature as "voluntary immobility."

Respectfully submitted 12 March 2024



Professor David Lipset

Curriculum Vitae (Abbreviated)
March, 2024

DAVID MICHAEL LIPSET

Education

1984 Ph.D. University of California-San Diego

1973 B.A. Harvard College (Social Studies)

Employment

2006- to date, Professor of Anthropology, University of Minnesota

1991-2006 Associate Professor of Anthropology, University of Minnesota

1985-1991 Assistant Professor of Anthropology, University of Minnesota

Research

1981-82 (16 months) Murik Lakes, Papua New Guinea
1986 (6 weeks) North coast, Papua New Guinea (Australian Museum)
1988 (6 weeks) Lower Sepik River region, Papua New Guinea (Australian Museum)
1993 (4 weeks) Murik Lakes (Museum of Cultural History, UCLA)
2001 (4 weeks) Murik Lakes
2008 (4 weeks) Murik Lakes
2010 (4 weeks) Murik Lakes
2011 (4 weeks) Murik Lakes
2012 (4 weeks) Murik Lakes
2014 (4 weeks) Murik Lakes

Scholarship

Books

2017/2019 *Yabar: The Alienations of Murik Men in a Papua New Guinea Modernity*. New York: Palgrave. 2nd ed. Paperback (2019).

1997 *Mangrove Man: Dialogics of Culture in the Sepik Estuary*. Cambridge University Press

1980/1982 *Gregory Bateson: The Legacy of a Scientist*. Boston: Beacon Press. Spanish trans. 1991, Japanese trans. 2004. German trans. in press.

Edited Books

2023 (with Eric K. Silverman) *Knots: Metaphors of the Moral in Ethnography and Social Thought*. London: Routledge.

2017/2018 (with Richard Handler) *Vehicles: Cars, Canoes and other Metaphors of Moral Imagination.* New York: Berghahn Press. 2nd. ed. Paperback

2016/2019 (with Eric K. Silverman) *Mortuary Dialogues: Death and the Reproduction of Moral Community in Pacific Modernities*. New York: Berghahn. 2nd ed. Paperback (2019)

2011 (with Paul Roscoe) *Echoes of the Tambaran: Masculinity, History and the Subject in the Work of Donald F. Tuzin*. Canberra: ANU EPress <http://epress.anu.edu.au/tambaran_citation.html>

Selected Journal Articles (* = refereed)

*2023 "Fishing Camps and Topiary Trees: Place, Affect and Moral Agency in a Papua New Guinea Modernity." *Pacific Studies* 45(1): 23-42.

*2021 "Comedy and other Hollywood Tropes of American Exceptionalism in Hollywood Movies (1990-2011)." *Visual Anthropology* 34:405-422.

*2019 "*Moana* and other Moral Heroes in Hollywood's Pacific." Special Issue edited by Jessica De Largy Healy and Eric Wittersheim. *La Journale de la Societe des Oceanistes* 148: 23-34

*2018 "De-colonized Collecting: The Australian Museum in the Lower Sepik, 1988." *Journale de la Societe des Oceanistes* 146:110-143

*2017a "Masculinity and the Culture of Rising Sea-Levels in a Mangrove Lagoon in Papua New Guinea." Journal of Maritime Studies (MAST) 16(2):1-22. http://www.readcube.com/articles/10.1186/s40152-017-0057-5?author_access_token=8KZFM7c9ptrPUiNp9-2aTm_BpE1tBhCbnbw3BuzI2RO0U33S-2h1uoyQSuwxG-HB26_EK_01OjuOF7HGQxHH9lCXLTDuvj_btZmDOtWr6nU-8TQ31CVAzXD0rRckyPzDkKuqmaAvFut1eL-lU8hQjw%3D%3D (accessed 1/27-17)

*2017b "Mobile Telephones as Public Sphere in Peri-urban Papua New Guinea." Christine Jourdain and Lamont Lindstrom, eds. Theme Issue of *Journale de la Societe des Oceanistes* 144-145: 195-208.

*2016 "Colonial and Postcolonial Museum Collecting in Papua New Guinea." *The Australian Journal of Anthropology* 27: 333-352.

Selected Journal Articles (* = refereed)

*2015a "Hero, Savage, or Equal?:The Moral Personhood of Pacific Islanders in Hollywood Movies." In *From Romance to Reality: Essays on Representations of Pacific Islanders*. Judith Schacter and Nancy Lutkehaus, eds. Special Issue of *Pacific Studies* 38 (1-2): 103-139.

*2015b "On the bridge: Class and the Chronotope of Modern Romance in an American Love Story." *Anthropological Quarterly* 88(1): 163-186.

*2014 "Place in the Anthropocene: A Mangrove Lagoon in Papua New Guinea in the Time of Rising Sea-Levels." *HAU*: *Journal of Ethnographic Theory* 4(3):215-243.

*2013a "Mobail: Moral Ambivalence and the Domesticaion of Mobile Telephones in Peri-Urban Papua New Guinea." *Culture, Theory and Critique* 54(3):335-354.

*2013b "'The New State of Nature": Rising Sea-Levels, Climate Justice and Community-based Adaptations in Papua New Guinea (2008-2011)." *Conservation and Society* 11 (2):144-157.

*2011 "The Tides: Masculinity and the Dialogics of Climate Change in Coastal Papua New Guinea. *Journal of the Royal Anthropological Institute*. (N.S.) 17: 20-43.

*2009a **(**with J. Halvazks) "Smoke as Mirror: Marijuana, the State and Representations of the Nation in Pacific News papers. *Ethnology* 48 (2): 119-138.

*2009b "A Melanesian Pygmalion: Masculine Creativity and Symbolic Castration in a Postcolonial Backwater." *Ethos* 37 (1): 50-77.

*2008 "What Makes a Man? Rereading *Naven* and *The Gender of the Gift*, 2004." *Anthropological Theory* 8(3): 219-232.

*2007 "Women Without Qualities: More Courtship Stories told by Papua New Guinea Youth." *Ethnology* 46 (2): 93-111.

*2006a (theme issue, ed. with J. Halvazks) Marijuana in Papua New Guinea. *Oceania* 76 (3).

*2006b **(**with J. Halvazks) Another Kind of Gold: An Introduction to Marijuana in Papua New Guinea. *Oceania* 76 (3): 209-219.

*2006c "Tobacco, Good and Bad: Prosaics of Marijuana in a Sepik Society." *Oceania* 76 (3): 245-257.

*2005a "Dead Canoes: The Fate of Agency in 20th century Murik Art." *Social Analysis* 49 (1): 109-140.

Selected Journal Articles (* = refereed)

*2005b (with Eric Silverman) "The Moral and the Grotesque: Dialogics of the Body in Two Sepik River Societies (Eastern Iatmul and Murik)." *Journal of Ritual Studies* 19 (2): 1-42.

*2005c "Author and Hero: Rereading *Gregory Bateson: Legacy of a Scientist*, 2004." *Anthropological Quarterly* 78 (4) 901-918.

*2004a "Modernity without Romance? Masculinity and Desire in Courtship Stories Told by Young Papua New Guinean Men." *American Ethnologist*. 31 (2) 205-224.

*2004b "The Trial': A Parody of Law amid the Mockery of Men in Postcolonial Papua New Guinea." *Journal of the Royal Anthropological Institute* (N.S.)10: 63-89.

*1997 (with Kathleen Barlow) "Dialogics of Material Culture: Male and Female in Murik Outrigger Canoes." *American Ethnologist* 24 (1):4-36.

*1994 (with Jolene M. Stritecky) "The Problem of Mute Metaphor: Gender and Kinship in Seaboard Melanesia." *Ethnology* 33:1-20.

*1986 (with M. Meeker and K. Barlow) "Culture, Exchange and Gender: Lessons from the Murik." *Cultural Anthropology* 1:6-74.

Book Chapters

*2023a (with Eric K. Silverman). "Introduction: Knots as moral relationship." In *Knots: Metaphors of the Moral in Ethnography and Social Thought.* London: Routledge, pp.1-12.

*2023b (with Eric K. Silverman). "Canoes, knots and the concept of the person in the Sepik (Papua New Guinea. In *Knots: Metaphors of the Moral in Ethnography and Social Thought.* London: Routledge, pp 124-38.

*2023c (with Eric K. Silverman). "Knots as Moral Reflexivity." In *Knots: Metaphors of the Moral in Ethnography and Social Thought.* London: Routledge, pp. 212-28.

*2022 "Mancunian Realism and Melanesian Anthropology." In *Festschrift for F.G. Bailey*, eds. V. de Munck and E.J. Sobo. Manchester: Manchester University Press, pp. 114-35.

*2018 "A Handset Dangling in a Doorway: Mobile Phone Sharing in a Rural Sepik Village (Papua New Guinea)." In *The Moral Economy of Mobile Phones*. Heather Horst and Robert Foster (eds.). Canberra: ANU E press, pp. 19-38.

Book Chapters

*2017 (with Bridget Henning) "Customary Landowners, Logging Companies and Conservationists in a Decentralized State: The Case of REDD+ and PES in Papua New Guinea." In *The Carbon Fix: Global Equity and the New Environmental Regime*, Shirley Fiske and Stephanie Paladino, eds. London: Routledge, pp. 151-170.

*2016a "The knotted person: changing mortuary rites in the Murik Lakes." IN *Mortuary Dialogues: Death and the Reproduction of Pacific Modernities*. David Lipset and Eric K. Silverman, eds. New York: Berghahn.

*2016b (with Eric Silverman) "Introduction: Mortuary Rites as Identity Politics in the Pacific." IN *Mortuary Dialogues: Death and the Reproduction of Moral Community in Pacific Modernities* s. David Lipset and Eric K. Silverman, eds. New York: Berghahn.

*2014a "Introduction: On Vehicles as Metaphors and Vice Versa." IN *Vehicles: Cars, Canoes and other Metaphors of Moral Imagination*. Pp. 1-20 (D. Lipset and R. Handler, eds.). Berghahn Press.

*2014b "Canoes: A Melanesian Metaphor." IN *Vehicles: Cars, Canoes and other Metaphors ofMoral Imagination*. Pp. 21- 40. (D. Lipset and R. Handler, eds.). Berghahn Press.

*2011a (with Paul Roscoe) "Introduction: Donald F. Tuzin, an Anthropologist's Anthropologist." IN *Echoes of the Tambaran: Masculinity, History and the Subject in the Work of Donald F. Tuzin*. David Lipset and Paul R. Roscoe, eds. Pp.1-21. Canberra: ANU EPress <http://epress.anu.edu.au/tambaran_citation.html>

*2011b. "Skirts-Money-Masks and Chains of Masculine Signification in Postcolonial Papua New Guinea." IN *Echoes of the Tambaran: Masculinity, History and the Subject in the Work of Donald F. Tuzin*. David Lipset and Paul R. Roscoe, eds. Pp. 73-102 Canberra: ANU: EPress http://epress.anu.edu.au/tambaran_citation.html

Under Review

(co-edited with Joshua Bell) Maps in the Pacific. Theme issue in *Oceania*.

(with Joshua Bell) "Maps and Mapping Processes: Introduction to a theme issue" *Oceania*

"GIS for the Ancestors: Mapping the Murik Lakes in the Time of Rising Sea-Levels." *Oceania*

In Progress

Nemot: Place in the time of Sea-Level Rise (book length ms)

"Murik Plates, Ceramic Plates and Alfred Gell's Theory of Art"

"Vernacular Modernities in the Pacific"

A Relevant Social Science: British Anthropology in WW II (book length ms)

Miscellaneous publications

2023 "Two Coasts, One Risk." *Los Angeles Review of Books Quarterly* 40:36-41.

2024 "Margaret Mead wanted to save the world via LSA. The government had other ideas." *Los Angeles Times*, 12 January.

Grants and Awards

2022 Sabbatical Leave, College of Liberal Arts, U. of Minnesota, Spring 2023.
2019 Imagine Fund, College of Liberal Arts, U. of Minnesota, $500
2018 Spring semester, single semester leave, College of Liberal Arts
2014-15 Sabbatical Supplement, College of Liberal Arts
2014-2017 Imagine Fund, College of Liberal Arts, $5000.
2012-2013 Firebird Institute Research Award, $5000 per year
2012b Wilford Research Award, Dept of Anthropology, $5100
2012a Spring semester, single course release, College of Liberal Arts

Teaching

Anth1003W, *Understanding Cultures*, SS08, Sp 07, SS05, Sp05, SS04, Sp04, Sp03, SS02, Sp02, SS01, F00, Sp00, F99, WQ98, Spq98, Wext98, SS96, SpQ96, WQ96, SS95, SSI, WQ93, SS93, SS92, FQ92
Anth1005W, *Introduction to Cultural Diversity and the World System*, F11, F07, F05, F04, F03, Sp03, F02, F01, Sp01
Anth3242w *Hero, Savage or Equal? Images of Nonwestern peoples in Commercial films*. F 19, F 18, F07, F06. F05, F04, F03, F02, F01, F00, F99
Anth 3003 *Approaches to Cultural Anthropology*, F 22, Sp 20, F08, Sp08, F04, F03, F02, F01, F00, SS00, SpQ98, SS98, WQ97,SSII95, WQ93, WQ91
Anth 3004, Great Controversies, F 22, Sp17, Sp 19, Sp 20
Anth 3036 *The Body in Society*, F 08, SS08, May 11, Sp16
Anth 3046w *Anthropology of Romance*, Sp08, F07, Sp05, F16, Sp17, May 18
Anth 3049w, *The Anthropology of Social Class*, Sp 21, F11, Sp16, Sp 19, F 20,
Anth 3242w *Hero, Savage or Equal?: Representations of Non-Western peoples in the Movies*. Sp09, Sp11, F15, F16, F17, F18, F19, F20
Anth 8001 Graduate Seminar: *Foundations of Cultural Anth*. Sp95, F15, F17
Anth 8223 Anth. of Place, F 19

PhD Graduate Advisees:

Paul Spicer 1997
Lori Jervis 1998
Susan Schalge 1996
Eric Silverman 1997
Jamon Halvakzs 2011
Heather O'Leary 2012
Bridget Henning 2016
Vinodh Kutti 2017
Thomas Walton 2018
Steven Kensinger 2019
Rania Madania
Yun Feng

Major Departmental, College and University Service
2020-to date WEC liaison, CLA,
2020-to date, Undergraduate Committee, Anth Dept., U of M
2018-to date, Grant-in-Aid Evaluation Committee, U. of M.
2017-to date, Chair, Gudeman Lecture Committee,, Anth Dept, U of M.
2019-2020, Merit Committee, Anth Dept, U of M
2017-2019, Undergraduate Committee, Member, Anth. Dept. U. of M.
2015-2017, Merit Committee, Anth Dept. U. of M
2009-2010 Chair, New Course Committee (CLA)
2007-10 College of Liberal Arts (CLA) Assembly
2005-10 Director of Undergraduate Studies, Anthropology Dept. , U. of Minnesota
1999-2006 Member Graduate Students Dissertation Fellowships Committee, Graduate School, U. of Minnesota
1994-2000 Director of Graduate Studies, Dept. of Anthropology, U. of Minnesota
1994-2005 Member, CLA Fulbright Scholarship Committee, U. of Minnesota
1997-98 Chair, CLA InfoTech Fees Committee

Exhibit 32

"Obligations of States in Respect to Climate Change
(Request for Advisory Opinion)

Expert Statement of John Aini

13 March 2024

I, John Aini, from Lovongai Island Village, New Ireland Province, Papua New Guinea solemnly affirm and declare on 13 March 2024:

Background:

1. My name is John Aini. I am 59 years old. I was born on 10 October 1964 in Lovongai Village, Lovongai Island, New Ireland Province of Papua New Guinea (PNG) .

2. I am a Papua New Guinean national and I provide a statement to the International Court of Justice on changes to the weather and the environment, the land and the reefs, in the New Ireland Province of PNG and what these changes mean for our *kastoms* (traditional knowledge, worldviews and practises).

3. I am a Maimai—a chief in the Malangan culture in northern New Ireland, an Ainpidik in the Tumbuan Society from southern New Ireland, and a Merengen from my own Tungak culture from Lovongai, (New Hanover) Island, also in New Ireland Province.

4. I am the co-founder of Ailan Awareness, an NGO focused on the strengthening of Indigenous sovereignty with regard to both biological and cultural diversity in New Ireland Province.

5. One of our key projects is the Ranguva Solwara Skul (Ranguva "Saltwater School"), a school that teaches local people both Western and traditional marine conservation and management practices and ultimately, to teach love, care, and respect for a sustainable environment..

6. I have a certificate in tropical fisheries obtained from the National Fisheries College in 1983

7. Although I am just trying my best to safeguard my peoples traditional conservation

knowledge and practices, others have recognised me as one of the foremost experts on indigenous knowledge of marine environments and conservation practice in the Melanesian Pacific. **My CV is attached as Annexure A.**

8. I am the recipient of the Seacology award for international conservation. I have served as a partner to major conservation organisations during their work in PNG, including, The Nature Conservancy, The Wildlife Conservation Society,Global Witness, and Change International.

9. I have contributed to several publications about Indigenous conservation, including, co-authoring "Indigenous Coastal Planning in Papua New Guinea: Self-determination through Revitalization." Theorizing the Contemporary, *Cultural Anthropology*, (2024) with Paige West and others; "Reimagining Conservation Practice: Indigenous Self Determination and Collaboration in Papua New Guinea. *Oryx*. 57(3) (2023) with Paige West, Yolarnie Amepeou and others; " Towards an Ethical Collaborative Practice in Political Ecology". *In* Ariadne Collins, Elia Apostolopoulou and Jessica Hope (eds). *Handbook of Political Ecology.* (Routledge, 2015) with Paige West; and "Learning through Doing: The story of Ailan Awareness's partnerships with coastal communities". In *Resilience Sourcebook: Case Studies of Social-Ecological Resilience in Island Systems.* (New York: American Museum of Natural History, 2014) with Paige West.

10. This expert statement is based on my expertise and experience. My testimony is based on my direct knowledge and my knowledge based on my own *Kastom* (traditional and cultural worldviews, beliefs and practices), which have been passed down to me from my parents, grandparents, great-grandparents, and ancestors as well as from elders throughout New Ireland Province.

11. I have given my testimony in English.

12. This statement uses italics for words in my local language.

INTERCONNECTEDNESS OF EVERYTHING

13. Our connection to the environment is hard to explain, but we have lived with these things since our forefathers, since generations. The connection is there and I may not be explaining well but every day I am living within the interconnectedness of things and I'm part of it every day, sometimes in a big way, other times in a little way. For example, when the sun comes, the tree is already beginning to tell me to come and sit under it. It is providing shade for me.

14. It seems like *samting nating* (inconsequential) in the way we view the world but that is the connection I speak of.

15. We are in communication everyday. We are talking every day.

16. The connectedness that I talk about is the same with other Pacific Islands. It's not that we are physically in communication, it's innate, it's complex.

17. I need a fish because the ocean is just there. It may or may not be asking me to fish, but the connections are there. I will go and get some fish. I don't know how to explain it in English. But that is the way I see our connection with the environment around us.

18. I wish I was born in the era of my ancestors, before colonisation and christianity. If I was born at that time, I would have captured all our knowledge and practices to bring to the present and continue to work with my people in these challenging times of today.

19. My father never taught me these things. My father always prayed with the rosary every evening and I got sick of it. But here, am I, God continues to bless me and my work.

REVITALSING TRADITIONAL CONSERVATION

20. After I obtained my certificate in tropical fisheries, I started working with the PNG National Fisheries Authority . Whilst working with them, as we were assessing marine resource stocks, I witnessed that the numbers of sea cucumbers were going down, number of fish were going down and then also witnessed the destructive, and introduced, fishing methods, such as dynamite, that our people of New Ireland were using.

21. I co-founded Ailan Awareness in 1993 to address this issue. Our work initially involved conducting "road shows" throughout New Ireland about marine conservation and management and facilitating the work of major western environmental NGOs.

22. However, about 15 years ago I came to realise that although I like western science and I know a little bit of western science, the western concept of conservation involved too much top down planning. I witnessed tick boxes becoming the agenda; 10 meetings, tick the box! Sustainability was not there.

23. When I saw this, I went back to discussing with our elders about how they did things in the past to manage, protect and conserve the gifts of nature. I was told by the elders about *Aiveven. Aiveven,* in my own *Tungak* language, means conservation and management and it proposed a more sustainable concept.

24. The *Aiveven* is our conservation approach and the *Vala* and *Ngoto* were our reef resource management tools.

25. In around 2007, Ailan Awareness decided to focus on revitalising our traditional conservation and management practices and adopt an *Aiveven* approach. We have focused

this work on my home and people in Lovongai.

26. I felt that when I was using the western concepts of marine conservation and management, that my approach was almost floating, it did not have roots or take root with the people of New Ireland. When I found our traditional words and concepts, I felt like I now had firm footing, I was standing strong on my own legs, alongside my people, and I knew then that this work that I was doing would bear fruit.

CALLING THE FISH

27. The *Vala* describes a form of socio-spiritual ecological practice whereby people with deep ritual knowledge and experience call on that knowledge, their relationships with their ancestors, their ecological knowledge and their relationships with certain marine species in the work they do to create favourable conditions on a reef.

28. There are specific and widely known legal and spiritual rules for the use of a *Vala* area.

29. A *Vala* is a closure, it can be opened periodically and closed again by the elders with that authority.

30. The *Ngoto* are traditional fish traps or stone weirs.

31. *Pole pole* (pronounced poler poler) are the areas inside *Ngoto*, like a haven, where fish are trapped.

32. Each *Ngoto* has a *pole pole* and each *pole pole* has the potential to be a *Vala* area.

33. When the communities on Lovongai began working with Ailan Awareness to revitalize traditional conservation practices, no one had created a *Ngoto* in over one hundred years.

34. Historically, each marine *Ngoto* was connected to a terrestrial *Ngoto* which could also be subject to the *Vala* process.

35. The general public can see the physical side of these traditional conservation practices but there is also the spiritual side that is often not open to the public to see. But all the things that we do with these practices, are done with the connectedness, with the spirits, and are done before the physical structures are placed out at sea on the coral reef. So that we can *call* the fish.

36. My people never lost their belief in the spirits, that was always there. All of us believe in our ancestors. It was just the way of going about to make the spirits come, for a particular event, to call the fish that had almost been lost.

37. Of the elders who passed on this knowledge to me, there are only 3 remaining. And we are

working with them around the clock to try to keep the knowledge they have.

38. By cultural laws, this knowledge is to be passed down from an uncle (mother's brother) to his nephews. It follows the bloodline and I am not their blood. So it was not easy for me to request and obtain that knowledge from the elders.

39. Since 2008 when we started this work in Lovongai, the village people have been attesting to the return of fish species, the return of turtles and the return of sharks.

CLIMATE CHANGE IMPACTS ON THE REEF

40. I know climate change is here. I know global warming is around, I know ocean acidification is happening.

41. My island, Lovongai, is known to have extensive reefs and although it is true that corals break down the momentum of the surf, at the rate that the sea level is rising, this is no longer true for us. We are experiencing breaching of our shores by frequent and increasingly strong high tides that are breaking our coral reefs.

42. We often see broken corals and marine organisms washed up on our shores after a big high tide. The beach smells for days from the rotting coral and other sea plants and animals.

43. Also when there is ocean acidification, the corals are not growing at the normal rates. It weakens them.

44. And everything is connected. The corals are connected to the fish. The fish are connected to the sea grass, right up to the mangrove, right onto the land.

45. In Lovongai, we are experiencing increased and erratic big high tides. When I was growing up, we only witnessed the big high tide come around November and December of the year. Since I was a small boy this was the case. Now these big high tides are coming anytime they want. And with all the force behind them.

46. When a big high tide comes, just as a high tide, there's no problem. But when it comes with a little movement from an earthquake or storm surge, when it comes with that force, then that's when it impacts our reef and our homes

47. For example, in January 2024, we experienced big high tides where all our corals were thrown here and there and the tides took out the trees which were protecting our shores and then they eroded the sand back onto the sea grass, which does not help, in any way, those ecosystems to sustain life.

48. When we are practising the *Ngoto* and/or the *Vala* conservation methods, when we are calling to the spirits, we speak into lime powder. Lime powder is used for many of our traditional ceremonies. In the past, it was sourced from corals but in order to conserve the coral, we are now using dead giant clams and kina shells.

49. The lime, when it is spoken into, when centered into, it has power. For example, it has the power to make the reef productive or when I'm planting taro, it has the power to make the taro big.

50. The giant clam lives on shallow reef flats. And the kina shell lives in shallow waters too. They are being affected by the reef damage from the big high tides. They are being washed up on our shores to die after big high tides.

51. If we lose the giant clam and the kina shells and, therefore, our source of lime, we lose our ability to carry on these ceremonies, including those essential to our revitalised traditional conservation methods and to our sustenance.

OUR RELATIONSHIPS WITH OUR FORESTS

52. Around 75% of our land has been lost. It's not ours. It has been taken by a controversial business lease benefitting foreign loggers. We have been fighting them in Court and on our lands. The logging has now stopped.

53. There is a replica of the *Ngoto* that we place on our reefs, inland, in the forest.

54. The connection between the *Ngoto* on the reef and the *Ngoto* in our forests is not yet known but we know that there is a relationship.

55. Everything that we do in the sea is from the forest. If I want to call the fish, I collect the leaves and seeds from the forest, and after all the spiritual things are done and words spoken into them, I come and place the leaves and seeds in the *Ngoto* on the reef and the fish come.

56. A tree in the forest can have three to four names. It has a common name. A hidden name, known only to certain clans and their purpose for it. And a third name, for the specific task it can perform. And that’s with all plants and animals depending on what our connections are with them and what they provide for as.

57. So the fight against the logging, among so many reasons, is because what I'm currently doing with my people on the coral reefs will have no meaning, bear no fruit, if the logging doesn’t stop, because the sedimentation and other impacts of the logging will still affect the reef. Because the forest and the reef are connected.

CLIMATE CHANGE IMPACTS ON OUR FORESTS

58. We have sacred places in the forest that are *tambu* (taboo) where only certain people are allowed to go. Within those sacred places there are *masalai* or spirits and there are gifts of abundance. Certain people can see these spirits and are permitted to approach those places and call out to the spirits, requesting gifts from them, and they are blessed by the spirits with gifts from the forest.

59. These *masalai* or spiritual places are increasingly under threat from deforestation and from droughts. The spirits are being disrespected when the forests are clear felled. The spirits are leaving when their homes become uninhabitable.

60. In around 2015 and 2016, there was an extreme El Nino event in PNG and we had a big drought in New Ireland. As a result of the drought, there was a big bush fire in Lovongai and our people physically saw a big snake, a *masalai*, trying to kill the fire to save its home. We knew the snake spirit was there, we felt it, but we had never physically seen it. Only certain elders were able to see it until this point.

61. We understood that it showed itself in its desperation to save its home.

62. There will be more of this happening as our sacred places continue to come under threat.

63. I would be less concerned about climate change if I knew the spirits were there to help us.

64. The rules and systems we had in the past were there to keep everything in balance. I believe that the spirits will continue to do what they have been doing in the past to ensure that we have enough amidst these changes, and the spirits, despite the impacts of climate change, will try to ensure we have some fish and that our gardens bear taro.

65. I see climate change and global warming as nature rebelling against humans. If humans had worked carefully and within the limits of the environment then this would have never happened to us.

66. Same with the spirits, if we continue to disrespect them, if their homes are destroyed, and they leave us, we will not have their blessings. It’s a reciprocal relationship.

OUR LIVELIHOODS AND LANGUAGES

67. With the reefs and forest being destroyed, we are losing our livelihood. Both the forest and the reef will not be able to sustain us. We use both of them to live. When they are gone, that is it.

68. Then there is the connection with our languages. It's an important part of this. When we

lose plants and animals, we lose the words for them, when we lose environments, we lose the terms for them. Then we do not know how a particular plant can help us because we have lost its name. The language would have told us its purpose.

Respectfully submitted on 13 March 2024



John Aini

RESUME

John Aini

Founder and Director, Ailan Awareness, Inc.
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Papua New Guinea
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http://ailanawareness.org/

Born

1964 Lavongai, New Hanover, Papua New Guinea

Education

1983 National Fisheries College of Papua New Guinea, degree in tropical fisheries

Work History

2007 – Present: National Fisheries College, Instructor of "Community Based Marine Management" course

2013 – 2016 President, Local Level Government Lovangai, New Hanover, PNG.

1993 – Present: Director, Ailan Awareness

1990 – 1993: The Nature Conservancy, PNG

1983 – 1990: Department of Primary Industries (National Fisheries Authority)

Keynote Lectures

Co-production of Knowledge: Power and Collaboration, Columbia University, New York City, USA (With Prof. Paige West)

Eleanor Sterling Memorial Lecture, University of Hawai'i, Manoa, USA. (With Prof. Paige West)

5th International Marine Conservation Congress, Kuching, Malaysia, June 25 to 29 (With Prof. Paige West) (2018)

European Political Ecology Network Bi-Annual Conference, POLLEN, Oslo, Norway, June 20 to 22 (With Prof. Paige West) (2018)

Significant Achievements

Named one of 50 people changing the world by The Explorers Club (2022)

Elected, President, Local Level Government, New Hanover (2013)

Awarded the Seacology Prize, San Francisco, California, USA (2012)

Initiated as chief in *Malagan* tradition in Northern New Ireland (*Maimai)* (2011)

Initiated as chief in *Passigan* tradition on New Hanover (2011)

Initiated as chief in *Alenpidlk* tradition in Southern New Ireland (*Tumbuan*) (2011)

Co-founder, Ranguva Solwara Skul, Kavieng, Papua New Guinea (2010)

Founder, Ailan Awareness, Papua New Guinea (1993)

Other Projects and Work

- *Niu Ailan Surf Riders Alliance. 2008 - present*
  Contributed to development of provincial surf management plan to protect reefs and communities in surfing areas, as well as to stimulate the surf tourism industry. Aims to work with communities in vicinity of surf breaks to protect the reefs from over-exploitation.

- *Barnard College and Columbia University 2007 – present*
  Together with colleague Paige West, AA and Aini are working together on many projects, all funded by various sources. This is a long-term collaboration. They have been funded by The Christensen Fund, Columbia University, Barnard College, and The United Nations GEF program.

- *Ocean Watch New Zealand. 2007- present*
  Annual collaboration in conducting stock and coral reef monitoring and distribution of awareness materials.

- *Wildlife Conservation Society. 2005 - present*
  Local consultant in conservation awareness programming design and implementation in NIP. Currently assisting with drafting local level government legislation to limit marine resource extraction for New Hanover.

- *The Nature Conservancy. 1998 - present*
  Identification of spawning aggregation sites and monitoring for TNC management areas in NIP and West New Britain. Conducts awareness workshops in affected communities.

- *The Asian Development Bank. 2005 - 2006*
  Data Collection Specialist and Team Manager for socio-economic surveys and data collection projects under the jointly funded National Fisheries Authority (NFA) and Asian Development Bank (ADB) Coastal Fisheries Management and Development Project." Pioneered community based fisheries and marine resource management and awareness road show.

- *Center for Environmental Law and Community Rights, Pacific Heritage Foundation, and EMTV. 1985 - 2006*
  Working with affected communities and the provincial government, conducted workshops on sustainable logging and land rights in vulnerable communities around the province. Successfully campaigned to expose and halt illegal logging activities in NIP.

- *Queensland Department of Primary Industries. 2000 - 2006*
  Developed a community based seagrass monitoring protocol. Teaches monitoring in schools and villages and works with them to monitor seagrass meadows/health.

- *Reef Check International. 2000-2002*
  Coordinator for PNG 2000-02. Supervised Reef Check monitoring throughout the country and trained partners in monitoring protocols and site identification.

- *Oxford University. 1998*
  Created student volunteer program for Reef Check and supervised participants in monitoring management sites

- *The National Fisheries Authority. 1984 - 2000*
  Consultant and technical assistant to NFA biologists and administrators.

Funding (since 2008)

2023 "Women's Empowerment in New Ireland, Papua New Guinea," Synchronicity Earth. (With Paige West)

2023 "Deepening socio-spiritual and socio-ecological practices in Papua New Guinea" Anonymous Donor. (With Paige West)

2023 "Lovangai Island Greenbelt" (with Paige West and People's Planet Project). Azimuth World Foundation.

2022 "Women's Empowerment in New Ireland, Papua New Guinea," Synchronicity Earth. (With Paige West)

2021 "Strengthening Indigenous Socio-Ecological Sovereignty New Ireland, Papua New Guinea," Anonymous Donor. (With Paige West)

2021 "Strengthening of Indigenous sovereignty in Marine Conservation: Gender and

Representation," Synchronicity Earth. (With Paige West)

2020 "Strengthening Indigenous marine conservation in New Ireland, Papua New Guinea," Anonymous Donor. (With Paige West)

2019 "The Malangan and the Marine: Maintaining Indigenous sovereignty over biocultural conservation in Papua New Guinea" The Christensen Fund. (With Paige West)

2019 "Community empowerment in Island Melanesia", National Geographic. (With Paige West)

2016 "The Malangan and the Marine: Maintaining Indigenous sovereignty over biocultural conservation in Papua New Guinea" The Christensen Fund. (With Paige West)

2014 "Reviving Malangan in New Ireland, Papua New Guinea," US Ambassador's Fund For Cultural Preservation. (With Paige West)

2012 "Value of and in Forest and Oceans in Papua New Guinea" The Christensen Fund. (With Paige West)

2011 "Effecting the Conservation of Biocultural Diversity in Papua New Guinea" The United Nations, Global Environmental Facility. (With Paige West)

2010 "Value of and in Forest and Oceans in Papua New Guinea" The Christensen Fund. (With Paige West)

2009 "Value of and in Forests and Oceans in Papua New Guinea" The Christensen Fund. (With Paige West)

2008 "Value of and in Forests and Oceans in Papua New Guinea." The Christensen Fund. (With Paige West)

Exhibit 33

Obligations of States in Respect to Climate Change
(Request for Advisory Opinion)

Expert Statement of Professor Jamon Halvaksz

March 12, 2024

I, Professor Jamon Halvaksz, Associate Professor of Anthropology at the University of Texas at San Antonio, of One UTSA Blvd, San Antonio, TX 78249, USA, solemnly and sincerely affirm and declare on March 12, 2024:

BACKGROUND

1. My name is Jamon Halvaksz and I am a national of the United States of America.

2. I am an anthropologist and my current role is an Associate Professor of Anthropology at the University of Texas. I have been asked to provide an expert statement based on my research working with Biangai speakers along the Upper Bul Auolo River of Papua of New Guinea.

3. My research attends to the relationship among mining, conservation and agriculture in a context of climate change in Papua New Guinea. My current research focuses on climate change and urbanization in South Texas and Papua New Guinea, in part collaborating with earth scientists and chemical engineers. I have attached my CV at Annexure A of this statement.

4. I have conducted research with Biangai speakers along the Upper Bulolo River of Papua New Guinea. I have been working with these communities for 36 years and conducted 30 months of field research on resource extraction and conservation. I have published works on the Biangai, including *Gardens of Gold: Place-Making in Papua New Guinea* (University of Washington Press), and *Naturalist Histories:* .

5. I have also worked with peri urban and urban communities around the coastal city of Lae, as part of a new project on climate change and urbanization.

6. This expert statement is based on my expertise and experience. I confirm that all the matters in respect to which I express my opinion in this statement are within my

competence and professional knowledge and experience. I have been asked to provide an independent statement, based solely on my expertise and confirm that my conclusions are unbiased, objective and impartial.

THE BIANGAI PEOPLES RELATIONSHIP WITH THEIR LAND

7. The Biangai people live inland, on the upper slopes of the Bulolo Valley in the Morobe Province of PNG. They live in close proximity to the Hidden Valley Gold Mine, an open pit mine owned by the South African company, Harmony Gold. They have been involved in local mining since the 1920s when a gold rush brought hundreds of Australian miners to the streams around the town of Wau, but the open pit mine was a new opportunity, and a different kind of risk. Like other Papua New Guineans, Biangai are part landowners of the mine, sharing 50% rights among the villages of Kwembu and Winima. Watut community of Nauti in the next valley control the other 50%, even though Biangai would say it is all on their land. My work was in Winima and Elauru. Elauru, by contrast, is outside of the mine lease area. So they don't share the same benefits or employment opportunities as their relatives in Winima.

8. For all Biangai, land is important. It is what they commonly call their 'bone,' something that is core to being a person in this world. The Biangai use the word *ngaibilak* to talk about their land. It translates loosely to "cared for" or "caring land". They see it not necessarily as just them caring for the land as caretakers but the land caring for them as both heritage and ancestry. I use the phrase placeperson to mark the depth of these connections because it is hard to distinguish persons from places and vice versa in terms of what it means to be Biangai.

9. There's a beautiful phrase in *tok pisin,* a creole language spoken throughout PNG, which is *han mak* or hand mark. So the mark of someone's hand is still present in a house that they built or in a garden that they cut. It is embedded in a piece of wood or a single nail that one remembers another hammering. That mark becomes very important as an actual, literal connection to the community, to ancestors and to the land. This is seen in how as houses are disassembled pieces

10. The Biangai, for example, will plant yams in the same garden spaces and in the exact same depression in the soil from where their ancestors had planted prior to them. There's a utility to it because these gardens have been planted before, so there's not many stones to clear out. These depressions are returned to plant again, reinforcing that connection among present and past yams, and present and past gardeners. To lose a garden is to lose this history of relationships

11. Yams are important for Biangai, as it marks both a relationship with historical ancestors who are said to have created them from their own flesh, and ongoing genealogies. When you plant a seed yam, it is descended from past gardens and past gardeners in parallel to

your own human genealogy. Yams are kin in this way. And the gardens that they are planted in have been planted before. When a garden is prepared, you can actually see the depression in the land where past yams were harvested.

12. The Biangai have a bilateral kinship system, so both mothers and fathers have land rights. When people marry, the first thought is, " are they bringing land together?" Bringing land together is a way of uniting land and uniting families and uniting ancestors.

13. In recent years, the weather has grown more extreme. As a result, the Biangi have experienced a loss of land from cycles of drought that kills off vegetation and heavy rains displacing these connections.

14. All those things–land, family, and ancestors–get intermingled together in important ways in the land and the gardens. When those things get disturbed, it becomes heart wrenching. When those spaces are lost, it's devastating.

15. You cannot separate a person from the land and you cannot separate that person's identity from the land.

WHAT IT MEANS FOR BIANGAI TO LOSE CONNECTION TO LAND

16. The Biangai are experiencing increased rains and the increased landslides but also extreme drought periods where nothing can grow there.

17. I was with the Biangai people during the El Nino event of 2015 and 2016. The effects of El Nino are complex and non-linear, and for the Biangai, the El Nino event of 2015/2016 brought extreme drought followed by heavy rains. The drought led to extreme food scarcity, grass and forest fires, and water shortages. More importantly, it devastated vegetation that was central for soil stability on steep mountain slopes. As the rains returned, they were so heavy that they washed out coffee gardens and yam gardens and completely devastated them. The gardens were unrecognisable to the point where people just gave up on those spaces and gave up on those connections because they no longer had the *han mak* of that land. They no longer had the visual cues, not clues but "cues" that had been there before that tied them to each other and to ancestral forces in the land.

18. I have been writing recently about two cases of two men who basically lost everything in these rainfalls and floods, which are exacerbated by the mining infrastructure that the state maintains and the drainage systems that have directed all of the new rains and heavy rains down onto these gardens. As a result of that, the gardens get completely overthrown with mud and sediment and they're no longer viable and they die.

19. One man in particular, who is named Yalamu[1], lost a coffee garden that his father had planted. It was the first coffee garden in that area. He also lost yam gardens that his father and grandfather had planted in the past and all of these things that had the *han mak* of his father. Yalamu was so sad and disappointed that he left the village and moved in with relatives in another community. Being separated from his land, as he knew it, was just too much.

20. He had spent most of his time in this area of yams and coffee and sweet potatoes and taro. It was a beautiful spot along the river. His wife and children would be there too, but once the coffee gardens were gone and the yams were gone, he just didn't have any reason to be there. The rains also changed the course of the rivers, and so many of the taro that was planted near the rivers was also washed away.

21. Yalamu told me, "I have no business being here anymore. I have nothing to do and no enjoyment." So he left the village and he went to a village that his son had married into.

22. In 2016, I barely saw him, and a year later he died.

23. He was a very active older man, but he died. His death was premature by Papua New Guinean standards. As a recognized genealogical historian and one of the last men to be taught the knowledge of ancestors, his death had wider implications for organizing marriages, mitigating land disputes, and maintaining connections. And so the loss of the coffee garden was more than just the loss of the coffee garden in the end.

24. Another man that I knew who lost his garden, he likewise faced a slow decline and he passed away shortly after. I have a photo of him sitting in that coffee garden with no trees. It's an entire grove gone. And he's just sitting there with his head down, because it was the first time he had been there after its destruction, and he was trying to absorb the scene of what had happened. It was upsetting.

25. This, what theorists have called "the slow death of climate change", is very apparent throughout Papua New Guinea. Many researchers have spoken about the slow violence of climate change following Rob Nixon's 2011 book. And the violence is real. But what is at stake is not simply violence but actual death and extinction. It is more akin to what medical social science calls slow death. For authors like Berlant, this references the failed infrastructure and persistence of structural power dynamics that disempowers health and well being in marginalized communities. So the slow death from climate change speaks to the ways that drivers of climate and structural power relations make people sacrificable or killable even if slowly. Slow death captures what is really at stake and the urgency of the situation. It is as if we are skipping the violence and turning to the end of things in the Pacific.

[1] Names have been changed for privacy and security

LOSS OF SOCIAL RELATIONSHIPS AND KNOWLEDGE

26. It’s hard to separate the impacts from mining from that of climate change, they’re intertwined. I don't see them as being distinguishable at a certain level because mining is one of the causes and drivers of the issue in the first place.

27. For the Biangai, the Hidden Valley mine has disturbed the forest and forced animals to leave that area and the animals are being found by people who are looking for food. When there's droughts, what few animals are in the forest tend to try and find food beyond the forest because there's no food in the forest for them. So wild pigs and pythons look for water sources closer to the villages, like creeks and stream beds, that are still active and so are the humans. When they meet, it's fatal for one.

28. Beyond the spiritual connection people feel with those animals, there's also just an overall biodiversity risk that isn’t dealt with when mining starts.

29. Sometimes, the hunting lands have been disturbed by the mine and/or by extreme weather events forcing people to rely on lands they're not actually from, or are connected to. So they don’t know the hunting practices and knowledge of that land and its animals. They've lost that connection and the social relationships and when accidents happen to them, it's attributed to the fact that they weren't supposed to be there in the first place. It’s understood that the spirits of the forest are befuddling them and leading them astray.

30. One guy was lost for three days in the forest and people said, “Well, that's because you weren't on your land!” And he's asking, “ how do you know?” And the response is, “Well, you described you were in here and that's not your land. And so you had no rights to be there and the animals that you were following led you astray intentionally.”

31. So there's both this loss of social relationship and loss of knowledge. And then as a result of that, when people do go hunting, they hunt wherever they want.

32. It's a traditional practice of the Biangai to bring everyone with rights in a single garden together to plant yams. But increasingly, they're not planting those places during yam season because of either flooding or drought, or they're not planting those places because there's increased disruption from wild pigs because the wild pigs are coming down to find food when there's no food in the forest due to either flooding or drought. Gardens are lost because of damage to land as I said earlier, but also because they become inhospitable places to plant.

33. When they stop planting in these places that their ancestors planted, the social relationships and knowledge gets disturbed and when they end up going elsewhere to plant, they go to the wrong places. The wrong people also get brought into the garden because no one really understands whose rights are there and where the rights are

anymore. This is increasingly resulting in disputes over who can plant where and who has rights to a particular plot when they plant yams.

DISAPPEARANCE OF A SAFETY NET

34. Even when Biangai people are employed in the cash economy, it doesn't necessarily mean they are ok in times of extreme weather events.

35. A lot of Biangai work for the nearby mining company. During the 2015/2016 El Nino event, the mine shut down. The mine couldn't get potable water up to the site and the mine didn't have reliable electricity. The mine relied on hydroelectric energy and the volume of the dam was not sufficient to produce enough electricity. So the mine shut down.

36. All the Biangai people who worked there had to go home. During this shut down, they are not paid. But they didn't have any food in the village, they didn't have gardens ready for them. They had been spending their weeks working at the mine and then coming home for a 1 week break. So there was no preparation for the mine shutting down and the El Nino event. Even though they had jobs, it didn't matter. They ended up spending a month, during El Nino, relying on Government handouts like everyone else. So the drought had a double impact on these workers.

Respectfully submitted on March 12, 2024



Professor Jamon Halvaksz

January 1, 2014

Dr. Jamon Alex Halvaksz, II

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EDUCATIONAL BACKGROUND

2005 Ph.D. Anthropology, University of Minnesota – Twin Cities

1998 M.A. Anthropology, University of Minnesota – Twin Cities

1994 B.A. (high distinction) Anthropology and French (with honors), University of Kentucky

PROFESSIONAL EXPERIENCE/ ACADEMIC APPOINTMENTS

September 2013 – Present
Associate Professor, Department of Anthropology, University of Texas at San Antonio. San Antonio, Texas.

August 2007 – August 2013
Assistant Professor, Department of Anthropology, University of Texas at San Antonio. San Antonio, Texas.

March 2007 – June 2007
Visiting Assistant Professor, Department of Anthropology, University Cincinnati. Cincinnati, Ohio.

March 2005 – January 2007
Post-Doctoral Fellow, Macmillan Brown Centre for Pacific Studies, University of Canterbury. Christchurch, New Zealand. Two-year appointment. Project entitled: 'Community-Centered Pacific Resource Management Model.'

January 2004 – December 2004
Lecturer, Department of Anthropology, University of Minnesota – Twin Cities. Minneapolis, Minnesota.

August 2003 – December 2004
Lecturer, Anthropology, North Hennepin Community College. Minneapolis, Minnesota.

1995 – 2000 and 2002 – 2003
Teaching Assistant, Department of Anthropology, University of Minnesota – Twin Cities. Minneapolis, Minnesota.

June 1996 – July 1996
Instructor, Connections Program, Saint Paul City School District, Saint Paul, Minnesota. Co-taught summer course in anthropology and archaeology to 9th-12th grade students.

ETHNOGRAPHIC FIELDWORK

30 May 2011 – 5 August 2011
Research in support of the grant entitled: 'Large Scale Mining Development and Agricultural Change in Papua New Guinea.' Elauru and Winima villages, Morobe Province, Papua New Guinea.

30 August 2005 – 28 September 2005
Research related to the opening of Hidden Valley Gold Mine and closure of the Kuper Range Conservation Area. Elauru and Winima villages, Morobe Province, Papua New Guinea.

03 November 2000 – 24 March 2002
Doctoral Dissertation Research entitled: 'Global Desires, Local Debates: Evaluating Conservation and Development Options in the Wau-Bulolo Valley, Papua New Guinea.' Elauru and Winima villages, Morobe Province, Papua New Guinea.

14 January 1998 – 10 March 1998
Internship with Wau Ecology Institute. Assessed incentive projects associated with a locally initiated wildlife management area. Elauru village, Morobe Province, Papua New Guinea.

06 July 1996 – 30 July 1996
Exploratory fieldwork interviewing indigenous environmental activists and officials at Environmental NGOs. Papua New Guinea: Port Moresby, National Capital District; Aitape District, Sandaun Province; and Madang, Madang Province.

ARCHIVAL RESEARCH

Australian War Memorial, Canberra
Library of the Martin Luther Seminary, Lae
Melanesian Archives, University of California, San Diego
National Archives of Australia, Canberra
National Library of Australia, Canberra
National Archives of Papua New Guinea, Lae and Port Moresby
Pacific Collection at the Hamilton Library, University of Hawai'i - Manoa
Smithsonian Institute, Washington DC

HONORS AND AWARDS

Honors Alliance, University of Texas at San Antonio, certificate of appreciation for 'promoting academic integrity, intelligent living, and meaningful learning,' April 2009

National Science Foundation, Summer Institute for Research Design in Cultural Anthropology.

Selected Participant. Russ Bernard and Jeffrey Johnson, Directors. University of California, Irvine. August 1998.

Oswald Research and Creativity Award, Social Science Category, University of Kentucky
Second Place in undergraduate research, for the paper entitled: 'The Appalachian as Practice.' 1994.

PUBLICATIONS

Dissertation

2005 Halvaksz, Jamon. *Re-Imagining Biangai Environments: Mining and Conservation in the Wau Bulolo Valley, Papua New Guinea*. Unpublished Ph.D. Thesis. Department of Anthropology, University of Minnesota – Twin Cities. Minneapolis, Minnesota.

Books, Edited Volumes, Journal Special Issues – Refereed

2006 Lipset, David and Jamon Halvaksz, Guest Editors. Marijuana in Papua New Guinea. A special issue of *Oceania* 76 (3).

Articles in Peer-Reviewed Journals, Edited Volumes – Refereed

n.d Halvaksz, Jamon. 'Forests of Gold: From Mining to Logging (and Back Again).' In, *Forests of Oceania: Environmental Histories, Present Concerns and Future Possibilities*. J. Bell and P. West (eds). Accepted with revision by Australian National University Press.

2013 Halvaksz, Jamon. 'Mining the Forest: Epical and Novelesque Boundaries along the Upper Bulolo' In *Uncomfortable Bedfellows?: Exploring the Contradictory Natures of the Ecotourism/Extraction Nexus*. N. Davidov and B. Buscher (eds). Routledge.

2013 Halvaksz, Jamon. 'The Taste of Public Places: *Terroir* in Papua New Guinea's emerging nation.' accepted for publication by *Anthropological Forum* 23(2):142-157

2010 Halvaksz, Jamon. 'Souveraineté mélanésienne: les défis de l'intégrité régionale en Papouasie-Nouvelle-Guinée.' traduction par Natacha Gagné et Marie Salaün. *Visages de la souveraineté en Océanie*. Natacha Gagné and Marie Salaün, Editors. *Cahiers du Pacifique Sud #6,* Harmattan: Paris.

2010 Halvaksz, Jamon. 'The Photographic Assemblage: Duration, history and photography in Papua New Guinea.' *Anthropology and History* 21(4): 411-429.

2009 Lipset, David and Jamon Halvaksz. 'Smoke as Mirror: Marijuana and Representations of the Nation in Pacific Newspapers.' *Ethnology* 48(2): 119-138 [issue delayed by journal, published in August 2010]

2008 Halvaksz, Jamon. 'Photographing Spirits: Indigenous Photography, Ancestors and the Environment in Papua New Guinea.' As part of a special issue, *Haunting Images: The affective power of photography*. Ben Smith and Richard Vokes, Guest Editors. *Visual Anthropology* 21(4): 310-326.

2008 Halvaksz, Jamon and Heather Young-Leslie. 'Thinking Ecographically: Places, Ecographers and Environmentalism.' *Nature+Culture* 3(2): 183-205.

2008 Halvaksz, Jamon. 'Whose Closure?: Appearances, Temporality and Mineral Extraction along the Upper Bulolo River, Papua New Guinea.' *Journal of the Royal Anthropological Institute* 14: 21-37.

2007 Halvaksz, Jamon. 'Cannabis and Fantasies of Development: Revaluing Relations through Land in Rural Papua New Guinea.' *The Australian Journal of Anthropology* 18(1): 56-71.

2006 Halvaksz, Jamon and David Lipset. 'Another Kind of Gold: An Introduction to Marijuana in Papua New Guinea.' As part of a special issue, Marijuana in Papua New Guinea, David Lipset and Jamon Halvaksz, Guest Editors. *Oceania* 76(3): 209-219.

2006 Halvaksz, Jamon. 'Drug Bodies: Relations with Substances.' As part of a special issue, Marijuana in Papua New Guinea, David Lipset and Jamon Halvaksz, Guest Editors. *Oceania* 76(3): 235-244.

2006 Halvaksz, Jamon. 'Becoming 'local tourists': Travel, landscapes and identity in Papua New Guinea.' *Tourist Studies* 6(2): 99-117.

2006 Halvaksz, Jamon. 'Cannibalistic Imaginaries: Mining the Natural and Social Body in Papua New Guinea.' As part of a special issue: Melanesian Mining Modernities, Paige West, and Martha Macintyre, Guest Editors. *The Contemporary Pacific: A Journal of Island Affairs* 18(2): 335-359.

2003 Halvaksz, Jamon. 'Singing about the Land among the Biangai.' *Oceania* 7(3): 153-169.

1997 Halvaksz, Jamon and Elizabeth Hochberg. 'Logging the Southwestern Pacific: Bibliographic Review Essay.' As part of a special issue: Logging in the Southwestern Pacific, Kathleen Barlow and Steven Winduo, Guest Editors. *The Contemporary Pacific: A Journal of Island Affairs* 9(1): 167-193.

Conference Proceedings – Non-Refereed

2007 Halvaksz, Jamon. 'Moral Epistemologies: Biangai Pathways to Building Knowledge.' In *Dreadlocks Vaka-Vuku, Special Issue: Proceedings of the Pacific Epistemologies Conference 2006*. M. Prasad (ed.), Pacific Writers Forum, The Department of Literature and Language, University of the South Pacific.

2006 Halvaksz, Jamon. 'Marijuana in Papua New Guinea: Understanding Rural Consumption and Production.' In Pamela Thomas (ed.), *'Illicit Drugs and Development: Critical Issues for Asia and the Pacific.' Selected papers from a symposium held in Canberra, Australia, 15-16 August 2005*. *Development Bulletin*, no. 69, February 2006.

Reviews, Letters and Reports – Non-Refereed

2013 Halvaksz, Jamon. Book Review of *From Modern Production to Imagined Primitive: The Social World of Coffee from Papua New Guinea,* by Paige West. Duke University Press. *Anthropological Forum*. published on-line May 7, 2013

2012 Halvaksz, Jamon. Book Review of *Beyond the Sacred Forest: Complicating Conservation in Southeast Asia,* edited by Michael Dove, Percy Sajise, and Amity Doolittle. Duke University Press. *Oceania* 82(2). [Publication delayed to 2013]

2012 Halvaksz, Jamon. 'Two New Films from New Ireland.' Film review of *Rubber's Kastom* and *Stori Tambuna: Ancestor's Tales*, directed by Paul Wolffram. *Visual Anthropology* 25(5): 452-454.

2010 Halvaksz, Jamon. Extended Book Review of *Reverse Anthropology: Indigenous Analysis of Social and Environmental Relations in New Guinea* by Stuart Kirsch and *Conservation is our Government Now: The Politics of Ecology in Papua New Guinea* by Paige West. Book Review Forum. *Pacific Studies* 33(1): 59-67.

2009 Halvaksz, Jamon. Book review of *The Battle for Wau: New Guinea's Frontline, 1942-1943*, by Phillip Bradley, Cambridge University Press. *The National* (Papua New Guinea), *Weekender Supplement*, April 24.

2008 Halvaksz, Jamon. Book review of *Embodying modernity and post-modernity: Ritual, praxis, and social change in Melanesia*, edited by Sandra Bamford. Carolina Academic Press. *Anthropological Forum* 18(2): 189-191.

2008 Halvaksz, Jamon. Book review of *Biology Unmoored: Melanesian reflections on life and biotechnology*, by Sandra Bamford. University of California Press. *Anthropological Forum* 18(2): 191-193.

2007 Halvaksz, Jamon. "At the Foreshore of Community-Centered Pacific Resource Management Models." Report submitted to the Macmillan Brown Centre for Pacific Studies. January.

2005 Halvaksz, Jamon. Book Review of *Landscape, Memory and History: Anthropological Perspectives*, edited by Andrew Strathern and Pamela Stewart. Pluto Press. *The Contemporary Pacific: A Journal of Island Affairs* 17(2): 473-475.

2005 Halvaksz, Jamon. 'Agriculture under the gold mine: assessing the potential impact of Hidden Valley.' Unpublished report provided to Morobe Goldfields, Ltd. and Unitech faculty, Morobe Province, Papua New Guinea.

2002 Halvaksz, Jamon. 'Research Report: Gold Mining and Conservation in the Wau-Bulolo Valley, Papua New Guinea.' *Anthropology and the Environment Column, Anthropology Newsletter* 43(9): 42.

1999 Halvaksz, Jamon. 'Intern Fieldwork Experience in Papua New Guinea.' *Student Column, Society for Applied Anthropology Newsletter* January, pp. 6-7.

1998 Halvaksz, Jamon. 'Kuper Range Wildlife Management Area: Report on Fieldwork in Elauru, Morobe Province.' Unpublished research report for the Wau Ecology Institute, Morobe Province, Papua New Guinea.

1998 Halvaksz, Jamon and Emily Weglian. 'Anthropology Education is Never Too Early.' *Projecting Points, Anthropology Newsletter* 39(6): 17.

Manuscripts

Under Review

n.d. Halvaksz, Jamon. 'People and Places: Viewing Biangai landscapes through indigenous photography.' In *Photographing Pacific Islanders,* K. Creely and E. Silverman, eds. Australia National University Press

Currently in Preparation

n.d. Halvaksz, Jamon. *Mining Nature, Mining Culture: resource extraction and conservation along the Upper Bulolo River, Papua New Guinea.* Book length manuscript, in preparation.

n.d. Halvaksz, Jamon. *Biangai Ngago: A Biangai Dictionary.* Intended to be a self-published contribution to the Biangai communities.

SCHOLARLY PRESENTATIONS

Conference Sessions Organized / Chaired

2013 Bell, Joshua and Jamon Halvaksz, Co-Organizers/ Co-Chairs. Naturalist Histories, Making Nature in Oceania. Working Session, Annual Meeting of the Association for Social Anthropology in Oceania, 7-11 February Portland, Oregon

2012 Bell, Joshua and Jamon Halvaksz, Co-Organizers/ Co-Chairs. Naturalist Histories, Making Nature in Oceania. Informal Session, Annual Meeting of the Association for Social Anthropology in Oceania, 7-11 February Portland, Oregon

2008 Halvaksz, Jamon. Chair. 'Human-Environment Relations and Development Regimes: Case studies in conflict and commoditization.' Annual Meeting of the American Anthropological Association, 26-30 November. San Francisco, California.

2007 Halvaksz, Jamon. Chair. Heather Young Leslie. Organizer. 'Thinking Ecographically: Individuals and Human-Animal-Environment Relations.' Joint meetings of the Canadian Anthropology Society / La Société Canadienne d'Anthropologie and American Ethnological Society. 8 - 12 May. Toronto, Canada

2005 Halvaksz, Jamon, and David Lipset. Co-Organizers. 'An Ambivalent Commodity: Marijuana in the Contemporary Pacific Islands.' 104th Annual Meeting of the American Anthropological Association, 30 November - 4 December. Washington DC.

2004 Halvaksz, Jamon, and David Lipset. Co-Organizers. 'An Ambivalent Commodity: Marijuana in the Contemporary Pacific Islands.' Informal Session. Annual Meeting of the Association for Social Anthropology in Oceania, 24 - 28 February. Salem, Massachusetts.

2003 Halvaksz, Jamon, and Jennifer Stampe. Co-Organizers / Co-Chairs. 'The Tourism Trap: Broadening the Contemporary Debate.' 102nd Annual Meeting of the American Anthropology Association, 19-23 November. Chicago, Illinois.

2003 Halvaksz, Jamon, and Susan Schalge. Co-Organizers. 'Community and Economy: Engaging Locality through Economic Practices.' Annual Meeting of the Central States Anthropological Society, 17-19 April. Louisville, Kentucky.

1999 Halvaksz, Jamon, and Paige West. Co-Organizers / Co-Chairs. 'Taking Time to Communicate: Anthropology and Conservation in Southeast Asia and the Pacific.' Invited session (Anthropology and the Environment Section). 98th Annual Meeting of the American Anthropology Association, 17 - 21 November. Chicago, Illinois.

1997 Halvaksz, Jamon. Organizer. 'Broadening Anthropology: Input and Outreach.' Invited session (Archaeology Division). 96th Annual Meeting of the American Anthropology Association, 19 - 23 November. Washington, DC.

Papers presented at Conferences – Refereed

2013 'We Practice What We Preach': The Rise and Fall of the Wau Ecology Institute.' As part of the Working Session, 'Naturalist Histories: Making Nature in Oceania' Annual Meeting of the Association for Social Anthropology in Oceania, 6-9 February, San Antonio, Texas.

2013 'People, Places and Time in Biangai photography.' As part of the Symposium, 'Photographing Pacific Islanders' Annual Meeting of the Association for Social Anthropology in Oceania, 6-9 February, San Antonio, Texas.

2012 'Accumulating Knowledge, Dispossessing Relations' As part of the session, 'New Dispossessions: Imagining non-material orgins for accumulation. Annual Meeting of the American Anthropology Association, 14-18 November, San Francisco, California.

2012 'People, Places and Time in Biangai photography.' As part of the Working Session, 'Photographing Pacific Islanders' Annual Meeting of the Association for Social Anthropology in Oceania, 7-11 February, Portland, Oregon.

2011 'Who does a gardener touch when they touch a yam?: The Ecological Work Biangai Gardens.' As part of the session, 'The Labor of Ecologies: Exploring the Conceptual Work of "Ecology."' Annual Meeting of the American Anthropological Association. 16-20 November. Montreal, QC Canada.

2011 'People and Places: Viewing Biangai landscapes through indigenous photography.' As part of the Informal Session, 'Photographing Pacific Islanders' Annual Meeting of the Association for Social Anthropology in Oceania, 8-12 February Honolulu Hawai'i.

2011 'Forests of Gold: From Mining to Logging (and Back Again).' As part of the symposium, 'Forests of Oceania: Environmental Histories, Present Concerns and Future Possibilities' Annual Meeting of the Association for Social Anthropology in Oceania, 8-12 February Honolulu Hawai'i.

2010 'Forests of Gold: From Mining to Logging (and Back Again).' As part of the working session, 'Forests of Oceania: Environmental Histories, Present Concerns and Future Possibilities' Annual Meeting of the Association for Social Anthropology in Oceania, 9-13 February. Alexandria, Virginia

2009 'The *Gris* of Public Places: *Terroir* in Papua New Guinea's emerging nation.' As part of the session, 'Re-place-ing the local: Anthropological engagements with terroir. Annual Meeting of the American Anthropological Association. 2-6 December. Philadelphia, Pennsylvania.

2008 'Agriculture, Conservation and Mining: Transforming human-environment relations along the Upper Bulolo, Papua New Guinea.' As part of the session, 'Human-Environment Relations and Development Regimes: Case studies in conflict and commoditization.' Annual Meeting of the American Anthropological Association, 26-30 November. San Francisco, California.

2007 'Credible Boundaries: Networks of conservation, entomology and community' As part of the session 'Arenas, Audiences and Knowledge: Regimes of Credibility in Environmental Politics.' Annual Meeting of the American Anthropological Association, 28 November – 2 December. Washington, D.C.

2007 Young Leslie, Heather and Jamon Halvaksz. 'Ecographic Imaginaries; Folding Place, Possibility and Potentiality' As part of the session, 'Thinking Ecographically.' Joint meetings of the Canadian Anthropology Society / La Société Canadienne d'Anthropologie and American Ethnological Society, May. Toronto, Canada.

2006 'Entomological Regionalism: the Role of Insects in Pacific Islands Regional Associations.' Annual Meetings of the Pacific History Association, 8 – 10 December. Dunedin, New Zealand.

2006 'Butterflies, Beetles and the Biangai: Insect values in Papua New Guinea and the Pacific.' As part of the session, 'Animal Salvation: Redefining the Moral Landscapes of Protected Areas.' 105th Annual Meeting of the American Anthropological Association, 15 - 19 November. San Jose, California.

2006 'Photographing Spirits: Indigenous Photography, Ancestors and the Environment in Papua New Guinea.' As part of the panel, 'Haunting Images: The affective power of photography.' Annual Meeting of the Australian Anthropology Society, 26-29 September. Cairns, Australia.

2006 'Moral Epistemologies: Biangai pathways to knowledge.' As part of the panel, 'Residence and Identity.' Vaka Vuku: Navigating Knowledge, Pacific Epistemologies Conference, University of the South Pacific, 3 - 7 July. Suva, Fiji.

2006 'Whose Closure?: Scratching the ground for gold.' Presented in abstentia. As part of the working session, 'The Social Impact of Mine Closure in the Pacific: Past Experiences and Anticipated Futures.' Annual Meeting of the Association for Social Anthropology in Oceania, 7 - 11 February. San Diego, California.

2005 'Marijuana and Local Meaning: Relations with Substance.' Presented in abstentia. As part of the session, 'An Ambivalent Commodity: Marijuana in the Contemporary Pacific Islands.' 104th Annual Meeting of the American Anthropological Association, 30 November - 4 December. Washington, DC.

2003 'Becoming Local Tourists: Travel, Personhood, and Modernity in Papua New Guinea.' As part of the session, 'The Tourism Trap: Broadening the Contemporary Debate.' 102nd Annual Meeting of the American Anthropology Association, 19 - 23 November. Chicago, Illinois.

2003 'Cutting Our Own Trees to Build Our Own Homes.' As part of the session, 'Community and Economy: Engaging Locality through Economic Practices.' Annual Meeting of the Central States Anthropological Society, 17 - 19 April. Louisville, Kentucky.

2003 'Why Biangai Forests Should Mean Biangai Forestry.' As part of the session, 'Managing Trees for Sustainable Development: Issues in Community Forestry and Agroforestry.' Joint Meeting of the Society For Applied Anthropology and Political Ecology Society, 19 - 23 March. Portland, Oregon.

2003 "It's not the same as before': Relationality and Gold Mining in the Wau-Bulolo Valley, Papua New Guinea.' As part of the working session, 'Social Life and Mining in the Pacific.' Annual Meeting of the Association for Social Anthropology in Oceania, 11 - 15 February. Vancouver, British Columbia.

2002 'Local Meaning and Political Ecology: Singing About the Land Among the Biangai, Morobe Province, Papua New Guinea.' As part of the session, 'Sustainability and Conservation of Common Resources.' 101st Annual Meeting of the American Anthropology Association, 20 - 24 November. New Orleans, Louisiana.

2000 'Sustainable Research: Ethical Considerations for Research among the Biangai of Papua New Guinea.' As part of the session 'Doing an Applied Anthropology Dissertation: Experiences from the Field and Academia.' Annual Meeting of the Society for Applied Anthropology, 21 - 26 March. San Francisco, California.

1999 'Sustaining Conservation, Sustaining Conversations in the Wau-Bulolo Valley, Papua New Guinea.' As part of the Invited Session (Anthropology & Environment), 'Taking Time to Communicate: Anthropology and Conservation in South East Asia and the Pacific.' 98th Annual Meeting of the American Anthropology Association, 17 - 21 November. Chicago, Illinois.

1997 Halvaksz, Jamon and Emily Weglian. 'Anthropology's (Failed?) Public Voice.' As part of the Invited Session (Archaeology Division), 'Broadening Anthropology: Input and Outreach.' 96th Annual Meeting of the American Anthropology Association, 19 - 23 November. Washington, DC.

Papers presented at Conferences – Non-Refereed

2000 'Sustaining Conservation, Sustaining Conversations: The Politics of Resource Development in the Wau-Bulolo Valley, Papua New Guinea.' 22nd Annual Undergraduate Conference, Department of Anthropology, University of Minnesota. Deep Portage, Minnesota.

1998 'Conservation as Development: Elauru Landowner Attitudes Toward the Establishment of a Wildlife Management Area.' 20th Annual Undergraduate Conference, Department of Anthropology, University of Minnesota. Itasca, Minnesota.

1996 Halvaksz, Jamon, Kathleen Saunders and David Weinlick. 'Where No One Has Gone Before: The Gender of Star Trek.' 18th Annual Undergraduate Conference, Department of Anthropology, University of Minnesota. Itasca, Minnesota.

Papers presented as Invited Presentations – Non-Refereed

2009 'Appearance, Duration and Desire: The Life Stories of Occasional Miners.' Mining Across Generations: Artisanal and Small-Scale Mining Conference. Invited Participant. Centre for Research in the Arts, Social Sciences and Humanities, University of Cambridge 15-17. Cambridge, England.

2005 'Agriculture Under the Gold Mine: Assessing the Potential Impact of Hidden Valley.' Invited Speaker, Department of Language and Communication, The Papua New Guinea University of Technology. 23 September. Lae, Papua New Guinea.

2005 Invited Panelist for the session, 'The Impact of Drugs on Development: The Drugs-Development Nexus.' As part of the conference, 'Illicit Drugs and Development: Critical Issues for Asia and the Pacific,' organized by the Development Studies Network, Australia National University, 15 - 17 August. Canberra, Australia.

2005 'Conservation or Mining? A Development Dilemma.' Presentation to the University of the Third Age, University of Canterbury, Okeover Chapter. 5 August. Christchurch, New Zealand.

2004 'Environmental Imaginaries: Colonialism, Gold and Cannibalism.' Invited Speaker, Department of Anthropology, Hamline University. 29 April. Saint Paul, Minnesota.

Papers presented at Seminars and Workshops – Non-Refereed

2010 'Cultural Considerations' Teaching Assistant Seminar: Teaching Excellence, Advancement and Mentoring Center. University of Texas at San Antonio. 8 January. San Antonio Texas.

2008 'Cultural Considerations' Teaching Assistant Seminar: Teaching Excellence, Advancement and Mentoring Center. University of Texas at San Antonio. 23 August. San Antonio Texas.

2006 'Butterflies, Beetles and the Biangai: Insect values in Papua New Guinea and the Pacific.' Informal Seminar, Macmillan Brown Centre for Pacific Studies, University of Canterbury. 2 November. Christchurch, New Zealand.

2006 'Taking Pictures of Pacific Persons, Practices and Places: Waitman and Lokal.' Macmillan Brown Seminar, Macmillan Brown Centre for Pacific Studies, University of Canterbury. 14 September. Christchurch, New Zealand.

2005 'Drug Bodies and Fantasies of Development in Papua New Guinea.' Macmillan Brown Seminar. Macmillan Brown Centre for Pacific Studies, University of Canterbury. 13 October. Christchurch, New Zealand.

2005 'Re-imagining Biangai Environments: Mining and Conservation in the Wau-Bulolo Valley, Papua New Guinea.' Macmillan Brown Seminar. Macmillan Brown Centre for Pacific Studies, University of Canterbury. 19 May. Christchurch, New Zealand.

2002 'Singing About the Land Among the Biangai, Morobe Province, Papua New Guinea.' Department of Anthropology Workshop. Department of Anthropology, University of Minnesota. Minneapolis, Minnesota.

Other Media

2005 Halvaksz, Jamon. Interviewed by Jemina Garrett on Illicit Drugs in the Pacific, *Pacific Beat – On the Mat,* Australian Broadcasting Corporation, 16 August 2005.

GRANTS AND FELLOWSHIPS

Received

Wenner-Gren Foundation for Anthropological Research,
To aid research entitled, 'Large Scale Mining Development and Agricultural Change in Papua New Guinea.' 2014-2016. ($19,910.00)

Faculty Development Leave, University of Texas at San Antonio
One semester leave to complete the book, 'Mining Nature, Mining Culture.' Spring 2014.

COLFA Research Grant, University of Texas at San Antonio
To support archival research at the Smithsonian Institute, Washington DC. July 2013 2,000.00.

Mexico Center Research Fellowship (Faculty Portion), University of Texas at San Antonio
Co-authored with Marissa Shaver. Summer 2013. ($750.00-faculty portion, 2,500.00-student portion).

Tenure-Trac Research Award Competition, University of Texas at San Antonio.
To aid research entitled, 'Large Scale Mining Development and Agricultural Change in Papua New Guinea.' September 2010-August 2011. ($21,994.00)

Graduate Research and Partnership Program, University of Minnesota.
Co-authored with Professor David Lipset. To aid archival research and writing on a project entitled, 'An Ambiguous Commodity: Marijuana in the Contemporary Pacific Islands,' June – August 2004. ($6,270.00)

Friends of the Library Travel Grant, University of California, San Diego
To aid archival research at the Melanesian Archives, University of California, San Diego. August 2003. ($500.00)

Doctoral Dissertation Fellowship, Graduate School, University of Minnesota
To aid in the writing of the dissertation, 'Re-imagining Biangai Environments: Mining and Conservation in the Wau-Bulolo Valley, Papua New Guinea.' 2002 – 2003 academic year. ($14,000.00 plus tuition waiver)

Wenner-Gren Foundation for Anthropological Research, GR.6724
To aid research entitled, 'Global Desires, Local Debates: Evaluating Conservation and Development Options in the Wau-Bulolo Valley, Papua New Guinea.' November 2000 – March 2002. ($11,370.00)

National Science Foundation, Cultural Anthropology Program, BCS - 0003927
To aid research entitled, 'Global Desires, Local Debates: Evaluating Conservation and Development Options in the Wau-Bulolo Valley, Papua New Guinea.' November 2000 – March 2002. ($4,000.00)

Graduate School, University of Minnesota, Grants for Research Abroad
To aid research entitled, 'Global Desires, Local Debates: Evaluating Conservation and Development Options in the Wau-Bulolo Valley, Papua New Guinea.' November 2000 – March 2002. ($2,500.00)

Department of Anthropology, University of Minnesota
'Pre-dissertation Research Block Grant' in support of an internship with the Wau Ecology Institute in Papua New Guinea. 1998. ($2,600.00)

Institute of International Studies and Programs, University of Minnesota
'President's International Internship Grant' in support of an internship with the Wau Ecology Institute in Papua New Guinea. 1998. ($2,000.00)

Department of Anthropology, University of Minnesota
'Pre-Dissertation Research Block Grant' in support of exploratory research in Papua New Guinea. 1996. ($2,000.00)

College of Liberal Arts Special Events Fund, University of Minnesota
In support of the Anthropology and Archaeology Speakers' Bureau, grant co-authored with Terry Fingerhut and Kathleen Saunders. 1995. ($700.00)

Department of Anthropology, University of Minnesota, Single Quarter/Semester Tuition Block Grants. Spring 1998, Winter 1998, Winter 1995 and Fall 1994.

TEACHING

Courses Taught at the University of Texas at San Antonio, 2007 - Present

Undergraduate courses, lower division:

Introduction to Anthropology
Introduction to Physical Anthropology
Introduction to Cultural Anthropology

Undergraduate courses, upper division:

Anthropology and the Environment (previously titled *Cultural Ecology*)
Contemporary Pacific
Culture in Theory and Practice
Media, Power and Public Culture

Graduate courses:

Ecological Anthropology
Field Research Methods in Cultural Anthropology
Human Animal Relations
Anthropology and Science

Courses Taught at the University of Cincinnati, Spring 2007

Undergraduate courses, lower division:

Introduction to Cultural Anthropology

Graduate courses:

Contemporary Anthropological Theory

Courses Taught at North Hennepin Community College, Sept. 2003 - Dec. 2004

Undergraduate courses:

Introduction to Cultural Anthropology
Introduction to Physical Anthropology, Archaeology & *Prehistory*

Courses Taught at the University of Minnesota, 1995-2004

Undergraduate courses, upper division:

Cultural Anthropology
Culture Theory

As a Teaching Assistant/ Lab Instructor

Human Evolution
Human Origins
Understanding Culture
Pacific Island Societies
Cultural Anthropology
Indians of the Southwest

STUDENT MENTORING

PhD Advisor

DelliCarpini, Rebecca (Admitted 2013)
Pirkey, Will (Advanced to candidacy 2011)
Shaver, Marissa (Admitted 2012)

PhD Committees

Pezzia, Carla (PhD completed Spring 2013)
Edgin, Rebecca
Ellwinger, Amanda (completed comprehensive examines Spring 2013)
Bratsch, Sara (completed comprehensive examines Summer 2013)
Figueroa, Antonia
Melo, Milena
Roberts, Jason (completed comprehensive examines Spring 2013)

M.A. Advisor

Fischer, Matthew – MS in Environmental Science (started Fall 2013)
Holguin, Jessica (started Fall 2013)
Staubin, Mathew (completed MA proposal Summer 2013)
Torpie-Sweterlitsch, Jennifer (completed MA proposal Spring 2013)
Vryn, Michelle (MA awarded Spring 2012)

M.A. Committees

Benavidez, Victoria
Birch, Trisha
Collins, Amber (MA awarded Spring 2013)
Decristoforo, Maria (completed comp. exams)
George, Brandy (MA awarded Summer 2013)
Pople, Elizabeth (MA awarded Summer 2012)
Roberstson, Will (MA awarded Summer 2013)
Rodriguez, Norma (completed comp. exams)
Russell, Drew (MA awarded Fall 2012)

Honors Thesis Advisor

2009-2010: Casey Durchholz: "I'm special because…": Animal Personhood in a True No-Kill Animal Shelter – Completed.

2012-2013: Elizabeth Cook: The Steam Punk Subculture in Texas

McNair Scholars Advisor

2012: Jody Hance: Traditional healing in South Texas

Awards Received by Students:

2013: Elizabeth Cook, "Ethnographic Study of Steampunk Subculture in Texas." Paper accepted to 2013 meetings of National Council on Undergraduate Research.

2013: John Michael Meredith, 4th place for "Agency Reveals itself: Understanding(s) of Identify, Space, Place, and Landscape at the San Jose Mission." Research paper written for ANT3233 (Halvaksz Fall 2012)

2011-2012 Jody Hance: Writing Across the Curriculum $2,500 scholarship for "Modern *Curanderismo* in San Antonio, Texas: The Rise of Ruby Red, her Beliefs, and Practice of *Limpias*." Written for ANT2053 (Halvaksz Fall 2011)

SERVICE

University of Texas at San Antonio

Current- Departmental

2013 – Present Search Committee, TT Medical Anthropologist

2013 – Present Teaching Assistantship Committee

2013 – Present Anthropology Society, faculty co-sponsor

2013 – Present Anthropology Non-Tenure Track Committee

2008 – Present Anthropology Undergraduate Program Learning Assessment Committee of Capstone Course.

2007 – Present Library Liaison for the Department of Anthropology.

Current- College

2007 – Present Academic Policy and Curriculum Committee, College of Liberal and Fine Arts

2013 Fall Convocation, COLFA Flag Bearer.

Current- University

2012 – Present Water Institute of Texas, College of Liberal and Fine Arts Representative

2010 – 2012 University Assessment Steering Committee,

2013 – Present University Cross College Assessment Review Committee

Previous

2012 Graduate Student Recruitment Table at the American Anthropology Association, San Francisco, November

2010 – 2012 Anthropology Admissions Policy Committee

2011 Graduate Student Recruitment Table at the American Anthropology Association, Montreal, Canada, November

2010 Roadrunner Days, Faculty Representative, August 23

2010 Graduate Student Recruitment Table at the American Anthropology Association, New Orleans, LA, November

2008 – 2009 Anthropology Guest Lecture Series Coordinator.

2008 – 2009 Member, Search Committee for two or more tenured positions in Cultural Anthropology and Archaeology

2007 – 2010 Faculty Sponsor, Anthropological Graduate Student Association.

University of Canterbury, Christchurch, New Zealand

2005 – 2006 Research Scholars Selection Committee, Macmillan Brown Centre for Pacific Studies.

University of Minnesota – Twin Cities

1999 Co-authored and co-evaluated first graduate student survey, Department of Anthropology.

1998 – 1999 Part of a team that assisted Professor Martha Tappen in revising course materials, lab manuals and procedures to qualify the course "Human Evolution" as a Biological Lab under the University of Minnesota guidelines.

1995 – 1999 Anthropology and Archaeology Speakers' Bureau.
1995 Co-Organizer.
1996 – 1999 Co-Director. Coordinated speaking engagements by Anthropology graduate students in Minneapolis and Saint Paul K-12 classrooms.

1994 – 1995 Budgetary Advisory Committee, Graduate Student Representative to the Dean of the College of Liberal Arts, University of Minnesota (Dean Davis). Minneapolis, Minnesota.

1994 – 1995 Council of Graduate Students, Anthropology Representative.

SERVICE: PROFESSIONAL ACTIVITIES/ ELECTED OFFICES

2009 – Present Book Co-Editor, *Environment and Society: Advances in Research*, Columbia University Earth Institute and the University of Manchester. Berghahn Books.

2009 – Present Newsletter Editor, Association for Social Anthropology in Oceania, an international organization dedicated to the comparative studies of Pacific topics.

2009 Convener. Melanesian Interest Group, American Anthropology Association.

2008 Convener-elect. Melanesian Interest Group, American Anthropology Association.

ACADEMIC ORGANIZATIONS MEMBERSHIP

American Anthropology Association, since 1995
American Ethnological Society, since 1996

Anthropology and the Environment section, since 2002
Association for Social Anthropology in Oceania, since 1998
Melanesian Interest Group, since 2000

BOOK PROPOSAL REVIEWER

Berghahn Press

JOURNALS REFEREED

American Anthropologist
Food and Foodways
Oceania
Journal of Pacific Studies
Tourist Studies

LANGUAGE TRAINING

Biangai – low to moderate proficiency
French – four years high school and four years university
German – one year university
Tok Pisin (national language of Papua New Guinea) – fluent

OTHER TRAINING AND WORK EXPERIENCES

August 2010

National Science Foundation, Short Courses on Research Methods in Cultural Anthropology. Selected Participant. Short Course on Research Methods in GeoSpatial Analysis at Duke Marine Lab.

May 2003 – July 2003

Cultural Resource Management. Field Technician for Foth and VanDyke. Phase I and Phase II archeological excavations along MN169 expansion. Mille Lacs, Minnesota.

September 1998 – December 1998

Regional interviewer for the 'Women and the Outdoors Project.' Sponsored by an anthropology consulting firm, Contexts, and Richardson, Myers and Donofrio, Inc. Baltimore, Maryland.

August 1994 – December 1994

Formal course work in pedagogy. This included training workshops offered to new teaching assistants (i.e. evaluating student performance, leading discussions, course design, etc.), and a term length post-graduate seminar in pedagogical methods and considerations for anthropology.

June 1992 – September 1992

Archaeological Field School. Murray State University, Wickliffe Mounds Field School. Professor Kit Wesler, project supervisor. Six-weeks excavation along the edges of a Mississippian mound site near Wickliffe, Kentucky. Two-weeks field survey in Southeast Missouri.

Exhibit 34

Obligations of States in Respect to Climate Change
(Request for Advisory Opinion)

Expert Statement of Professor Jerry Jacka

[11 March 2024]

I, Jerry Jacka, Professor of Anthropology at the University of Colorado Boulder, United States of America, of 815 38th St., Boulder, CO 80303, USA, solemnly and sincerely affirm and declare on 11 March 2024:

BACKGROUND

1. My name is Jerry Jacka and I am a national of the United States of America (USA).

2. I am an environmental anthropologist and my current role is a Professor of Anthropology at the University of Colorado Boulder, United States of America

3. My research examines the impacts of resource extraction and climate change through a social science lens on different communities. I have attached my CV at Annexure A of this statement.

4. My research in the Porgera valley, Enga Province, PNG has looked at the impacts of the Porgera Gold Mine and the impacts of climate change on the Ipili, Enga, and Huli people and their ecological knowledge and resource management practices.

5. I have worked with the Ipili, Enga, and Huli people in Porgera for 26 years. I have conducted research on resource extraction, deforestation, social disruptions, and climate change. I have published works on the Ipili, Enga, and Huli including a book length monograph: *Alchemy in the Rain Forest: Politics, Ecology, and Resilience in a New Guinea Mining Area* (2015, Duke University Press); an edited volume with John Wagner: *Island Rivers: Fresh Water and Place in Oceania* (2018, Australian National University Press); as well as 19 articles and chapters.

6. In this Statement, I speak about the Ipili, Enga, and Huli peoples that I have worked with in Papua New Guinea.

7. This expert statement is based on my expertise and experience. I confirm that all the matters in respect to which I express my opinion in this statement are within my competence and professional knowledge and experience. I have been asked to provide an independent statement, based solely on my expertise and confirm that my conclusions are unbiased, objective and impartial.

RELATIONSHIPS AND THE ENVIRONMENT

8. The Ipili, Enga and Huli have been known to periodically experience months of drought accompanied by several nights of frost, the latter of which completely destroy their crops. The most severe of these events occur in conjunction with strong El Ninos.

9. The Engans have several customary responses to these climatic disasters. These customary responses were recorded in the 1972 extreme El Nino by geographer Eric Waddel.

10. In response to minor frosts, the Enga have a local-level response where gardens are planted in two distinct ecological niches, one on the valley bottoms, the other on the lower slopes. While the former are acknowledged to be more productive, they are also more vulnerable to frost damage.

11. During severe frosts even the gardens on slopes have the potential to be destroyed. In this event, Enga also have an intraregional level response wherein various household garden plots are in different locations up to about a day's walk away from one another.

12. As these are still in the frost zone, though, severe frosts can also destroy these gardens.

13. Finally, the Enga can utilise the extraregional-level response in which they will migrate to communities lower in altitude below the frost zone where they will be given food and gardens by individuals with whom they have previously established exchange relationships until such time as they can re-establish their gardens in their home regions.

14. One of the main factors that generate the long-distance migration networks is marriage. 'Women are bridges' is a common refrain as it is through female kinship links that relatives can go and live on the lands of other kin groups. In Porgera, many ancestress, married into Porgera kin groups, after having temporarily migrated during a time of frost.

15. Recently, I have been studying and writing about the interactions between the Ipili and Engan people of the Porgera area living in high altitudes and other Engans who live in mid to low altitudes. The whole system of living in this area is dependent upon relationships between high altitude peoples and peoples that live in mid altitude areas. When the extreme El Ninos come, they cause long-term droughts, and then usually about

a week of frosts in the middle of them, they completely destroy everybody's sweet potato gardens.Then the high altitude people have to migrate down to lower altitudes.

16. They often stay in the mid altitude areas for a couple of years, usually marrying into host communities.

17. In the high altitudes, it takes sweet potato 12 months to mature, so from the mid altitudes, the Engan migrants venture back to do the initial planting. Then, because the soil has got so much nitrogen in it, they actually have to pull out all of the sweet potato vines, and then replant them. This is because when there's too much nitrogen in the soil, sweet potatoes don't produce tubers.

18. The initial planting absorbs the nitrogen, it goes into the leaf production, then they pull them out, effectively lowering nitrogen levels in their soil and replant and then they have to wait that full year again for tuber production to happen. So at the end of about 2 years, when their second planting of sweet potato is ready for harvest, they also move back to their lands in the high altitudes.

IMPACTS OF CLIMATE CHANGE ON RELATIONSHIPS

19. In my writing I've been trying to explore the combined effects of climate change and mining development. When I was in PNG in 2016 studying the impact of the 2015/2016 El Nino, I was talking to Engans and they've lost the connections to be able to migrate down to the lower altitude or middle altitude areas because of violence associated with uneven development and dissatisfaction of benefits from the Porgera Mine and the Liquified Natural Gas Project.

20. The violence resulting from these projects have fractured social relations in the area, which were previously based on ties of long-term reciprocity and delayed exchange mechanisms.

21. When you talk about health effects, both physical and mental, people were talking about the fact that they had no relief; being able to go down to these mid and low altitude areas was like a pressure relief valve, and now they could not go down to these areas to live and get food.

22. Yet from my research, I know that scientists are saying that because of climate change, El Ninos are getting more frequent and more intense.

23. I talked to some people that traditionally migrated down towards the side of the Liquified Natural Gas Project and they're not going there anymore because they're afraid of the violence associated with that development project.

24. The option for temporary migration is no longer open to the Ipili, Enga and Huli people of Porgera in an era where there are more El Ninos, in fact, there's an El Nino event gearing up right now. So the situation will be more intense but they will have less opportunities to assist themselves because of development pressures.

25. It's really a story that I think needs to be told together. Mining development and climate change.

26. What's basically happening is that these individual cultures were in fact connected together and needed each other to work well, but now that they're being singularised in some way, it's creating a situation that has huge implications for health and society.

27. We know that people are going to have more dependence upon government services, including health and social services, in times of climate change. But if their basic services are disappearing, as they are in PNG, it's something that is going to exacerbate the impact on them as well. In PNG, hospitals are closing, aid posts are closing, yet we know that climate change is intensifying disease patterns in novel ways

LOSS OF AGRICULTURE, BIODIVERSITY AND KNOWLEDGE

28. In 2009, I wrote a paper about how the Porgera people themselves had observed climate change over a 70 year period and spoke about it in 4 different dimensions; the moral, the agricultural, the environmental, and the cosmological.

29. When I was there in 2016, I didn't hear people talking about these things. I was there in January and May and June of 2016. The drought had just ended and people, especially in the high altitude areas, were just trying to live. They were worried about where they were going to go. So I don't think I had time to reflect on some of the more cosmological things that I was interested in back in my 2009 article and the people did not have the capacity to engage in these discussions.

30. In 2016, people in the high-altitude zones mentioned that they cannot grow Irish potatoes, one of the frost adapted crops in PNG, due to a potato blight. In mid-altitude areas, people had noticed the disappearance of different varieties of squash (*pumkin* in Tok Pisin) due to a changing climate.

31. The food insecurity situation was really dire. The government made two distributions of rice, the first time was 20 kilograms per household, the second time was 10 kilograms per household. People in this area are polygamists, so there might be 10 to 12 people living in one household. They were also feeding their pigs, an important cultural animal, with it too. So it was gone in a couple days.

32. People were going out in the forest and they were eating tree burn leaves and other kinds of wild greens that they could find. But if you eat too many of those, it causes diarrhea. The only crops that were really doing well were cabbages and beans. Beans were not grown in the quantities to subsist on, and if you eat too much cabbage, you get iodine deficiencies, and you can develop thyroid problems in your neck. So there are more health implications around that.

33. People were just sitting there being hungry all the time and hoping that some *wantoks* (friends and relatives) would send them money so they could buy rice and store foods.

34. In 2016, I interviewed an Engan man, Karep Karet, a man in his 50s who stated:

> After the frost came, whoever had money, left, and went to Mt. Hagen or Porgera or other places. Those of us who don't have money – old people, kids – we just stay here and die. Birds depend upon trees, but people depend upon the land. Now our land is destroyed and we are hungry. […] When the frost came, I walked down to the Marient side [east of Kandep], but it was destroyed too so I came back here. I don't have any *wantoks* who could help me. I don't know anyone outside Kandep so I just stayed here. I sold a little pig for K700 (≈ US$225) and bought rice and food but that money is gone now. (25 May 2016 interview)

35. When the people are in a survival state, where they are just trying to find food to eat to survive, the traditional ecological knowledge, the stories, the relationships, are not passed down to the next generations, so it's being lost.

36. The biodiversity of the area and stories and relationships intertwined with them are also being lost.

37. In Enga province they talk about hunting marsupials as a euphemism for having sex. So it's really about social reproduction. One of the ways that a man indicates interest in a woman, is for him to give her family a hunted marsupial.

38. If marsupial populations are declining because of climate change then you're talking about the inability for social reproduction to happen. Anthropologically, this is significant because it highlights the complex ways that climate change impacts human populations beyond the things that we can just observe. Impacts on the flora and fauna are bound to influence people's cultural beliefs, especially when they are tied so closely to the land like people in PNG are.

Respectfully submitted on 11 March 2024,



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Professor Jerry Jacka

Annexure A to Expert Statement of Professor Jerry Jacka

JERRY K. JACKA — CURRICULUM VITAE

Department of Anthropology
University of Colorado Boulder
1350 Pleasant Street, 233 UCB
Boulder, Colorado, 80309 USA

+1.303.492.7198 (office)
jerry.jacka@colorado.edu
http://jerryjacka.com

EDUCATION

2003	Ph.D.	University of Oregon, Anthropology
1994	M.A.	University of Alaska Fairbanks, Anthropology
1992	B.A.	University of Washington, Anthropology and Linguistics (with honors)

ACADEMIC & RELATED WORK EXPERIENCE

2023 –	Professor, Department of Anthropology, University of Colorado Boulder
2017 – 2023	Associate Professor, Department of Anthropology, University of Colorado Boulder
2015 – 2017	Assistant Professor, Department of Anthropology, University of Colorado Boulder
2009 – 2015	Associate Professor, Department of Anthropology, University of Texas San Antonio
2003 – 2009	Assistant Professor of Anthropology, Department of Sociology and Anthropology, North Carolina State University

SELECTED PUBLICATIONS

BOOKS

2018 Wagner, John R. and Jerry K. **Jacka**, eds. *Island Rivers: Fresh Water and Place in Oceania*. Canberra: Australian National University Press.

2015 **Jacka**, Jerry K. *Alchemy in the Rain Forest: Politics, Ecology, and Resilience in a New Guinea Mining Area*. Durham: Duke University Press.

ARTICLES & CHAPTERS (PEER-REVIEWED)

in press **Jacka**, Jerry K. "Climate Change, Resource Extraction, and 'Double Losers' in western Enga Province, Papua New Guinea," in *Double Exposure*. N. Bainton and E. Skrzypek, eds. Canberra: Australian National University Press.

2024 **Jacka**, Jerry K. "'Don't Look Down': Green Technologies, Climate Change, and Mining," in *Anthropology and Climate Change*, 3rd ed., pp. 107–116. S. Crate and M. Nuttall, eds. London: Routledge.

2022 **Jacka**, Jerry K. Place, Time, and Affect: Changing Landscapes around a New Guinea Mining Area. *Cultural Anthropology* 37(3): 549–571.

2022 **Jacka**, Jerry K. and Sarah Posner. How the Enga Cope with Frost in the 21st Century: Food Insecurity, Migration, and Development in the Papua New Guinea Highlands. *Human Ecology* 50(2): 273–286.

2020 **Jacka**, Jerry K. In the Time of Frost: Multi-Scalar Responses to El Niño in Papua New Guinea. *Anthropological Forum* 30(1–2): 141–156. DOI: 10.1080/00664677.2019.1647832

2019 **Jacka**, Jerry K. Resource Conflicts and the Anthropology of the Dark and the Good in Highlands Papua New Guinea. *The Australian Journal of Anthropology* 30(1): 35–52.

2018 **Jacka**, Jerry K. The Anthropology of Mining: The Social and Environmental Impacts of Resource Extraction in the Mineral Age. *Annual Review of Anthropology* 47: 61–77.

2018 Mawyer, Alex and J. K. **Jacka**. Sovereignty, Conservation, and Island Ecological Futures. *Environmental Conservation* 45(3): 238–251.

2016 **Jacka**, Jerry K. Development Conflicts and Changing Mortuary Practices in a New Guinea Mining Area. *The Journal of the Polynesian Society* 125(2): 133–147.

2016 **Jacka**, Jerry K. "Working in the 'Life Market': Gold, Coffee, and Violence in the Papua New Guinea Highlands," in *The Anthropology of Postindustrialism: Ethnographies of Disconnection*, pp. 22–37. I. Vaccaro, K. Harper, and S. Murray, eds. New York: Routledge.

2015 **Jacka**, Jerry K. Uneven Development in the Papua New Guinea Highlands: Mining, Corporate Social Responsibility, and the "Life Market". *Focaal: Journal of Global and Historical Anthropology* 73: 57–69.

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GRANTS & RESEARCH

GRANTS RECEIVED

2019 Institute of Behavioral Science Research Development Awards, CU Boulder, (PI Jerry Jacka) *The Social and Ecological Implications of Superfund Designation: A Comparative Approach*

2017 National Science Foundation, Doctoral Dissertation Research Improvement Grant, Cultural Anthropology, (PI Jerry Jacka, Co-PI Emily Hite), *Models of Socio-Ecological Resilience in Response to Environmental Change*. Award No. BCS-1756367

2016 National Science Foundation, Post-Doctoral Research, (PI Jessica Rothman, Co PIs Sagan Friant, Jerry Jacka, Tony Goldberg), *Exploring the Links Between Biodiverse Foods, Nutritional Quality, and Food Security*. Award No. SMA-1604902

2016 National Science Foundation, Doctoral Dissertation Research Improvement Grant, Cultural Anthropology, (PI Jerry Jacka, Co-PI Gregorio Ortiz), *Uneven Development and Perspectives on the Environment*. Award No. BCS-1628183

2015 National Science Foundation, RAPID Grant, Cultural Anthropology, (PI Jerry Jacka), *El Niño-Southern Oscillation Events, Migration, and Resilience*. Award No. BCS-1602367

Exhibit 35

Obligations of States in Respect to Climate Change
(Request for Advisory Opinion)

14 March 2024

Expert Witness Statement of Yolarnie Amepou

INTRODUCTION

1. My name is Yolarnie Amepou. I am 35 years old. I am a Papua New Guinean national and I am from Madang, which is a coastal town in the North of Papua New Guinea (PNG). My village is called Tangu, which is in the mountains of Madang.

2. I speak Tok Pisin, a creole spoken throughout PNG, and English. I have given my statement in English.

3. I obtained a Bachelor of Science from the University of Papua New Guinea, majoring in Marine Biology in 2011.

4. In 2014 I started a master's degree with the University of Canberra, Australia. This was supposed to build on my honors degree with the University of Papua New Guinea but I discontinued my studies in order to start a non-governmental conservation organisation named Piku Biodiversity Network ("**PBN**").

5. I am currently the Director of PBN and I have held this position since 2017.

6. PBN is a small community-based, non-government organisation that works in biodiversity conservation for Papua New Guinea, but predominantly out of the Gulf of Papua and the Kikori River Delta (collectively the "Kikori region") located within the Gulf Province of PNG.

7. PNG holds 7-10 percent of the world's recorded biodiversity and the Kikori River Basin, which includes the Gulf of Papua and the Kikori Delta islands, hold a significant amount of that biodiversity.

8. I have worked in the Kikori region since 2012. I have worked with the Veraibari village community, within the Kikori region, since 2013. Since 2016, I have spent 6 months of every year living in the Kikori region. These 6 months are between September and March when it is the dry season.

9. I have published extensively on the conservation work that PBN undertakes in the Kikori region, including: 2014, Turtle Conservation Challenges in Papua New Guinea, feature article in the *Turtle Survival Alliance Magazin*e, page 22-24; 2021, Papua New Guinea A Potential Refuge for Threatened Indo-Pacific River Sharks and

Safishes. *Front. Conserv Sci* 2:719981; 2024, Maw money, maw problems: A lucrative fish maw fishery in Papua New Guinea highlights a global conservation issue driven by Chinese cultural demand. *Conservation Letters.*

10. More articles can be found in my CV attached at **Annexure A.**

11. I have been asked to give an expert witness statement by the Melanesian Spearhead Group based on my expertise and my observations and knowledge of the impact that climate change has had and is having on Veraibari village and the Kikori region.

12. The matters that I speak about in this Statement are based on my direct knowledge of the facts stated and that have been reported to me during my research and work in the Kikori region and in Veraibari village since 2012. The opinions I express in this statement are based on my expertise and on data, studies and surveys I have conducted, researched and written personally, as well as from conversations and experiences I have encountered with the people and places of the Kikori region since 2012.

13. Where I recount stories told to me by the people of Veraibai village and the Kikori region, I have been given permission by the holders of these stories to share them with the International Court of Justice.

BACKGROUND

14. The Kikori River is one of several rivers that empty into the Gulf of Papua. Running parallel to the Kikori River, you have the Vailala, Purari, Turama, Bamu and the Fly rivers.

15. These rivers drain out most of the highlands of PNG; the Purari drains, Chimbu Province, and the Kikori drains Southern Highlands and Hela Provinces and the Fly river drains everything else.

16. All the villages along these rivers are caught between these rivers, their tributaries and the sea.

17. Veraibari village is located at the mouth of the Kikori River. The Kikori River is 445 km in length and is Papua New Guinea's fifth largest river. The Kikori River is included in the Kikori River Basin and is on the tentative list for World Heritage because of its biodiversity and cultural diversity values..

18. The coast of the Kikori region comprises delta islands exposed to the Gulf of Papua.

19. The Kikori delta is a very dynamic environment, coastal beaches, sandbars and islands are created and destroyed by wind and wave action, a process that is reflected in the migratory history of the Kikori people, local legends and customs as well as the ever-changing physical environment.

20. Along the Kikori River, as well as the run two pipelines, owned by major foreign oil and gas companies.This oil and liquified natural gas is largely exported overseas, to high production and high consumption countries.

21. In 2012, I arrived in the Kikori area, as a volunteer, to work on the Piku Project. This was a project managed by the University of Canberra, Australia. The Piku Project works towards the conservation of the freshwater pig-nosed turtle, which is called "piku" in the Rumu language, one of 10 distinct language groups in the Kikori area our organisation works with. The pig-nosed turtle is endemic to Southern New Guinea and three rivers in the Northern Territory in Australia.

22. In 2013, I was employed by the Piku Project to work on turtle conservation. I also visited Veraibari village for the first time in 2013 to present a report done by the Piku Project to the Veraibari community.

23. In 2014, I started working with the village. The initial work I did was to collect data on the pig-nosed turtle nesting as the pig-nosed turtle would nest on the people of Veraibari's traditional lands. I would also often teach environment classes in their local primary school as well as in other schools in communities we worked with.

24. In 2014, the University of Canberra offered me a place in their masters in biology program. I accepted and began the program whilst still working with the Piku Project.

25. In 2016, I realised that the most ethical way to work with the Veraibari community and other communities in the Kikori region, and to ensure the sustainability of the Piku Project, as well as the other conservation projects happening in the area, was to have on-going collaboration with the community and build a long-term trusting relationship with the 10 tribes from that region.

26. I had been told by people in the communities, and had witnessed myself, scientists coming into the communities for a short period of time to do their research and then leaving and never being heard from again. We now call this "parachute scientist" behaviour. I felt not only was this an extractive way of working with the local community but it also gave them no sense of ownership or connection to the conservation work being done on their land and waters.

27. In 2017, I founded the PBN with Professor Arthur Georges from the University of Canberra and Carla Eisenberg, a Brazilian conservation scientist with the Charles Dawin University, Australia. At the same time, I discontinued my Masters program and became the full time Director of PBN.

PIKU BIODIVERSITY NETWORK

28. The PBN is an incorporated organisation. I have annexed a pamphlet about PBN at **Annexure B** to this witness statement.

29. The PBN is an association of members. We have members who are both individuals and organisations, who work towards our goal of biodiversity conservation; using strategies in knowledge generation, environmental education, and anything we can do to support community led conservation action.

30. Some of our members include individual members from the James Cook University, Australia, the University of Canberra, Australia, and more recently the Wildlife Conservation Society.

31. Our founding project is the Piku Project, which I discuss briefly above. The Piku Project existed for over 10 years prior to the incorporation of the PBN.

32. Our other projects include working to conserve the freshwater river dolphins (the snubfin and the humpback dolphins), sharks and rays, the sawfish and frogs.

THE BIODIVERSITY OF THE KIKORI REGION

33. The Kikori Basin is on the tentative list for World Heritage because of its cultural and biodiversity value. The Kikori delta is listed as an Important Marine Mammal Protected Area by the IUCN because of the presence of the Australian snubfin dolphin and the Australian humpback dolphin which only exist in limited waters.

34. The Kikori River Basin and its drainage extends from the Southern Highlands Province and its alpine grasslands to the extensive mangrove wetlands of the Gulf Province. The delta includes large alluvial plains below 40m elevation covered in mangroves and dissected by a distributary system of river channels meandering extensively across the Gulf of Papua. The Kikori and the Purari deltas together, comprise the largest continuous area of mangroves in Papua New Guinea. Rainfall in this area is one of the highest recorded in the world at between 4 – 8 meters annually.

35. PNG is ranked second for number of mangrove species in the world. There are 34 different types of mangroves in the world. Of these, 33 species can be found in the Kikori region.

36. The Kikori delta has 43 species of sharks and rays, 28 of which are on the IUCN's red list. Of the 28 species on the red list, 4 are critically endangered, 6 are endangered, 6 are near threatened and 12 are vulnerable.

37. The Kikori delta also has one of the last healthy populations of sawfish in the world.

THE PEOPLE OF THE KIKORI REGION

38. There are [4] tribes on the coast of the Kikori River Delta, the Morigi, the Kerewo, the Pai'a and the Urama.

Migration

39. They explain their migration throughout the delta and coastal areas by reference to their traditional men's long houses, the *dubu daima,* and their canoes.

40. For example, in 2018, I was travelling down the neighboring Bamu River to villages on its delta with our boat skipper, Max, who was from Kemei village, and he said to me, of our destination, Bina village,"We are going back to the village I came from. Back in the day, the big house broke, and there were only 5 canoes. One of the canoes came to Kemei village. I am from the family of that canoe".

41. I was new to Kikori then and I assumed Max was talking about a literal canoe and a house that broke recently. But he was telling me their migration story. The 5 canoes were the 5 clans or the 5 families that moved from the original or source village.

42. When these families moved away, they kept naming their children by names from the source village, so that whenever they return to the source village, they could be identified by their extended family and exchange stories and be granted hospitality.

43. When Max and I arrived at Bina village, we met with some of the families from the original house and then they hugged and they cried. They didn't know each other, but this is the descendants of history coming together. It was then that I realised that Max had been telling me their migration story.

Creation of islands

44. The people in the Kikori believe islands are created and disappeared by certain people who have the ability to move sand from one place to another. The building up and breaking down of land is thought to occur by human hands, through sorcery.

45. In 2014, I was with an old man from Babai Village, Kerewo in a boat, and we went past an island and he said to me, "I made this island because when I was a young man, I swam there. I took sand from here and I went and I threw it there. And then later, when I turned around, there was this island."

46. There was one case in 2016, where my boat skipper couldn't get off the boat at certain parts of the river because his ancestors were thought to have built islands along certain parts of the river. The belief was that if he was to get off the boat and step on these particular islands with his feet, the islands would disappear, because his genealogy is both the beginning and end of those islands.

47. As a scientist, I know that where the sea and the river meet, it's a dynamic system. You have wind and wave action that constantly builds up and breaks down land. In the delta, the movement of sand really changes the landscape.

48. But for the people of the Kikori region, both can be true.

49. This belief system extends to weather patterns.

Telling of weather and seasonal patterns

50. The people of the Kikori region believe they can communicate with or affect the weather patterns. Some knowledge of how to do this is communal, others are held with certain elders. Occasionally, it's also held by young people, where this knowledge has been passed down in order to safeguard it.

51. An example of communal knowledge is that of removing rain. You put your finger to your lips and gather the rain cloud and send it onto the other side with a sweeping gesture with your hand. It's believed, everybody can do that to move rain. So sometimes we'll be on a boat travelling somewhere and we see bad weather approaching, and everyone on the boat will be doing this gesture, trying to collect rain from here and throw it over there.

52. But then there's knowledge that's specific to people and clan. And certain people of the Kikori region can discern which clan holds specific weather knowledge and attribute specific weather events to the clan. The lay person can sometimes discern these things from what is said around specific weather events.

53. The people of Veraibari village would have powers specific to their clan, the Pai'a, but this would be sacred to them and I do not know it.

54. In Veraibari, as in other parts of the Kikori region where the pig-nosed turtle resides, the people are able to tell of the turtle's life cycle by observing the rosewood tree. I learnt this the first time I came to Veraibari in 2013.

55. When the rosewood tree starts to put on flowers, they know that the pig-nosed turtle is starting to nest.

56. I always return to the Kikori region for the turtle nesting season from September to November. I notice that when people see I have returned, they will automatically look up at the tree to note whether it's flowering or not. And if it is, then it affirms my reason for being there, even though I know, by the Gregorian calendar months, that it's time for the turtles to nest. The tree confirms to the Kikori people that the turtle is nesting.

57. I also heard in Veraibari village in 2019 that when the rosewood tree starts to put on its first leaves, it signifies the changing of seasons from wet/storm season to dry season.

58. I learnt this from one of the village leaders, Tofinga in around November 2019. I was in Veraibari to monitor the snubfin dolphin, and I was told that a couple of weeks before my arrival a huge king tide had hit. Tofinga said to me, "Oh yes, we knew that the water was coming, we'd been watching the water, we'd been watching the tree. You watch the rosewood tree, when the leaves start to come back, the water will come."

59. We know this tide in English as the King tide but for the people of Veraibari, it's the highest tide of the year, when the sands will be "washed" for the turtles to start nesting. It hits around the time that the rosewood trees starts to put back its leaves, after the rosewood tree puts back its leaves, it starts to flower. And that's when the pig-nosed turtles start to nest.

60. The belief that the sands need to be washed before the turtles nest is held along the Kikori river. Even the people towards the headwaters of the river, of the Rumu tribe, say that the turtles will nest after the biggest flood of the year, after the sands are "washed". Signalling a change, the start of something new, or for the pig-nosed turtle; new life.

Kinship and animals

61. As part of PBN's conservation approach, when we want to talk about conservation of a particular species with the villages, we need to first find out why or how the species is of value to them so we can have a conversation of shared value, need and drive for conservation action. We ask the people of the Kikori about origin stories and

traditions that may be connected with certain species. These are some of the stories they have told us.

The story of the sawfish

62. When we started our sawfish project in 2018, we went to the delta villages and asked if there was any cultural significance of the sawfish. That's when we were told the sawfish story by an elder in the Aiedio village of the Kerowo tribe. This story was re-told to us by an elder in Samoa village, also of the Kerewo tribe.

63. The elder in Aiedio village told us the story in more detail than the elder in Samoa and this was because a young Kerewo men were with us and interested to know also. So in a way, he used this opportunity to pass on the knowledge.

64. He told us that when a young man catches his first sawfish, the rostrum of the sawfish is removed and the young man's uncle (mother's brother), places the rostrum on his back and carries it around, dancing in celebration of his nephew becoming a man, until his back bleeds from the sawfish teeth.

65. This was an important kinship ritual, between the young man, who will be known by his father's tribe, and his mother's people, especially his mother's brothers. It was also a form of initiation for him, a reinforcement of his transition from boy to man.

66. We were told the practice stopped when the sawfish could no longer be seen in the shallow waters close to the village.

67. In the past when he was a young man you could see the fins in water, like sharks in water, just near the village, whereas you don't see that anymore. Now if you want to see a big sawfish, you have to go into deeper water. Back in the day they used to roam really close to the sandbanks just in front of the village.

68. When it comes to things like your cultural connection and significance to an animal or plant, the people of Kikori do not freely share this information with outsiders. I think the Kerewo tribe told us, PBN, this story because of our relationship with them. We have a close relationship so they felt free telling us, they felt we were worthy of it and an indication of trust.

The story of the snubfin dolphin

69. Many tribes in the Kikori have stories about the snubfin dolphin as an ancestor. There aren't any stories about the humpback dolphin because they consider it a "new" species, they don't even have an indigenous name for it.

70. The Kerewo tribe have differing versions of the same story, depending on the village. One story was that there was a young man who wanted to go to a party that only women could attend. And so he killed his mother and took on her skin. (They had a tradition back then where you could remove someone's skin and preserve it, normally used in warfare). And then he traveled from one village to another (all the villages and rivers are known and named by elders who tell the story) on his way to the party which was held in Kerewo's origin village, Kerewo village. When he got to the party, the women needed to go and urinate and they did so together, it was then that they

found out that he was a man and not a woman. And in shame he jumped into the water and became the first snubfin dolphin.

71. The Gope people have another story.

72. In those days, boys from the age of about 11 would move into the *dubu daima*, the men's house. The women and children lived on their own. The men would go hunting and would not share their meat with the women, they would eat it in secret in the men's house. One day, a small boy returned to his mother from the men's house and developed a toothache. When the mum went to check his tooth, she found pork stuck in it. She told the other women, confirming their suspicions of the men's greed. So under the Chief's wife's orders, one day when the men had gone from the village to hunt, all the women and children jumped into the water and turned into snubfindolphins. Abandoning the greedy men.

73. This story is told to young boys. It's told as a lesson to them on how to look after and protect the women and their responsibility in society

74. The Pai'a tribe, which the people of Veraibari village belong to, also have their own story. I was told two stories, one that stated that the snubfin dolphins were brother and sister who moved to live in the water because of problems on land. From the Pai'a tribe the snubfins are seen as a clan of the tribe and therefore respected as such. The other story was that the dolphin originated from the death of a grandfather who had killed his grandchild and who was in turn killed by his son and thrown into the water to become the first snubfin dolphin.

CLIMATE CHANGE IMPACTS IN THE KIKORI REGION

75. My earliest memory of climate change was learning about carbon cycles and oxygen in highschool. It was a very far away concept for me at the time. It didn't register as something that I should be concerned about in my personal life until I moved to the Kikori region.

76. The first time I arrived at Veraibari in 2013, the boat stopped at the shoreline and we had to walk for 10-20 metres under coconut trees and mangroves that lined the shoreline before reaching the village. To get mobile phone reception, we had to climb a tree on the shoreline. Today there are no mangroves and coconut trees in front of the village. You get off the boat and you're right in the middle of the village. The tree we used to climb for mobile phone reception doesn't exist anymore.

77. After every storm season, I would return for field work to see the havoc that the storm season had caused in the Kikori region. The most noticeable physical damage after storm season was along the coast of the Gulf of Papua, including Veraibari,which sits on the East of the Gulf of Papua.

78. Every year, travelling from east to west along the Gulf of Papua, I would see the extent of the devastation. When I first started working in the Kikori region, in 2012, there used to be really old big mangrove forests that stood at the front line between the delta islands and the sea. I found that every year, returning to field work after the storm season, there would be dieback of mangrove forests, all the trees just dead along the shoreline. This was the remnants of what happened in the storm season.

79. When we were in university doing biology, we were taught that mangroves grow at different places in the sea depending on salinity. So the ones that can withstand very salty water usually grow right in front and the ones who can't, grow further back. As the water gets brackish and fresher, the species of mangroves change.

80. I could identify how salty the water was, from the mangrove species present. I could make out the different mangrove species from observing how they were distributed along the salt gradient.

81. After each storm season, I started noticing that the mangroves that were frontliner, that stood in the saltwater, that people relied on for shoreline protection, were washed away by storms and showed effects of dieback. These were 30-40 year old mangrove cedars that are supposed to be stable and withstand the sea. It showed how intense the storm season was getting.

82. I paid attention to the mangroves because their presence affects where the sand banks lie and, therefore, where the pig-nosed turtles come up to nest. The flooding Kikori River brings the load of sand down to the coast, which meets the waves from the sea. It's like it plays sandcastles right at the Gulf of Papua. In the Kikori delta, it leads to islands being formed out of the sea within the space of a few months.

83. The dying mangroves means little protection for the villages of the Kikori delta and along the Gulf of Papua. I observed that after every storm season some villages would stop existing as they previously did. People couldn't remain in their villages and so they just locked their doors and moved inland to Kikori Town, where they would largely live in squatter settlements.

84. You could say I've been noticing climate change impacts in the Kikori area since I've been there, so from 2012 onwards. When planning field trips, I would keep tabs on which villages were occupied and which villages were unoccupied, or abandoned, because I had to notify the community leaders that I would be working on their lands and get permission to travel there, even if the community leaders were not there themselves.

85. This requirement meant I had to establish which villages were still active and which villages had no people, and where we could find the people who belonged to those villages that had been abandoned, to obtain the necessary permissions. This is the reason it was noticeable to me that whole villages were increasingly being abandoned because of the increased intensity of the storm season.

86. Of course, this was going on before I started working in the Kikori region. For example, when I first started working in the Kikori region, we wanted to negotiate access to "Banana Island" anda newly formed island in front of it, that had become a popular pig-nosed turtle nesting area. The island was owned by the people of Babai village, who were forced to abandon their village some years previously, because, in their words, "the sea took our village". Forcing them to resettle with their kin of Apeawa village.

87. We have a similar situation in Veraibari village, they have settlers there from Demaibari village. Damaibari stopped existing as an active village in the 1980s

because of rising sea levels. The people of both villages are of the same tribe, the Pai'a tribe, that's why Demaibari resettled in Veraibari..

88. However, the land in Veraibari belongs only to those who are originally from there. All the tribes of the Kikori region that I work with are patrilineal, so land, and taking care of society, is passed down from father to son.

89. When people are forced to abandon their villages because of the devastating effects of the sea, they often say the "sea took our village". It is a very common sentence for a lot of villages in the Kikori delta islands. It's also a direct explanation, when you ask resettled people, "why are you here?" They just say, "the sea took our village." And you understand from it, that the sea has encroached, it's gone into the freshwater sources, it's destroyed the houses, all of the above. And so that's why they moved.

Climate change and the pig-nosed turtle

90. From the beginning of my time in the Kikori, working to conserve the pig-nosed turtle, climate change was one of the factors I had to consider in my work. This is because the location and temperature of a nest determines whether turtles are born male or female. Turtles born in hot nests are more likely to be female and turtles born in colder nests are more likely to be male.

91. With other turtles, you have a larger "pivotal range". They can have a 5-10 degree pivotal range. So if the nest is 25 degrees, they might all be males and if it's 30 degrees, they might all be females. Pig-nosed turtles have a pivotal range of 1 degree. Any nest below 34 degrees will produce male turtles and any nest above 34 degrees will produce female turtles. So the temperature of the nest is crucial to the male/female population of that season.

92. PBN made an attempt to study this in 2014 but we weren't able to successfully complete the project because most of the eye buttons got washed away with the waves during storm season. We had to monitor at least 30-50 nests to get a good data set and the storm seasons was too harsh to collect that data.

93. One of the reasons we attempted this project was because of our concern that climate change may have an impact on turtle nesting and sex ratio of the turtle population into the future.

94. However, even though the project was unable to be completed, we observed some other issues whilst monitoring the nests.

95. One of the problems that we found with the turtle nests on the coast was that, because of the sediment load coming down from the Kikori River, as well as the movement and impacts of the high and the low tides of the coast, the turtle nests on the coast of Kikori, unlike the river nests on the Kikori River were getting buried deeper and deeper, decreasing the temperature of the nest.

96. This would indicate more male turtles.

97. The sand particles that travel from the top of the river to the coast, get finer and finer, as the elements weather them down. So if this fine sand gets inundated by water, it packs tighter, ultimately burying the turtle nest under really compact sand.

98. In the 2014/2015 turtle nesting season, we came across a lot of nests where turtle hatchlings suffocated to death from being buried under sand that was packed really tight by the higher tides. Hatchlings couldn't crawl out of these tightly packed nests and died.

99. The pig-nosed turtle will start travelling to nest after the king tide hits, marking the change of season from wet to dry.We know that the turtles will nest on the highest tide of the month between September and November. We don't know how they know, we haven't figured it out yet, but most turtles will nest on the highest tide of the month.

100. Nesting at the highest tide allows them to place their nests on the points that are the furthest from the usual hightide mark and, therefore, safest for the nest. It keeps the nests well away from the usual tides.

101. The fact that we were finding a lot of nests that were getting buried deeper means that either most of those turtles were not burying their nests on the highest tide of the month *or* the tides were getting higher than the turtles could handle.

102. It shows that even on what should be the highest tide of the month, you get subsequent tides that are as high or higher, burying the turtle nests even deeper. That's problematic.

103. This observation opened a can of worms and we were thinking, oh, we were worried about climate change and temperature. Now we have to worry about the tide mark and the flood mark and that the way the turtles have been nesting all this time, isn't actually working anymore when what is considered a high tide mark isn't the high tide mark anymore.

104. Even though we don't know how the turtle knew the highest tide in this month, the fact is, until that 2014/2015 season, they had been correctly guessing it. I could go and stay a whole month on the coast waiting for the high tide of the month and they would always come at the highest tide.

Climate change and the movement of animals along the Kikori River

105. Climate change impacts the way that people move along the river. Most of the time, the people along the Kikori River are moving up higher and concentrating in the safest parts of the river, such as near Kikori Town.

106. A lot of animals use the river as part of their life cycles. For example, to reproduce, the pig-nosed turtle travels from the river delta up the river or down to the coast. Another example is the large tooth sawfish. It reproduces in freshwater, so up the river, and then it slowly makes its way down to the ocean as it grows. One of the reasons PNG is one of the last places in the world for sawfishes is because it's one of the last places in the world where our rivers are still intact.

107. Bull sharks also come up the Kikori River to reproduce and then travel back to the coast. Kikori and the Gulf of Papua have two of the world's 3 freshwater sharks. The

third one is found in the Ganges River in India. Their population is almost gone because of the levels of pollution and development along the Ganges.

108. As Kikori Town accommodates increasing numbers of climate change migrants, we see a higher concentration of people in the middle of the Kikori River. This higher concentration of people is disrupting the only river path for most of these animals to move up and down in order for them to reproduce.

109. This is an indirect climate change impact on threatened species.

Climate change and changing weather patterns

110. PBN plan our work around the seasons of the Kikori region. So normally we are in the Kikori region from September to March when it's dry season and safe to travel along the river. However, I've noticed over the past 3 years that it's now becoming windier and the winds are stronger in January, February and March.

111. I now tell my field team that during those months, they are to try as much as possible not to sleep-out in the villages on the coast. They should return up river to Kikori Town.

112. In March 2022, really strong winds went through the Kikori and destroyed a number of villages. The University of Papua New Guinea later classed it as a "cyclone". This was unusual and the first cyclone in my 11 years in the Kikori region.

113. On 9 March 2023, the Post Courier, PNG's daily newspaper, reported Cyclone Niran moving through the Kikori region. It was reported that 25 houses were destroyed in east and west Kikori.

114. I traveled to the Kikori region maybe two weeks after that cyclone. The trees in the delta were snapped and bent over almost like somebody came through the forest and broke off the tops of the trees. All the trees had their tops snapped off.

115. Because they experienced cyclones 2 years in a row in March, the people of Veraibari, and the other existing villages of the delta area, have started keeping a record of houses standing before March of a year and those remaining after March, so they can alert response services and get assistance if needed.

116. In Veraibari, they had been doing this for king tides since 1997 . From about September every year, they take stock of the number of houses they have in the village, and then do a stock take after the king tide has passed through.

El Nino and drought in the Kikori

117. During the 2015/2016 El Nino event, the Kikori experienced a really severe drought.

118. At the time, PBN was working on our pig -nosed turtle project

119. Most of the remaining delta villages had been deserted because of drought. There were only a few remaining villages and we visited some of them to talk about pig-nosed turtle conservation.

120. Here I speak of the struggles these remaining villages had with obtaining potable water.

121. Aiedio village has a population of less than 10 houses. Most of the people had left years before my arrival in the area in 2012, because of rising sea levels, flooding and storm surges. In 2015, when we visited, Aiedio village had decreased to only 3 houses, everyone else had left because there was no potable water source. It's since returned to a population of around 10 houses during the dry season. In the wet season no one lives in this village because of the severe storm surges and flooding.

122. Samoa Village, is a recent village, created by missionaries around the late 1950s and early 1960s. But many of the people there are from Mubagouwo village, which during the 2015 drought was completely uninhabited for the same reasons as Aiedio village. The Mubagouwo village has returned to a seasonal dry season population of 3 houses.

123. Both Mubagouwo Village and Aiedio village have no natural freshwater source to this day.

124. Both villages rely on tanks, installed by one of the oil companies operating nearby, as part of a tax credit scheme; these tanks support several villages. Including Goare village, who PBN also worked closely with during 2015.

125. Goare village is 7 km from Mubagouwo village. The people from Goare themselves had 6 tanks but they were all empty during the drought. There were no speedboats then and the people from Goare village would have to go by sailing canoes, travelling for half a day to get first to Aiedio village and then Mubagouwo before the water tank there become contaminated., The people from Goare would have to wait for the wind to change and the tide to come up. When the tide came up and the wind blew in, the young men from Goare Village would collect the whole village's water containers, get onto the sailing canoe and put up the sail to sail to Mubagouwo village.

126. After they fetched water, they would wait for the tide to go out and the winds to change. Once the winds would go from inland back out to the sea, then they would put up the sail and travel back to Goare. That's how they were sourcing water in 2015.

127. Goare village is also a temporary village. During the storm season, the entire village is vacated and everyone moves to Kikori Town where it is safer for them.

Climate change and the biodiversity loss from funding relocation

128. As many of the people of the Kikori delta and coast are forced to leave their traditional lands and move to Kikori Town, they are also forced to enter the cash economy, because they are no longer able to rely on the fish and crops from their customary lands for sustenance.

129. Veraibari village is one of the last remaining villages that has a permanent population year round. They are, however, planning their fifth relocation in 50 years, moving only a few metres further inland, into the swamplands..

130. Their mangrove and coconut trees, which provided them with building materials and that lined their shores, have been taken by the ever encroaching sea. They have changed the way they build houses from using number of different species of mangroves to certain species they consider strong enough to handle the changing environmental conditions, this is Kwila (scientifically named, *Intsia bijuga*) and mangrove cedar (scientifically named *Xylocarpus moluccensis*) and a change from sago palved leaves as thatched roofing to corrugated iron roofing that will enable water catchment for sourcing drinking water.. This is an expensive process that also requires access to the cash economy.

131. This has led, over the last 8 years, to a thriving, unstainable and unregulated industry for "fish maw", the fish swimbladder that is sourced from the "scaly jewfish" and another 5 species within the Kikori. The scaly jewfishfish are purchased from the Kikori region at a price of USD25,000 per kg, for intended sale on the Chinese market. This is one of the highest selling fishmaw products globally.

132. Veraibari have a fish maw processing plant in their village.

133. People in the Kikori delta and coast are using fishing nets to catch fish maw in the sea and near the mouth of the river. This means they have unintended catch and stop sealife from moving between the river and the sea, an essential movement for many sea creatures to find food and reproduce.

134. This fishing method threatens the survival of many sea creatures including the river dolphins.No fishers in the Kikori region consume dolphin meat, nor have any other use or value for dolphin products beyond cultural and spiritual connections. However, dolphins are routinely entangled in gillnets. Because dolphins need to surface to breathe, they often drown in fishing nets.

135. From our monitoring of fishing nets, we estimate that these nets haul 80% by-catch, 50% of which are sharks and rays- 97% of which are endangered. Of the 20% target species caught, only 5 % are the high value targets.

Climate change impacts and education in the delta areas

136. Many delta and coastal villages, like Veraibari, have had their school building washed away by the sea during storm season. Other villages, like Kemei village, have built a classroom hoping to have their children taught but teachers are unable to stay there for the entire year because of the severity of the storm season.

137. Some parents from these villages will send their children, from as young as 5 years old, to boarding schools in locations where teachers are able to attend the whole year round. The decision on where to send their children to school is determined by the cost, the proximity of the school to their village and also on the kinship relations they have with the village where the school is located. This ensures the safety and wellbeing of their children.

138. This compounds an already significant problem in low education and literacy rates throughout the Kikori. In the last study conducted on literacy rates in the western part of Gulf Province, which the Kikori falls into, it was found that of the 13 schools

surveyed, only 4% of student learned to read well and more than 50% had no idea how written language works.

Relocation and quality of life

139. When these delta villages migrate to Kikori town they squat on small areas of Government land, we call them settlements. It's very difficult for them because outside of the small portion of land that's owned by the State, the rest of the land and waters are under the customary ownership of another tribe.

140. In their own villages, their main form of sustenance comes from fishing. In Kikori Town, they have issues with fishing on another tribe's traditional lands. And going back and forth from their traditional waters to fish for their weekly sustenance is problematic. The distance is long in a canoe and if you have a speedboat, the fuel is expensive.

Climate change impacts on Veraibari village

141. From about 2014, I was acutely aware that climate change was impacting Veraibari. From about 2017 I witnessed the increasing intensity of the storm season.

142. The buildup and breakdown of land by wind and wave action is not something that climate change created in the Kikori. It's something that climate change exacerbated. The breakdown and buildup of land is something that's always occurred in the Gulf of Papua and along the delta but climate change has just made it faster, too fast for the people to handle it how they did traditionally.

143. Addressing climate change wasn't a part of PBN's work at the time, we didn't have funding to do this work, and it was a very messy and complicated subject to explain to the people of Veraibari and I didn't know how to start the conversation.

144. It was difficult enough for me to explain the biostatistic work I was carrying out but now you want me to explain climate change? How do I tell them, it's not sorcerers *but*, yes, it is man-made, just by people you can't see and places you might never go to.

145. How do I tell them, the gas pipelines running through the Kikori River, go to these faraway places to be burnt to make many things for these invisible people?

146. I did not broach the subject with the community until about September of 2020.

147. I started talking to the community about climate change after their school building was destroyed, for the third time, and 2 teachers' homes were also destroyed by wind and waves between March and August 2020.

148. The community responded by accusing a number of elderly people of sorcery. The community accused these people of destroying the school because they were jealous of those families whose children were receiving an education.

149. The accused were brought to the police station in Kikori town.

150. When I heard this, I knew I had to start the conversation about climate change and so I did. The community was accusing these vulnerable people of sorcery because they didn't know about climate change, but I did, and I had the duty to do my best to explain it to them

151. I told them about PNG's Climate Change and Development Authority which was established in 2014. The existence of this body helped in my explanation to the community because I could say, it's not something I am making up, or something that's just happening here in Veraibari, the national government is so concerned they created this body.

152. Following this, I assisted the community to write to the Climate Change and Development Authority about their plight and to approach the Governor of the Gulf Province for assistance. The Governor sent the community 20 sandbags, which the sea, very soon after, breached.

153. In 2020, the PNG's national broadcasting station produced a documentary on the situation in Veraibari and their fifth planned relocation.

154. In the same year, PBN obtained some funding to start a food security program, however, the gardens we grew from this were also quickly taken by the sea.

155. In 2022, the community was assisted by PBN and two environmental law organisations to write a submission to the Special Rapporteur on human rights and climate change.

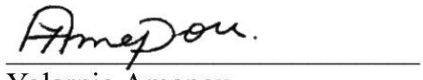
156. In 2023, one of those environmental law organisations, in partnership with PBN, hosted a series of climate change educational workshops in Veraibari.

157. Although all of these activities help to educate and may mitigate, however temporary, some impacts of sea level rise and storm surges, they do not propose a long term solution for the people of Veraibari.

158. Veraibari village has no choice, it must relocate. It must be funded to relocate. But how long will they be at this new location before they need to move again? And where will they move to when this site backs onto swamplands?

159. And what of all the losses they have had? The loss of land, and plants and animals, and the loss of knowledge and practices tied to those things? How will they regain those things?

Respectfully submitted on 14 March 2024



Yolarnie Amepou

Annexure A to Expert Statement of Yolarnie Amepou

CURRICULUM VITAE



Yolarnie Amepou

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PERSONAL DATA

First Name:	Yolarnie
Surname:	AMEPOU
Gender:	Female
Nationality:	Papua New Guinean (PNG)
Date of Birth:	20th May 1988
Marital status:	Single
Children; Sex; Date of Birth	Three (3); Male; 11 April 2013; Female; 13 Dec 2016; Feale; 15 Aug 2023
Health	Excellent, COVID-19-fully vaccinated: AstraZeneca in October 2021

CAREER HISTORY AND EXPERIENCE

2024 (2017-Present)
Cofounder, Director
Piku Biodiversity Network Inc. PO BOX 804. Vision City. Waigani Drive. Papua New Guinea. Website. www.pikubionet.org.pg.

2023 – 2024
Indo-Pacific Climate Leadership Lab one of 16 inaugural fellows from the Indo Pacific in the year long program that began in October 2023 and includes three one week, in person seminars held in Honolulu, Fiji and Tokyo. Together, the fellows will critically examine current responses to climate change adaptation and explore community approaches and their connections to local and regional policy.

2022 – 2023
Save Our Seas Foundation Grantee Recipient, **USD 9897.00** for work with collecting age and growth data for the data deficient and endangered winghead shark, *Eusphyra blochii* in the Kikori River Delta, Gulf Province, Papua New Guinea and continuation of the collection of fish and sawfish catch rate data in partnership with the Piku Biodiversity Network.

2022
Young Pacific Leaders Regional Workshop on Marine Sustainability Honolulu, Hawaii November 28-30, 2022. Workshop that brought together young Pacific Ocean policy emerging leaders for a series of virtual roundtables. Participants explored how to contribute to a sustainable and secure blue Pacific.

2022
Young Pacific Leaders Conference, As Alumni Mentor
Honolulu, Hawaii, **July 18-21, 2022**
YPL Annual Conference brought together young leaders from throughout the Pacific region on the YPL pillars of education, environment and resource management, civic engagement, and social and economic development.

2022
US – Papua New Guinea Exchange Alumni, Alumni Thematic International Exchange Seminar. Public Health and Climate Crisis in the Indo Pacific**.** Bangkok, Thailand. May 21st to 28th 2022. World Learning and United States Department of State.

2021 – 2022
Global Women in Management, Advancing Women's Economic Opportunities (GWIM 70). September 14th 2021 – March 29th 2022. Counterpart International with funding form ExxonMobil Foundation.

2021-Present	**Alumni** - Young Pacific Leaders. Young Pacific Leaders Preconference Activities 12 April – 02 May and Virtual Conference 7 and virtual conference 7-9 May 2021. US Department of State and Cultural Vistas
2021 –Present	**Alumni–** International Visitors Leadership Program. US Department of State. Promoting Climate Resilience in Pacific Island Countries. A Sub-Regional Project for Fiji, New Zealand and Papua New Guinea. March 27 – April 16, 2021. Arranged by Graduate School USA.
2018	**Participant** - Papua New Guinea Women's Leadership Workshop on September 3-7th 2018 in Port Moresby, Papua New Guinea. Workshop funded by ExxonMobil PNG, WomenLead Institute at Plan International USA and the Advancing Papua New Guinea, Women Leaders Network
2018 - Present	**Member:** IUCN SSC Tortoise and Freshwater Turtle Specialist Group
2016-2020	**Student Representative Oceania,** Steering Committee for the 9th World Congress of Herpetology 5-10 January 2020, Dunedin, New Zealand.
2014 – 2017	**Masters student** in Applied Science with the University of Canberra, Australia
2014 - 2016:	**Project Lead** –Kikori, Papua New Guinea for the Piku Project facilitated by the University of Canberra, Australia
2011 – 2013	**Intern Biologist**, with the PNG Institute of Biological Research (PNGIBR), Goroka, Eastern Highlands Province. Papua New Guinea

AWARDS

2022	One of nine nominees globally for the Future For Nature Award 2022. More information can be found at, Announcing the 2022 FFN Award Nominees - Future For Nature.
2017	United Nations 2017 Youth Champion of the Sustainable Development Goals in Papua New Guinea. Presented on The United Nations celebrating 72 years at the Taurama Aquatic Centre, 24th of October 2017. Port Moresby, Papua New Guinea
2016	One of eight (8) recipients worldwide to a full scholarship to attend the 8th World Congress of Herpetology in Hangzhou, China. August 2016
2015	Awarded Best Student Presentation Runner-Up – Best Paper 13th Annual Symposium on Conservation and Biology of Tortoises and Freshwater Turtles. Tucson, Arizona, United States of America, 6-9 August 2015
2015	Recipient of Pride of Papua New Guinea – Women's Award– Environment category. For Community Service. Presented on the 19th of November 2015 at the Parliament Function Room, Port Moresby, Papua New Guinea.
2014	Recipient of Award for one of the Top Three Post graduate student presenters at the Society for Conservation Biology (Oceania) Conference – Resilient Island Ecosystems and Communities. The University of the South Pacific (USP) Laucala Campus, Suva, Fiji. 7-11 July 2014.

PUBLICATIONS

2024	Amepou, Y., Chin, A., Foale, S., Sant, G., Smailes, O., & Grant, M. I. (2024). Maw money, maw problems: A lucrative fish maw fishery in Papua New Guinea highlights a global conservation issue driven by Chinese cultural demand. *Conservation Letters*, e13006. https://doi.org/10.1111/conl.13006
2024	Roeger, D.L., Amepou, Y., Chin, A. *et al.* Assessing Impacts and Local Perceptions Following the Incidental Introduction of tilapia (Cichlidae: Cichliformes) in a Remote Inland Fishery in Papua New Guinea. *Hum Ecol* (2024). https://doi.org/10.1007/s10745-023-00460-7
2024	Grant M.I, . (2024) Pacific Conservation Biology 30, PC22048. doi:10.1071/PC22048
2023	Grant, M.I., Kyne, P.M., James, J., Hu, Y., Mukherji, S., Amepou, Y., Baje, L., Chin, A., Johnson, G., Lee, T., M ahan, B., Wurster, C., White, W. T., & Simpfendorfer, C. A. (2023). Elemental analysis of vertebrae discerns diadromous movements of threatened non-marine elasmobranchs. *Journal of Fish Biology*, 103(6), 1357–1373. https://doi.org/10.1111/jfb.15537
2023	Hill, S, Green.M, Amepou.Y and Grant M, 2023. The Wonky Tooth Sawfish. https://sawfishbook.org/the-wonky-tooth-sawfish-book/
2022	Grant, M. I., Amepou, Y., & Jacobs, S. (2022). Assessment of target and nontarget species catch rates in the Kikori fish maw fishery and local ecological knowledge of locally threatened dolphin species. Final report prepared for the Secretariate of the Pacific regional environmental program (SPREP), AP_2/39 assessment of by-catch of threatened marine species by small scale fishers and mitigation options in the Kikori (pp. 1–52). Secretariate of the Pacific Regional Environmental Program (SPREP). Available at https://library.sprep.org/content/assessment-target-andnon-target-species-catch-rates-kikori-fish-maw-fishery-and-local-0
2021	Eisemberg, C.,Khatiwada, T., Truscott, H., Amepou, Y., Olewale, A. and Padilha, C. (2021) 'Solid waste in remote communities of Papua New Guinea – a case study on the Kikori delta region', Int. J. Society Systems Science, Vol. 13, No. 3, pp.182–200.
2021	Grant MI, White WT, Amepou Y, Appleyard SA, Baje L, Devloo-Delva F, Feutry P, Ibana D, Jogo DJ, Jogo S, Kyne PM, Mana R, Mapmani N, Nagul A, Roeger D, Simpfendorfer CA, Chin A (2021a) Papua New Guinea: a potential refuge for threatened Indo–Pacific river sharks and sawfishes. Frontiers in Conservation Science 2, 719981. doi:10.3389/fcosc.2021.719981
2021	Kyne, P. M., Davies, C.-L., Devloo-Delva, F., Johnson, G. J., Amepou, Y., Grant, M. I., Green, A., Gunasekara, R. M., Harry, A. V., Lemon, T., Lindsay, R., Maloney, T., Marthick, J., Pillans, R. D., Saunders, T., Shields, A., Shields, M., & Feutry, P. (2021). Molecular analysis of newly-discovered geographic range of the threatened river shark Glyphis glyphis reveals distinct populations. Report to the National Environmental Science Program, Marine Biodiversity Hub. Charles Darwin University and CSIRO. Available at https://www.nespmarine.edu.au/system/files/Kyne%20et%20al_A12_M2.17_Molecular%20analysis%20of%20newly%20discovered%20geographic20range%20of%20glyphis%20glyphis_Jul%2021.pdf
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2015	Eisemberg, C. C., Amepou, Y., Rose,M., Yaru, B., and Georges, A. (2015). Defining priority areas through social and biological data for the pig-nosed turtle (Carettochelys insculpta) conservation program in the Kikori Region, Papua New Guinea. J. Nat. Conserv. 28, 19–25. doi: 10.1016/j.jnc.2015.08.003
2014	Georges, A., De Alvarenga, C. C. E., Amepou, Y., & Manasi, E. (2014). Turtle Conservation Challenges in Papua New Guinea. Pp 22-24. Turtle Survival Alliance Magazine. https://colombia.wcs.org/Portals/113/Noticias/TSA-Magazine-2014.pdf?ver=2016-05-23-112225-490

REFEREES

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The Piku Project

The Piku Project is our founding Project. We worked as the Piku Project for over 10 years before registering as the Piku Biodiversity Network in 2017.

Piku is the Rumu language name for the Pig-nosed turtle. The Piku Project continues to work with the endangered Pig-nosed turtle in the Kikori River Delta with a focus on community education and community-led conservation action.

Our Other Projects

The Piku Biodiversity Network also works with the freshwater river dolphins locally known as "Pidu" for Delta tribes of the Kikori River. This is the Pidu Project which works with the Australian humpback and Australian snubfin dolphins.

Our shark project works with about 43 species of sharks and rays. We also work to support communities battling climate change impacts and to support our young people with projects and opportunities like that of our Kikori Turtle Rangers Project.



We are thankful to our Partners Who help us work towards Biodiversity Conservation in the Gulf of Papua, PNG.

For More Information

Piku Biodiversity Network Facebook Page

admin@pikubionet.org.pg / pikuoffice2019@gmail.com

www.pikubionet.org.pg

Introducing the

Piku Biodiversity Network

PO BOX 804
Vision City Post Office
Waigani Drive
Port Moresby



Piku Biodiversity Network Inc

The Piku Biodiversity Network Incorporated (PBN) is a network of individuals and organizations with the goal of improving the conservation and management of the biodiversity of Papua New Guinea through community engagement in environmental education, community-led conservation and knowledge generation.

The organization that is the PBN exists to facilitate the activities of its membership towards the goal using these strategies.

Our Vision

Informed and empowered communities working together to sustain a healthy Papua New Guinea environment which supports local culture and livelihoods and contributes positively to biodiversity conservation.

Our Mission

To promote and enable, through its membership, biodiversity conservation in Papua New Guinea via environmental education, community-led conservation and knowledge generation.

Our Values

- People,
- Community-led Conservation,
- Partnerships,
- Environment
- Operating Sustainably

Our Organisation

- The PBN is governed by a volunteer Board of Directors.
- Daily operations are managed by our Director, Ms Yolarnie Amepou.
- We are an association of members who lead their own projects within the PBN.



Exhibit 36

Obligations of States in Respect to Climate Change
(Request for Advisory Opinion)

Statement of Professor Paige West

13 March 2024

I, Paige West, Professor of Anthropology at the University of Columbia, United States of America, of 1264 Amsterdam Avenue, #5D, NY NY 10027 solemnly and sincerely affirm and declare on March 13, 2024:

BACKGROUND

1. My full name is Cathrine Paige West and I am a national of the United States of America (USA). I use the name "Paige West" in work and publication.

2. I am an anthropologist and my current role is a Professorship in Anthropology at Barnard College and Columbia University and Director of the Climate School Transdisciplinary Research Lab at Columbia University in the USA.

3. I have conducted research in Papua New Guinea since 1997 working in both terrestrial zones and coastal zones. My broad scholarly interest is in the relationship between societies and their environments. I have written about the linkages between environmental conservation and international development, the ways in which culture and environment are connected in Indigenous communities, and what happens when these connections are broken. My current research is focused on the question of how people forge new lives in the face of climate change and how they work to maintain cultural traditions in the present context. I have attached my CV at Annexure A of this statement.

4. I have worked with Indigenous peoples in Melanesia to understand their biodiversity-focused traditions and I have collaborated with many communities to revitalize their socio-ecological systems.

5. Since 2007, I have worked largely in the New Ireland Province of Papua New Guinea. In New Ireland, I work extensively with Ailan Awareness, a local NGO that directs its efforts towards reinforcing Indigenous sovereignty in connection to biological and cultural diversity in New Ireland Province.

6. I have published works on peoples throughout PNG including monographs, *Dispossession and the Environment: Rhetoric and Inequality in Papua New Guinea* (Columbia University Press, 2016); *Conservation is our Government Now: The Politics of Ecology in Papua New Guinea* (Duke University Press, 2006); co-edited volume *Tropical Forests of Oceania: Anthropological Perspectives* (Australian National University Press, 2015); as well as over 30 articles and chapters.

7. In this Statement, I speak about Gimi speaking people in the Eastern Highlands and multiple socio-linguistic groups in New Ireland who I have worked with in Papua New Guinea.

8. This expert statement is based on my expertise and experience. I confirm that all the matters in respect to which I express my opinion in this statement are within my competence and professional knowledge and experience. I have been asked to provide an independent statement, based solely on my expertise and confirm that my conclusions are unbiased, objective and impartial.

BIODIVERSITY AND WORLD VIEWS IN THE MALAGAN CULTURE

9. In northern New Ireland Province, *Malagan* is the collective name for a series of ceremonies, as well as the masks and carvings associated with them. The Malagan carvings are spectacular carvings and some of the most technically complex in Oceania.

10. There are now only about six living master carvers left of these objects.

11. Malagan is both those carvings that are funerary objects, but also a kind of total system that takes people all the way from before conception through to birth, through life, through initiation, through marriage, and then to death. And then after they die, the malagan ceremony and the carving allows what they were when they were alive to move on into the spirit world, which is out to sea.

12. Malagan carvings are wooden carvings but they're also a form of text. They are like a book if you know how to read them. If you're a specialist in reading malagan carvings, then you will have the ability to read the carvings on 5 different levels.

13. The first level is one that we can all read, which is that you see carvings of animals and people, so you see the physical form of the animal and you see the physical form of the people. On the second level, if you're a specialist enough, you will understand what animals are being carved. The third level of reading, means you are specialist enough to

understand the significance of those animals in terms of systems of spiritual practice, what used to be called “myth” and “religion”. On the fourth level of reading, you are specialist enough to understand the relationship between the person who carved them and their clan and that specific story about those specific animals. The fifth level of reading is a secret level that only the carvers know, and that's the level at which the carving story is connected to a place on the landscape that is known only by initiated carvers.

14. That total social system that is embodied in the malagan carvings is being radically changed as species are going to places that they didn't live in before, but also as species decline. For example, the fish species that are represented on these carvings that are connected to specific clan histories and specific places on the landscape are no longer in those places. This shows the direct link between ecology and culture and as the ecology changes the culture changes.

15. In my opinion, and from the work that I do with Ailan Awareness, they are no longer in those places because of coral bleaching, sea level rise, and warming seas. The main island of New Ireland is surrounded by fringing reef and that fringing reef is all damaged and dying and so all of the animals represented on these carvings that are then connected to totems and to clan histories go away.

16. This means cultural ideas and practices, like the Malagan carvings and the Malagan culture, go away too.

“HUNTING” AND WORLD VIEWS IN THE HIGHLANDS OF PNG

17. In Gimi-speaking communities in the Eastern Highlands of PNG, the relationship that people have with where they hunt is about their relationship with their ancestors. They bury their dead or put the bones of their dead on traditional hunting grounds. And because of that, the thing that was a living human and what we would call a “soul” in English, goes back into that land and it infuses that land. Then marsupials and other kinds of plants and animals that live on that land take in the soul of the clan. And so there is no separation between the natural world and the spiritual world and the cultural world at that particular moment.

18. With my white western eyes, I saw it at first as just “hunting” but now after all these years, I see it as a communing of the past and the present and the future, and this transference of the soul of the clan into the soul of the forest. That kind of connection is what is lost when people are not hunting.

19. From my observations and from what I have been told by the people I work with, the frequent and increased El Nino events, means increased drought occurrence and this is affecting the distribution of plants and animals. It means the animals that were traditionally hunted are not there anymore. In the highlands, for older men who have been

hunting their whole lives and older women who have been foraging and making big gardens out in the bush for their whole lives, they're still doing everything they can do to maintain those historic ways of provisioning. It's harder and it's frustrating and it's deeply sad for them, but they're still trying to do it.

20. However, for young people, it's not rewarding enough to learn or continue these practices. They don't want to go hunting if there are no animals to hunt. They don't want to plant big gardens if they are not going to bear food. This means young people are not accompanying their elders and, therefore, not learning those traditions or continuing them.

21. In 2019, when I was in PNG, I met with a master hunter I know, Ine Tabari, from Maimafu Village and we talked about how complicated it was now to find the marsupials that he wanted to find. We were talking about the droughts and the way that droughts affect the growth of trees and the fact that the leaves that marsupials eat get more toxic because there's less water; these leaves have toxins in them and less water means the toxins are more concentrated.

22. In our conversation I was talking about the droughts from my western science informed perspective and Ine's was talking about it from his Indigenous knowledge perspective. He said, "It's getting harder to do this, but what else do I have to do? This is my thing that I do." And then I talked to his grandchildren and for them it's really hard and unpleasant to go out hunting when they don't catch anything. It's even more unpleasant to go hunting when there are El Nino events. So in the Highlands, younger people are not doing the things that they're not learning to do, the things that they would have learned to do. So it's changing their traditional practices and their connections to their "place".

23. The effects of climate change on significant creatures to people's hunting practices are of real concern for me. I'm in fear of what's happening to the tree kangaroos because they're so important to people in PNG's hunting and it's looking like the droughts are really negatively affecting their population densities, and that's just going to mess up this whole cycle that I'm talking about; the meeting of the past, present and future and the ability to transfer this knowledge and world view to the next generation.

LOSS OF TERRITORY AND QUALITY OF LIFE FOR THE PEOPLE OF TENCH ISLAND

24. Tench Island is a small, low-lying, coral island in the St Matthias Islands group in the Bismarck Archipelago that is part of the New Ireland Province of PNG.

25. The people of Tench Island vacate the island and move to the main island of New Ireland before every King Tide. This has always been their practice.When the weather was really bad the people of Tench Island would go to the mainland and stay with communities they

had kinship ties with or had built migratory ties with and return to Tench when the weather had improved.

26. However now the weather is always so bad that returning to Tench Island is a problem and the mainland is also being affected by king tides so the communities that the Tench Islanders would traditionally stay with are also affected and cannot host them.

27. Tench Island no longer has a fresh water source and the salinated soil means nothing can grow there anymore so everyone from Tench Island will have to move permanently. They are unable to rely on their migratory and kinship networks because they too are being impacted by climate change and this will mean a growth in urban settlements for people that can't be absorbed into communities that they're married into.

28. It will also means a growth in what counts as joblessness. As once the Tench Islanders are no longer able to live their traditional lifestyles, they will be viewed through a capitalist lens. So if they don't have a wage labor position, they're categorised as "jobless".

29. In terms of health, because the Tench Islanders cannot grow food on their land anymore, they are not receiving adequate nutrients. Once they move away from their lands, the traditional ways of providing adequate nutrition are not available to the Tench Islanders anymore because they are not on their own land, they are not on their own reefs, so they can't feed themselves in that way.

30. They now have to buy their food and inflation in PNG is so high that people are not buying enough calories or food with adequate nutrition.

31. Additionally, to buy food, they need to access cash. In the past, the Tench Islanders would have fished and then sold their fish at the market or sold it to the nearby Lihir and Simberi mines. If they are not on their island, it means that they're not able to fish because they can't fish on other people's reefs so they also cannot access cash.

32. Over the past 14 years, I have observed this happening to the Tench Islanders as well as people from other outer islands who have been forced to settle on the mainland. This leads to health related impacts from lack of adequate nutrition.

33. The health system in New Ireland is really dire and, from my observations, has been in decline over the last 14 years. In the past there was a little more support for people in terms of health, but now it's just all gone. It's completely eroded.There's nobody at the hospital that can help people with all the climate related health problems they're experiencing,

34. Over the past 14 years, I've also observed so many more people with really bad, recurrent and enduring cases of malaria. It's like everybody has malaria all the time now and there's no health support. Malaria care in New Ireland Province is bad. This is combined with the kind of health related effects from a lack of adequate nutrition.

35. When I was last in New Ireland Province in July 2023, the Tench Islanders kept coming to me saying, "What are you going to do? What are you going to do to help us? How are you going to help us?" They are unable to see any security network or any kind of place for them on the mainland and there is insufficient State support.

36. There's a kind of profound depression and inability to face life. For the first time I heard people from Tench say over and over again, "We wish that we were dead so we didn't have to deal with this." I heard that from three different people from Tench, and they talked about it in terms of their children too. They said, "We wish that our children weren't alive right now because the island is gone."

37. There is currently no external support for Tench Islanders to relocate or to try and save their cultural heritage. The government of Papua New Guinea does not have enough staff to work with all communities in need. The Tench situation is a crisis and there is no one to help them.

BREAKDOWN OF TRADITIONAL STABLE SOCIAL RELATIONSHIPS

38. With declines in numbers of species and diversity of species, people are hunting and fishing in places that don't belong to them, where they don't have a relationship with the "place" or people and it's causing problems. It is causing conflict. People are fighting with their neighbors about all kinds of things, and a lot of it is tied to people on other people's lands, accessing their lands and reefs without permission.

39. The conflicts arising from these practices are damaging the fabric that allowed people from different families to live in some kind of stability.

40. These conflicts contribute to the existing global narrative about PNG being a violent place historically, and PNG sitting in this particular place in the imaginary world is going to be more entrenched because people are going to be fighting over resources even more so than they already do. This will, once again, make international aid agencies not attend to anything except trying to stop violence, overlooking the underlying causes of the violence.

Respectfully submitted on 13 March 2024



Professor Paige West

Paige West, CURRICULUM VITAE – January 30, 2024

Paige West

Claire Tow Professor of Anthropology, Barnard College, Columbia University
Director, Transdisciplinary Research Lab, The Climate School, Columbia University

DEGREES IN HIGHER EDUCATION

Ph.D.	Anthropology, Rutgers University (1997 – 2000)
M.Phil.	Anthropology, Rutgers University (1995 – 1997)
M.A.	Anthropology, The University of Georgia (1991 – 1994), *Phi Kappa Phi*
B.S.	Sociology and Psychology, Wofford College (1987 – 1991) *Magna Cum Laude, Sociology Department High Honors, Phi Beta Kappa*

PROFESSIONAL EXPERIENCE IN HIGHER EDUCATION

Claire Tow Professor of Anthropology (Endowed Chair), July 2016 – Present
Director, Center for the Study of Social Difference, Columbia University, July 2019 – June 2023
Co-Director, Barbara Silver Horowitz Scholars of Distinction, July 2017 – June 2021
Professor of Anthropology, July 2013 – June 2016
Chair of Barnard Department of Anthropology, July 2013 – June 2016
Associate Professor of Anthropology with Tenure, July 2009 – June 2013
Associate Professor of Anthropology, July 2008 – June 2009
Assistant Professor of Anthropology, July 2001 – June 2008

Affiliations with Other Columbia University Departments

Ph.D. in Sustainable Development, September 2007 – Present
Ecology, Evolution, and Environmental Biology, September 2003 – Present

Affiliation with the American Museum of Natural History

Senior Research Associate, Anthropology, October 2010 – Present
Visiting Curator for Pacific Ethnology, Anthropology, July 2009 – June 2010

Other Academic Experience

Rutgers University, Department of Anthropology, Visiting Lecturer, July 2000 – June 2001
Winthrop University, Department of Anthropology, Visiting Lecturer, July1994 – June 1995

SIGNIFICANT ACHIEVEMENTS

Co-founder, Ranguva Solwara Skul, Kavieng, Papua New Guinea (2009)
Founder, *Environment and Society: Advances in Research* (peer review journal) (2009)
Co-Founder, The Papua New Guinea Institute of Biological Research (2007)
Founder, Seminar on Politics, Society, Environment, and Development, Columbia University (2003)

CURRENT LEADERSHIP POSTIONS

Advisory Collective, Political Ecology Network (POLLEN) (2021 – Present)
Advisory Board, Diversity Studies Centre Oslo, Oslo Metropolitan University (DISCO) (2020 - Present)
Executive Design Board, The Climate School, Columbia University (2019 – 2024)

Interim Steering Committee, The Climate School, Columbia University (2022 – 2024)
Advisory Board, The University Seminars, Columbia University (2014 – Present)
Advisory Board, Barnard Center for Research on Women, Barnard College (2010 – Present)
Board of Directors, The Papua New Guinea Institute of Biological Research (2007 – Present)

CAMPUS WIDE SEMINARS

Co-Chair, *Ecology and Culture University Seminar*, Columbia University (2012 – present).
Director, *Politics, Society, Environment, and Development*, Columbia University (2003 – 2020)
Co-Director, *Pacific Climate Circuits*, Columbia University (2015 – 2018)

ACADEMIC AND PROFESSIONAL HONORS

2021	Fellow, John Simon Guggenheim Memorial Foundation.
2021	Named one of "50 people changing the world" by the Explorers Club.
2017-2018	Phi Beta Kappa national distinguished visiting scholar (one of fifteen nationally).
2017	Winner, Columbia University Press Distinguished Book Award for *Dispossession and the Environment: Rhetoric and Inequality in Papua New Guinea.* New York, NY: Columbia University Press.
2016	Commencement Speaker, Wofford College.
2016	Distinguished Scholar-Lecturer for the NSF's National Socio-Environmental Synthesis Center (SESYNC).
2013	Delivered the Leonard Hastings Schoff Memorial Lectures at Columbia University.
2010	Named Mack Lipkin Man and Nature Fellow by the American Museum of Natural History.
2009	Outstanding Mentorship Award, Columbia University Office of Multicultural Affairs
2009	University Lecturer for the University of Wisconsin, Madison (Spring 2009).
2006	Rockefeller Foundation Residency, Bellagio Study Center, Bellagio, Italy, (August).
2004-2005	American Council of Learned Societies Fellowship.
2004-2005	American Association of University Women American Fellowship.
2002	American Anthropological Association, Anthropology and Environment Junior Scholar Award.
2000	Nominated by Rutgers University for the UMI / Council of Graduate Schools National Distinguished Dissertation Award in the Social Sciences.

FIELD RESEARCH

May 2024 – July 2024 – to be conducted (funded, planned) Papua New Guinea
May 2023 – July 2023 – Papua New Guinea and Australia
February 2022 – April 2022 – French Polynesia
May 2019 – June 2019 – Papua New Guinea
May 2018 - June 2018 - Papua New Guinea
December 2017 – January 2018, Papua New Guinea
February 2017 – April 2017, Papua New Guinea
June 2016 – August 2016, Papua New Guinea
June 2015 – July 2015, Papua New Guinea
June 2014 – August 2014, Papua New Guinea and Australia
June 2013 – August 2013, Papua New Guinea and Australia
June 2011 – August 2011, Papua New Guinea
June 2010 – August 2010, Papua New Guinea
March 2010 – April 2010, Papua New Guinea
June 2009 – August 2009, Papua New Guinea
June 2008 – August 2008, Papua New Guinea
December 2007 – January 2008, Papua New Guinea
January 2007 – August 2007, Papua New Guinea
June 2005 – August 2005, Papua New Guinea
January 2005 – May 2005, Australia, England, Germany, United States
May 2004 – December 2004, Papua New Guinea
May 2003 – August 2003, Papua New Guinea
May 2002 – August 2002, Papua New Guinea
April 2001 – August 2001, Papua New Guinea
August 1997 – December 1998, Papua New Guinea
April 1997 – July 1997, Wildlife Conservation Society International Conservation Office, NYC

PUBLICATIONS AND CREATIVE WORK

Single Author Monographs

2016. *Dispossession and the Environment: Rhetoric and Inequality in Papua New Guinea.* New York, NY: Columbia University Press.

* Winner, 2017, Columbia University Press Distinguished Book Award.

2012. *From Modern Production to Imagined Primitive: The Social Life of Coffee from Papua New Guinea.* Durham: Duke University Press.

*Runner up, 2013, Julian Steward Prize, Society for Anthropology and the Environment.

2006. *Conservation is our Government Now: The Politics of Ecology in Papua New Guinea.* Durham: Duke University Press.

Edited Volumes

2015. *Tropical Forests of Oceania: Anthropological Perspectives.* Joshua Bell, Paige West and Colin Filer, eds. Canberra: Australian National University Press.

2009 *Virtualism, Governance, and Practice: Vision and Execution in Environmental Conservation.* James G. Carrier and Paige West, eds. New York: Berghahn Books.

2008. *Against the Grain: The Vayda Tradition in Human Ecology and Ecological Anthropology.* Bradley Walters, Bonnie J. McCay, Paige West, and Susan Lees, eds. Lanham, MD: Lexington Books.

Special Editions of Peer Review Journals

2021. *Offshore Detention in the Pacific*. JC Salyer, Steffen Dalsgard, and Paige West, eds. *The Contemporary Pacific.*32(2).

2018. *From Reciprocity to Relationality: Anthropological Possibilities.* Paige West, ed. *Cultural Anthropology* (Online & Open Access, in *Hot Spots*), September 22.

2010. *Surroundings, Selves and Others: The Political Economy of Identity and the Environment.* James G. Carrier and Paige West, eds. *Landscape Research*, 34 (2).

2006. *Melanesian Mining Modernities.* Paige West and Martha Macintyre, eds. *The Contemporary Pacific,* 18 (2).

Peer Review Journal Articles

Porzecanski, A.L., S. Akabas, E. Betley, M. Blair, N. Bynum, J.R. Ginsberg, M. Groom, S.K. Macey, A.C. Moore, C.J. Rivera, and P. West. (2024). Lessons from a transformative conservation educator and building the future of conservation education. Lessons in Conservation 13(1): 5-14.

West, Paige, John Aini, Michael Ladi Piskaut, Mark Almais, Mary Sauri, Bernard Tubail, and Boniface Fode. (2024). "Indigenous Coastal Planning in Papua New Guinea: Self-determination through Revitalization." Theorizing the Contemporary, *Cultural Anthropology*, January 25. https://culanth.org/fieldsights/indigenous-coastal-planning-in-papua-new-guinea

Toko, Pagi, Francesca Dem, Rodrigo Leret, Dino Martins, Jonah Philip, Paige West and Vojtech Novotny (Under Review) "Biodiversity conservation and Indigenous peoples in the tropics", *Nature*.

Yin Zhang, Paige West, et. al. (2023) "Protected Areas, Community Based Natural Resource Management Areas, and Indigenous and Locally Designed Management: An assessment of effectiveness" *Annual Review of Environment and Resources.* Vol. 48:559-588 ***I am the Corresponding author, written with 51 colleagues (reverse ABC author order) https://doi.org/10.1146/annurev-environ-112321- 081348*

Kik, Alfred, Leonardo R. Jorge; Jarmila Bajzekova; Nigel Baro; Redley Opasa; Gibson Sosanika; Pavel Duda; Paige West; Katerina Sam; Jan Zrzavy; Vojtech Novotny (2023) "Hunting skills and ethnobiological knowledge among the young, educated Papua New Guineans: Implications for conservation" *Global Ecology and Conservation. GECCO-D-00966R2 (June 2023)*

West, Paige. (2023) "Conservation as Homogenization? Socio-ecological futures and collaborative relations" *Kritisk Etnografi – Swedish Journal of Anthropology,* Vol. 6, No. 1. Pp 49-56.

Aini, John, Paige West, Yolarnie Amepou, Michael Ladi Piskaut, Cornelius Gasot, Rachel S. James, Jason S. Roverts, Patrick Nason, and Anna Elyse Brachey. (2023). "Reimagining Conservation Practice: Indigenous Self Determination and Collaboration in Papua New Guinea. *Oryx*. 57(3), 350-359. ***I am the Corresponding author.*

West, Paige. 2021. “Reversing the question: Malinowskian Legacies and the Anthropology of Climate Change”, *Economic Anthropology*. 8(1):172-147.

West, Paige. 2020. “Becoming through the Mundane: Asylum Seekers and the Making of Selves in Port Moresby, Papua New Guinea”. In, *Offshore Detention in the Pacific*. JC Salyer, Steffen Dalsgard, and Paige West, eds. *The Contemporary Pacific.* 32(2):468-476.

Salyer, JC, Steffen Dalsgaard, Paige West 2020. “It Is Not Because They Are Bad People”: Australia’s Refugee Resettlement in Papua New Guinea and Nauru. *The Contemporary Pacific* 32(2): 435-448.

West, Paige. 2020. “Translations, palimpsests, and politics: Environmental Anthropology Now”. *Ethos: Journal of Anthropology.* 85(1):118–123.

West, Paige. 2018. “Introduction” in *From Reciprocity to Relationality: Anthropological Possibilities.* In, Paige West (ed)., *Cultural Anthropology* (Hot Spots). September 22.

West, Paige. 2017. “Town and Place: Old Territory, New Difference”. *Cultural Dynamics.* 29(4) 322-332.

Sterling, E.J., et. al. 2017. (one of 15 co-authors) “Biocultural approaches to well-being and sustainability indicators across scales”, *Nature Ecology, and Evolution.* 1, 1798–1806 (2017*).*

West, Paige. 2017. “Dispossession.” *In* Theorizing the Contemporary”, June 28. *Cultural Anthropology.* (online only)

West, Paige. 2016. “An Anthropology for The Assemblage of the Now”, *Anthropological Forum.* 26 (4) 438-445.

West, Paige. 2015. “Anthropological Indeterminacy”. *HAU: The Journal of Ethnographic Theory.* 5(1) 454–458.

Castree, Noel, et. al. 2014. (one of 23 co-authors) “Changing the Intellectual Climate”. *Nature Climate Change* 4, 763-768.

West, Paige. 2014. "Such A Site for Play, This Edge: Surfing, Tourism and Modernist Fantasy in Papua New Guinea”. *The Contemporary Pacific* 26 (2).

Ogden, Laura, Nik Heynen, Ulrich Oslender, Paige West, Karim-Aly Kassam, and Paul Robbins. 2013. “Place, Equity and Earth Stewardship in the Anthropocene”, *Frontiers in Ecology and the Environment.* 11(7): 341-347.

West, Paige. 2012. “Globalization, Place, and Theory in Anthropology”. *Anthropology Now.* 4 (3): 97-108

Laurance, Bill, et. al. 2012. (one of 100 co-authors) “Averting biodiversity collapse in tropical forest protected areas”. *Nature,* 489, 290-294.

West, Paige. 2010. My Reply. (critical essay response to reviews of *Conservation is Our Government Now*). Pacific Studies 33 (1): 102 -120.

West, Paige. 2010. *“*Making the Market: Specialty Coffee, Generational Pitches, and Papua New Guinea”. *Antipode.* 42 (3) 690 – 718.

West, Paige and James G. Carrier. 2010*." "* Introduction: Surroundings, Selves, and Others: The Political Economy of Environment and Identity". *Landscape Research.* 34 (2) 157 – 170.

West, Paige. 2008. "Tourism as Science and Science as Tourism: Environment, Society, Self and Other in Papua New Guinea". *Current Anthropology.* 49 (4):597-625.

Peterson, Richard, Paige West, Diane Russell and Peter Brosius. 2008*. "*Seeing (and Doing) Conservation Through a Cultural Lenses". *Environmental Management* 45:5–18.

West, Paige, and Daniel Brockington. 2006. "Some Unexpected Consequences of Protected Areas: An Anthropological Perspective". *Conservation Biology* 20 (3):609-616.

West, Paige, Daniel Brockington, and James Igoe. 2006. "Parks and Peoples: The Social Effects of Protected Areas". *Annual Review of Anthropology* 20 (3):609-616.

West, Paige. 2006. "Environmental Conservation and Mining: Between Experience and Expectation in the Eastern Highlands of Papua New Guinea". *The Contemporary Pacific* 18 (2):295-313.

West, Paige. 2005. "Translation, Value, and Space: Theorizing an Ethnographic and Engaged Environmental Anthropology". *American Anthropologist* 107 (4):632-642.

West, Paige. 2005. "Holding the Story Forever: The Aesthetics of Ethnographic Labor". *Anthropological Forum* 15 (3):267-275.

West, Paige, and James G. Carrier. 2004. "Getting Away from It All? Ecotourism and Authenticity" (with commentary and reply). *Current Anthropology* 45 (4):483-498.

West, Paige. 2003. "Knowing the Fight: The Politics of Conservation in Papua New Guinea". *Anthropology in Action: Journal for Applied Anthropology in Policy and Practice* 10 (2):38-45.

West, Paige. 2001. "Environmental Non-Governmental Organizations and the Nature of Ethnographic Inquiry". *Social Analysis* 45 (2):55-77.

Chapters in Peer Reviewed Books

n.d. West, Paige and John Aini " Towards an Ethnical Collaborative Practice in Political Ecology". *In* Ariadne Collins, Elia Apostolopoulou and Jessica Hope (eds). *Handbook of Political Ecology.* Routledge.

2024. West, Paige. "Land of the lost volcano": Contemporary 'discovery' and dispossession in Papua New Guinea. *In* Jamon Halvaksz and Joshua Bell (eds). *Naturalist Histories of Oceania*. University of Hawai'i Press.

In Press. West, Paige et. al. "Marine Conservation in the Bismarck Sea". *In* Bouchet et. al. (eds). *Marine Fauna and Flora of the Bismarck Sea*. Muséum national d'Histoire naturelle, Paris ; IRD, Marseille ; Pro-Natura international, Paris, 572 p. (Patrimoines naturels ; 70).

In Press. Foale, Simon, John Aini, Cathy Hair, Jeff Kinch and Paige West. "Traditional Fishing Methods of the Bismarck Sea Region". *In* Bouchet et. al. (eds). *Marine Fauna and Flora of the Bismarck Sea*. Muséum national d'Histoire naturelle, Paris ; IRD, Marseille ; Pro-Natura international, Paris, 572 p. (Patrimoines naturels ; 70).

2021. West, Paige and John Aini. " 'I will be traveling to Kavieng!': Work, Labor, and Inequality in New Ireland, Papua New Guinea". *In* Bainton et. al. (eds). *Unequal Lives: Gender, Race and Class in the Western Pacific.* Australian National University Press.

West, Paige. 2019. "Dispossession". *In* Cymene Howe and Anand Pandian (eds). *Anthropocene Unseen: A Lexicon.* London: Punctum Books.

West, Paige and Enock Kale. 2015. "The Fate of Crater Mountain: Forest Conservation in the Eastern Highlands of Papua New Guinea". *In* Joshua Bell, Paige West and Colin Filer (eds). *Tropical Forests of Oceania.* Australian National University Press.

Aini, John and Paige West. 2014. "Learning through Doing: The story of Ailan Awareness's partnerships with coastal communities". In *Resilience Sourcebook: Case Studies of Social-Ecological Resilience in Island Systems.* New York: American Museum of Natural History.

West, Paige and James G. Carrier. 2010. "Introduction: Virtualism, Governance and Practice, a new approach." In *Virtualism, Governance and Practice.* Paige West and James G. Carrier, eds.. London: Berghahn Books.

West, Paige. 2008. Conservation Actions and Events in Papua New Guinea. In *Against the Grain: The Vayda Tradition in Human Ecology and Ecological Anthropology*. Bradley Walters, Bonnie J. McCay, Paige West, and Susan Lees, eds.. Lanham, MD: Lexington Books.

West, Paige. 2004. Environmental NGO's and the Nature of Ethnographic Inquiry. In *Anthropology and Consultancy.* P.J. Stewart, and A. Strathern, eds.. New York and Oxford: Berghahn Books.

Ellis, David M., and Paige West. 2004. Local History as 'Indigenous Knowledge': Aeroplanes, Conservation and Development in Haia and Maimafu, Papua New Guinea. In *Investigating Local Knowledge: New Directions, New Approaches*. Bicker, A., P. Sillitoe, and J. Pottier, eds.. London: Ashgate Publishing.

Reprints of Peer Review Papers in Edited Volumes

West, Paige. 2021. "Translation, Value, and Space: Theorizing an Ethnographic and Engaged Environmental Anthropology". *In* Bolles, et. al. (eds). *Anthropological Theory for the Twenty First Century: A Critical Reader.* The University of Toronto. Press.

West, Paige. 2020. "Environmental Conservation and Mining: Between Experience and Expectation in the Eastern Highlands of Papua New Guinea." *In* Barbara Miller (ed). *Sociocultural Anthropology: Critical and Primary Sources. Volume 4: Communication, Belief, Expressive Culture, and Futures*. London: Routledge. (reprint)

West, Paige. 2015. "Translation, Value, and Space: Theorizing an Ethnographic and Engaged Environmental Anthropology". In *Environmental Anthropology: Critical Concepts,* Routledge. (reprint)

Ogden, Laura, Nik Heynen, Ulrich Oslender, Paige West, Karim-Aly Kassam, and Paul Robbins. 2015. "Place, Equity and Earth Stewardship in the Anthropocene". *In* Rozzi et. al. (eds). *Earth Stewardship: Linking Ecology & Ethics in Theory and Practice*. London: Springer. (reprint)

West, Paige. 2011. "Making The Market: Specialty Coffee, Generational Pitches, and Papua New Guinea". *In* Brockington D. and R. Duffy (eds). *Capitalism and Conservation.* London: Wiley and Sons Ltd. (reprint)

West, Paige, Daniel Brockington, and James Igoe. 2009. Parks and Peoples: The Social Effects of Protected Areas. In *Biodiversity and Conservation.* Richard Ladle, ed.. London: Routledge. (reprint)

West, Paige, and Daniel Brockington. 2006. "Una Perspectiva Antropológica de Algunas Consecuencias Inesperadas de Áreas Protegidas". *NeoCons* 6 (3):609-616. (reprint)

As Editor of Environment and Society

West, Paige and Daniel Brockington. 2012. "Capitalism and the Environment". *Environment and Society* 3(1):1-4.

Feinberg, Rebecca, Paige West and Daniel Brockington. 2011. "Environment, Society, and Food". *Environment and Society* 2(1):1-4.

West, Paige, Daniel Brockington, Jamon Halvaksz, and Michael L. Cepek. 2010. "A New Journal for Contemporary Environmental Challenges". *Environment and Society* 1(1):1-4.

RESEARCH GRANT ACTIVITY

External Grants

2023 "Women's Empowerment in New Ireland, Papua New Guinea," ($80,000) (with John Aini) Synchronicity Earth.

2023 "Deepening socio-spiritual and socio-ecological practices in Papua New Guinea" ($300,000) (with John Aini), Anonymous Donor.

2023 "Lovangai Island Greenbelt" ($25,000) (with John Aini and People's Planet Project). Azimuth World Foundation.

2022 "Women's Empowerment in New Ireland, Papua New Guinea," ($80,000) (with John Aini) Synchronicity Earth.

2021 "Strengthening Indigenous Socio-Ecological Sovereignty New Ireland, Papua New Guinea," ($240,000) (with John Aini), Anonymous Donor.

2021 "Co-Production of Knowledge Practice at the Climate School of Columbia University: Making the Invisible Visible, a community based aquatic microbial observatory as a narrative," Moore Foundation (one of 8 PIs) ($600,000).

2021 "Strengthening of Indigenous sovereignty in Marine Conservation: Gender and Representation," Synchronicity Earth (with John Aini) ($10,000).

2020 "Strengthening Indigenous marine conservation in New Ireland, Papua New Guinea," ($75,000) (with John Aini), Anonymous Donor.

2019 The Christensen Fund "The Malangan and the Marine: Maintaining Indigenous sovereignty over biocultural conservation in Papua New Guinea" ($61,000) (with John Aini)

2019 Community empowerment in Island Melanesia, National Geographic ($30,000) (with John Aini).

2018 Decolonizing Science in the Melanesian Pacific. SNAPP: The Nature Conservancy ($125,000).

2016 The Christensen Fund "The Malangan and the Marine: Maintaining Indigenous sovereignty over biocultural conservation in Papua New Guinea" ($150,000). (with John Aini)

2014 US Ambassador's Fund For Cultural Preservation, "Reviving Malangan in New Ireland, Papua New Guinea," ($60,000). (with John Aini)

2013 National Science Foundation RAPID "Sovereignty, Rights, Justice and the Manus Island Detention Center, Papua New Guinea", With J.C. Salyer ($25,000).

2012 The Christensen Fund "Value of and in Forest and Oceans in Papua New Guinea" ($200,000) (with John Aini)

2011 The United Nations, Global Environmental Facility "Effecting the Conservation of Biocultural Diversity in Papua New Guinea" ($50,000). (with John Aini)

2010 The Christensen Fund "Value of and in Forest and Oceans in Papua New Guinea" ($185,000). (with John Aini)

2009 The Christensen Fund "Value of and in Forests and Oceans in Papua New Guinea" ($75,000). (with John Aini)

2008 The Christensen Fund "Value of and in Forests and Oceans in Papua New Guinea." ($50,000). (with John Aini)

2008 American Museum of Natural History, Center for Biodiversity Conservation "Biofuel production, food security, and local livelihoods in New Ireland, Papua New Guinea – Local Anthropology Collaboration Component Supplement." ($5,000).

2005 National Geographic Society for "Meaning and Subsistence: The Politics and Ecology of Tree Kangaroo conservation in Papua New Guinea." ($20,000).

2005 Wenner-Gren Foundation, "From Modern Production to Imagined Primitive: Tracing the Commodity Ecumene for Papua New Guinean Coffee." ($14,000).

2004 American Council of Learned Societies, Faculty Fellowship. Fall 2004 Salary.

2004 American Association of University Women, American Fellowship. Spring 2005 Salary.

2004 University of California San Diego, Friends of the Library Grant (to use the Melanesian Collection). ($600).

2000 Wenner-Gren Foundation for Anthropological Research, Richard Carley Hunt Postdoctoral research grant, ($15,000).

1997 Wenner-Gren Foundation for Anthropological Research, Predoctoral Grant, "Conservation Projects and Transnational Communities," ($15,000).

1996-1997 Center for the Critical Analysis of Contemporary Culture Graduate Fellowship, Rutgers University. (Tuition and Stipend).

1997 National Science Foundation, Cultural Anthropology Program, Dissertation Improvement Grant, "Conservation and Participation in Papua New Guinea," ($4,000).

1993 National Science Foundation, Cultural Anthropology Program, Ethnographic Training Grant "Defining Wilderness: The Creation of the Pinhook Swamp," ($3,000).

Major Internal Grant Activity

2023 Societal Impact Seed Grant, Office of the Provost, Columbia University, with Ajit Subramaniam and Michael Petriello ($15,000).

2021 Graduate Equity Initiative Grant, Arts & Sciences, Columbia University, with David Scott, Zoe Crossland, Audra Simpson and Brian Larkin. ($489,892).

2021 Earth Network Grant, Climate School, Columbia "Coastal Resilience", with Kate Orff and Kyle Mandli ($75,000).

2016 Mellon Foundation Digital Humanities, Barnard College "Digital Repatriation, Representational Sovereignty, and Malagan Carving" ($25,000).

2015 Center for the Study of Social Difference, Columbia University "Pacific Climate Circuits" with J.C. Salyer and Kevin Fellezs ($45,000).

Minor Internal Grant Activity

2020 Earth Institute, Small Grant, Research Assistant, Spring 2021, 20 hours per week.

2020 Institute for Social and Economic Research and Policy (ISERP) "Politics, Society, Environment, and Development Seminar Series" Small Grant ($3,000). (now through Anthropology as Ethnographic Futures)

2019 Institute for Social and Economic Research and Policy (ISERP) "Politics, Society, Environment, and Development Seminar Series" Small Grant ($3,000). (now through Anthropology as Ethnographic Futures)

2018 Institute for Social and Economic Research and Policy (ISERP) "Politics, Society, Environment, and Development Seminar Series" Small Grant ($5,000). (now through Anthropology as Ethnographic Futures)

2017 Institute for Social and Economic Research and Policy (ISERP) "Politics, Society, Environment, and Development Seminar Series" Small Grant ($5,000). (now through Anthropology as Ethnographic Futures)

2016 Institute for Social and Economic Research and Policy (ISERP) "Politics, Society, Environment, and Development Seminar Series" Small Grant ($6,000).

2015 Barnard College Office of the Provost Faculty Research Grant ($4,000).

2015 Institute for Social and Economic Research and Policy (ISERP) "Politics, Society, Environment, and Development Seminar Series" Small Grant ($6,000).

2014 Institute for Social and Economic Research and Policy (ISERP) "Politics, Society, Environment, and Development Seminar Series" Small Grant ($4,000).

2013 Institute for Social and Economic Research and Policy (ISERP) “Politics, Society, Environment, and Development Seminar Series” Small Grant ($4,000).

2013 Mellon Environmental Science mini grant, Barnard College “West Coast New Ireland – tourism and accumulation or tourism and dispossession” ($5,000).

2012 Institute for Social and Economic Research and Policy (ISERP) “Politics, Society, Environment, and Development Seminar Series” Small Grant ($4,000).

2011 Institute for Social and Economic Research and Policy (ISERP) “Politics, Society, Environment, and Development Seminar Series” Small Grant ($4,000).

2011 Institute for Social and Economic Research and Policy (ISERP) “Resource extraction, demographic transition, and markets for wildlife in Papua New Guinea” with Miriam Supuma ($10,000).

2011 Mellon Translation mini grant, Barnard College “Treasures of the Sea: Translating language and ontology” ($6,500).

2010 Earth Institute Research Assistant Program, “Social and Environmental Change and Palm Oil Production in New Ireland, Papua New Guinea,” (funds for one semester research assistant).

2010 Institute for Social and Economic Research and Policy (ISERP) “Politics, Society, Environment, and Development Seminar Series” Small Grant ($4,000).

2009 Institute for Social and Economic Research and Policy (ISERP) “Politics, Society, Environment, and Development Seminar Series” Small Grant ($4,500).

2009 Barnard College, Office of the Provost, Faculty Development Grant ($6,000).

2008/2009 Earth Institute Research Assistant Program, “Social and Environmental Change and Palm Oil Production in New Ireland, Papua New Guinea,” funds for year-long research assistants.

2008 Institute for Social and Economic Research and Policy (ISERP) “Politics, Society, Environment, and Development Seminar Series” Small Grant ($5,500).

2007/2008 Earth Institute Research Assistant Program, “Social and Environmental Change and Palm Oil Production in New Ireland, Papua New Guinea,” (funds for yearlong research assistant).

2007 Barnard College, office of the provost and SIRT fund “Biofuel production, food security, and local livelihoods in New Ireland, Papua New Guinea.” ($10,000).

2007 Institute for Social and Economic Research and Policy (ISERP) “Politics, Society, Environment, and Development Seminar Series” Small Grant ($6,000).

2006 Institute for Social and Economic Research and Policy (ISERP) "Making Value in the Pacific Tropics." Small Grant. ($10,000).

2006 Institute for Social and Economic Research and Policy (ISERP) “Politics, Society, Environment, and Development Seminar Series” Small Grant ($5,000).

2006 Barnard College, Mellon Environmental Science Minigrant program, "Social Effects of Protected Areas: Building a web-based initiative." ($2,490).

2005 Institute for Social and Economic Research and Policy (ISERP) "Politics, Society, Environment, and Development Seminar Series" Small Grant ($4,000).

2004 Barnard College Faculty Research Grant. ($12,500).

2004 Barnard College Special Assistant Professor Leave. One semester salary.

2003 Columbia University Center for Environmental Resource Conservation "A comprehensive study of hunting in Papua New Guinea integrating ecology and anthropology in a GIS model for the formulation of socially sound scientific wildlife management plans" with Andrew Mack ($20,000).

2003 Institute for Social and Economic Research and Policy (ISERP) "Politics, Society, Environment, and Development Seminar Series" Small Grant Small Grant. ($1,500).

INVITED LECTURES

As Keynote Speaker or Named Lecturer

2024 Eleanor J. Sterling Memorial Lecture, University of Hawai'i, Manoa, to be delivered March 2024.

2024 "Collaborative socio-ecological and socio-spiritual work in Papua New Guinea: An Anthropology of Letting Go". Invited Keynote, Integrative Conservation Conference, Center for Integrative Conservation Research, The University of Georgia. To be delived February 17.

2022 Munro Lecture, Department of Social Anthropology, the University of Edinburgh, October 2022.

2022 The Richard F. Salisbury Memorial Lecture, McGill University, October 2022.

2022 Conference Keynote, European Society for Oceanists (ESfO), June 2022, Marseille, France.

2021 "Standing Up and Stepping Back: Commoning, Collaborating, and Coproducing for SocioEcological Futures" Society for Conservation Biology Social Science Working Group "Twitter Conference", July 20, noon. https://twitter.com/PaigeWestNYC/status/1417515584481284098?s=20

2019 "Commoning and Decannonizing Political Ecology: An Example from Melanesia and New York City," Kings College London, annual Contested Development Lecture at King's College London as a part of their Human Geography Seminars, October 30.

2019 "An Anthropology for the Present" MEGA Seminar (national anthropological meeting of Denmark), (August 14)

2019 "Anthropological Futures" Macquarie University Distinguished lecture in Anthropology, Sydney, Australia. May 24.

2019 "Environment, Economics and Climate Change" Humanities Center, U Texas, Austin, April 16.

2019 Distinguished Scholar lectures, National Socio-Environmental Synthesis Center, March 5/6, Maryland.

2018 “A prayer for the world: Imagining a future in the face of climate change, dispossession, and transformation” University of Illinois, Chicago, University Institute for Humanities yearly plenary lecture. (October 3).

2018 “Communities Matter: Decolonizing conservation management.” Plenary Talk, 5th International Marine Conservation Congress, Kuching, Malaysia, June 25 to 29. John Aini & Paige West.

2018 “Critical Approaches to Dispossession in the Melanesian Pacific: Conservation, Voice, and Collaboration” European Political Ecology Network Bi-Annual Conference, POLLEN, Oslo, Norway, June 20 to 22. Paige West & John Aini.

2017 “Hunger, Shame, and Stigma on University Campuses in America,” Keynote, Columbia Food Bank Silent Auction, (November 15).

2017 “Narrating Now”. Yearly post-graduate conference, The University of Sheffield, The Sheffield Institute for International Development, Sheffield, UK (May 2).

2016 “Nexus of Indigenous Knowledge and Ecosystem Services” (with Jon Waterhouse). United States Geological Services, A Community of Ecosystem Services, ACES, Jacksonville, Florida (December 6).

2016 Aarhus University-Wide Autumn Lecture, “How do we know and write the socio-ecological present?”, Sponsored by Environmental Humanities, Aarhus University, Denmark (September 2, 2016).

2016 Distinguished Scholar-Lecturer for the National Socio-Environmental Synthesis Center’s (SESYNC), February 29 – March 3, Washington, DC.

2015 University Lecture, The University of Mississippi, “Imagining Pacific Futures: Climate Change, Local Livelihoods, and International Environmentalist Rhetorics,” April 22 (Earth Day).

2015 Keynote Lecture, Florida International University, “The Anthropocene as an Accumulation Strategy” Graduate Student Conference. March 5.

2015 New York City Bar Association (Animal Law Committee) “Animals, Value, Culture”. February 19, New York City.

2014 American Museum of Natural History Distinguished Lecture in Anthropology, “The Anthropocene”, December 18, 2014 (with J.C. Salyer)

2014 Keynote Lecture, “Representational Simplification and Sovereignty: Nature, Culture, and Emergent Images” at “Our Media”, 2014 Conference. July 20 – 24, Goroka, Papua New Guinea. The University of Goroka.

2013 Schoff Memorial Lectures, Columbia University. November 11, 18, and 25. These three lectures center on the theme of “dispossession”. Each year one senior faculty member at Columbia is invited to give these public lectures.

2013 John Sutherland Memorial Speaker, Duke University Marine Laboratory, “Effecting the Aquatic-Terrestrial Interface in New Ireland, Papua New Guinea: Indigenous Ontological Revitalization and its importance for Conservation,” February 19, 2013 (Beaufort, NC).

2012 Keynote Speaker, Swiss Anthropological Association annual meeting, "Revisiting Development in Anthropology," November 2, 2012 (Lucerne, Switzerland) (cancelled because of Hurricane Sandy)

2012 Keynote Speaker, Society for Applied Anthropology Annual Meetings, March 26 – 28, Baltimore, MD, "Why I am not an applied anthropologist."

2010 Keynote Speaker (with John Waterhouse and Sir Peter Crane), The Center for Biodiversity Conservation, Conference on Conservation Science, The American Museum of Natural History, "A Life in Conservation: Diverse Perspectives," November 3, 2010. New York City.

2009 Keynote Speaker, "Recovering Voices Conference", The Smithsonian National Museum of Natural History, "Which of these things is not like the others: Long-beaked echidnas (Zaglossus bruijni) (Kuiaru / Femomo), Raggiana Birds of Paradise (Paradisaea raggiana) (Olomo), and Monkeys." November 1 – 4, Washington, D.C.

INVITED LECTURES 2022 onwards

2024 "Living a Collaborative Scholarly Life" Center for Science and Society, Columbia University, January, 2024.

2023 "Resilience Planning in Papua New Guinea: Indigenous Self-Determination and Climate Futures", Georgetown University, October 2023.

2023 "Resilience Planning in Papua New Guinea: Indigenous Self-Determination and the Anthropology of Letting Go", Lamont-Doherty Earth Observatory, September 2023.

2023 "Where do we go from here? Scholarship, climate change, and activism in an age of ends", City University of New York, Department of Environmental Psychology, April 2022.

2022 "Collaboration? Co-Production? Care?: On Socio-Ecological Anthropology Today", University of Copenhagen, Department of Anthropology. November 2022.

2022 "Loss, Damage, Grief: Writing Climate Change", American University in Cairo, Department of Anthropology, Sociology, and Egyptology. November 2022.

2022 "The State of the Art in Anthropology and the Environment", University of Oslo, Department of Anthropology. May 2022.

2022 "Diversity in thought and practice", Oslo Met University, DISCO collective. May 2022.

2022 "Conservation as Homogenization? Socio-ecological futures and collaborative relations", Swedish Society of Anthropology and Geography VEGA symposium medal celebration, April 2022, Royal Castle, Stockholm.

2022 "Climate Connections: Gender, Solidarity, and Futurity", United Nations Commission on the Status of Women (CSW66) Parallel Event, "Ecofeminism and Gender Equality", March 22. Kirmizi Biber Dernegi, Yasar University Women and Family Research and Application Center.

Virtual INVITED LECTURES During COVID19

2021 “Practicing Political Ecology”. Indian Institute of Science Education and Research, Pune, India. May 21. (Zoom Delivered)

2021 “Reimaging Conservation Today: Decolonization, Indigenous Sovereignty and Collaboration”. Cambridge Conservation Initiative Seminar, University of Cambridge, May 19 Paige West (Zoom Delivered).

2021 “Collaboration, Sovereignty, and Colonial Legacies in the Pacific”. Board Meeting, Island Conservation, May 18 Paige West and John Aini (Zoom Delivered).

2021 “Revisiting Coffee: PNG, Circulation, and Commodity Markets Today,” Claremont McKenna College, April 5 (Zoom Delivered, guest of Dr. Velji).

2021 “Engaged Anthropology, Collaboration, and Papua New Guinea,” Georgia State. University, March 2 (Zoom Delivered, guest of Dr. Glover).

2021 “Anthropology and the Public: Pressing Questions, Responsibilities and Opportunities.” Invited Guest, “Environmental Justice”, Cool Anthropology, Wenner Gren Workshop (March 1).

2021 “Reimagining Conservation Today: Decolonization, Climate Change, and Indigenous Sovereignty” Oxford University, Oxford Nature Conservation Society. (Zoom delivered February 19).

2020 “Dispossession Now: Climate Change and Limitations of Sovereign Futures” The University of Maine, October 22, (Zoom delivered)

2020 **“**Decolonial Anthropology (?), Collaboration, and the Politics of Scholarship Today” University of Melbourne, August 25, (Zoom delivered)

2020 “Writing climate change in the Pacific” Georgetown University, Department of Anthropology, April 14. (Zoom delivered)

2020 “Returning to coffee, consumption, and generational practices” Bucknell University, Department of Anthropology, April 8. (Zoom delivered)

2020 “The Anthropology of Conservation Today” Dartmouth College, Human Development Initiative, Dickey Center / Department of Anthropology, May 4 (Zoom delivered)

Pre Covid INVITED LECTURES

2019 “A prayer for the world: Writing the climate crisis” University of British Columbia, November 14.

2019 “A prayer for the world: Climate change, engaged scholarship and writing the future” Grantham Research Institute on Climate Change and the Environment, London School of Economics, November 4.

2019 “Manus: A climate change and human rights disaster” University of New South Wales, Development Studies, May 29.

2019 “Conservation, Development, and an Anthropological Life” Guest Lecture, Dartmouth College. May 1. (Course lecture by skype)

2019 “Ethnography, Decolonization, and the Persistent Problem of Elitism in Anthropology” The University of Chicago, March 11. (Graduate Student Group invited presentation)

2019 “The Manus Island Detention Center, decolonial epistemic practice, and the future of anthropological inquiry” The University of Chicago, March 11 (Research Seminar, Anthropology Dept)

2019 “Fieldwork Faux Pas (and How to Avoid Them)” (with Christina Padoch and David Wilkie) Columbia University Center for Science and Society, March 1.

2018 “Ethnography, Decolonization, and the post Hau Now” Rice University, Department of Anthropology, October 18.

2018. “Being the Rogue Ethnographic Goat” Rice University, Ethnography Lab, October 18.

2018 “A prayer for the world: Affect, Anthropology, and writing the future.” Department of Anthropology, U Penn. September 24.

2018 “Representational Practice, Anthropology and dispossession” A conversation between Dr. Chelsea Bond and Paige West. Brisbane Free University, Brisbane, Australia. May 26.

2018 “The Manus Island Detention Center, decolonial epistemic practice, and the future of anthropological inquiry.” Department of Anthropology, The University of Queensland, Australia. May 24.

2018 “Decolonial Anthropology? The politics of anthropologists and the politics of anthropology.” Department of Anthropology, Melbourne University, Australia. May 18.

2018 “Dispossession and Disappearance in the Post Sovereign Pacific: The Regional Resettlement Agreement between Australia and Papua New Guinea, an ethnography of loss.” Department of Anthropology, Denkin University, Australia. May 17.

2018 Carleton College “Dispossession, Racism, and the Environment”, Phi Beta Kappa Distinguished Lecture, May 3.

2018 “Bridging the goal gap: How we integrate climate action, life on land, and gender equality” United Nations (Taiwan Special Mission), April 18.

2018 “King Tides and Urban Infrastructures in Papua New Guinea.” Urban Floods: Interdisciplinary Perspectives Program, Columbia University, April 13.

2018 “Coffee in and from Papua New Guinea Today!” Guest lecture, University of Alberta, Department of Sociology, in the “Culture, Politics and Globalization” seminar (Guest lecture in a course, via Skype). March 20.

2018 University of Tulsa “Dispossession, Racism, and the Environment”, Phi Beta Kappa Distinguished Lecture, March 12.
2018 Respondent, Wenner-Gren – New York Academy of Sciences event, to Jessica Catellino. March 6.

2018 Colorado College “Dispossession, Racism, and the Environment”, Phi Beta Kappa Distinguished Lecture, March 1.

2018 Santa Clara University "Dispossession, Racism, and the Environment", Phi Beta Kappa Distinguished Lecture, February 22.

2018 Respondent, "The Beast and the Sovereign" by Jack Halberstam, Columbia University, University Seminar on Literary Criticism. February 7.

2017 "Dispossession, Racism, and the Environment", Manhattan College, Phi Beta Kappa Distinguished Lecture, November 9.

2017 "Dispossession and Disappearance in the Post Sovereign Pacific: Climate, Change, and our Anthropocentric Future", Temple University, Phi Beta Kappa Distinguished Lecture, October 26.

2017 "The Contemporary and Papua New Guinea: Against Locating People and Place in a Prior" Department of Anthropology, Kalamazoo College (course lecture), October 25 (via skype).

2017 "Dispossession and Disappearance in the Post Sovereign Pacific: Climate, Change, and our Anthropocentric Future" Department of Anthropology, Yale University. October 23.

2017 "Conservation is Our Government Now: Updates on a Tragedy", Department of Ecology, University of Washington (course lecture), October 19 (via skype).

2017 "Dispossession, Racism, and the Environment", Phi Beta Kappa Distinguished Lecture, St. Catherine's University. October 12.

2017 "How do we know and write the socio-ecological present? Displacement and dispossession in the Melanesian Pacific" Department of Anthropology, New York University. September 14.

2017 "Dispossession and Disappearance in the Post Sovereign Pacific: Climate, Change, and our Anthropocentric Future", Phi Beta Kappa Distinguished Lecture, The University of Colorado, Boulder. September 7.

2017 "Dispossession and Disappearance in the Post Sovereign Pacific: Climate, Change, and our Anthropocentric Future" Department of Anthropology," Department of Anthropology, The University of Colorado, Boulder. September 8.

2017 "Fieldwork in Multiple Sites", Department of Anthropology, Columbia University Graduate Student Association Speaker Series, January 26.

2016 "Living a life in conservation: Ethics and actions", E3B, Columbia University, November 29.

2016 "Its All Data: Remembering George E. B. Morren", Morristown Museum, Morristown, New Jersey. November 13.

2016 "Decolonizing the Animal Turn in Anthropology", reply to Prof. Philippe Descola. Workshop on Animals and Anthropology. New York University. Departments of Environmental Studies and Anthropology. October 14.

2016 "Malangan as anthropological dispossession: Steps to redressing the misreading of cultural texts in Melanesia" - Bard Graduate Center, April 25, in the symposium Entangled Frontiers. (with Jenny Newell and John Aini)

2016 "Space, affect, and climate change" Temple Hoyne Buell Center for the Study of American Architecture, Columbia University. "Power and the Space of the Planet" event. April, 15

2016 "Writing as an Anthropologist", New York University, The Galitan School. April 5.

2016 "Coffee as Object and Affect," Guest Lecture, University of Hawai'i, Department of Ethnic Studies, March 17.

2016 "Social Equity, Representational Sovereignty and Environmental Conservation." Strategic Environmental Research Initiative (SERI) hosted by the Bren School of Environmental Science & Management at the University of California, Santa Barbara. February 22.

2016 "Representational Rhetorics of Development," Department of Anthropology, The University of Colorado. January 14.

2015 "Urban life and Development in Papua New Guinea," Guest Lecture, The University of Colorado, Jerry Jacka's course on Papua New Guinea. November 16.

2015 "Coffee and Consumption in Papua New Guinea," Department of Anthropology, The College of William and Mary. October 14.

2015 "Who accumulates with visual dispossession?" Department of Anthropology, The University of Toronto, October 16.

2015 "Rhetorics of capacity and the nexus of representational and material sovereignty", Women's, Gender, and Sexuality Studies, in "Moral Economies and Political Change: Critical Feminist Engagements with Development, Normalization, and Political Sovereignty", Yale University, October 2.

2015 Respondent, Wenner-Gren – New York Academy of Sciences event, "We are not Red Indians (We might all be Red Indians" – by Audra Simpson. September 28, NYC.

2015 "Indigenous Ontology as Theory", University of Sydney, Environmental Humanities Center. July 24, 2015.

2015 "Tsunamis, Mangroves, and Expats, oh my! : Indigenous ideas about sea level rise in Papua New Guinea", Raising the Bar, NYC, June 2.

2015 Lead discussant with Martha Macintyre, Wenner-Gren conference on "Capacity Building" May 20 to 22, Copenhagen, Denmark.

2015 "Savage slotting today: The material effects of ideologies of the primitive" Department of Anthropology, The Graduate Center, City University of New York, April 17.

2015 "Imagining Pacific Futures: Climate Change, Local Livelihoods, and International Environmentalist Rhetorics," Mississippi State university, April 24.

2015 "Towards a theory of rent gap conservation," McGill University, March 24. Political Ecology Seminar.

2015 "Possible Futures," Applying Anthropology conference, Teachers College, Columbia University. February 26, 2015.

2014 "The joys and hazards of fieldwork: Advice, cautions, and anecdotes on scientific fieldwork and working away from home." WINS Panel Event (women in science) November 18, American Museum of Natural History.

2014 “Commodity circulation in and of and from New Guinea,” Department of Anthropology, The Graduate Center, City University of New York, November 24 (in conjunction with their first year PhD seminar).

2014 “What Passes for ‘the social’: Conservation, communities and institutional memory in big conservation in Papua New Guinea,” October 20, FES, Yale University.

2014 “Visual Dispossession?”, October 29, Field Museum of Natural History.

2014 “Some thoughts about international climate change mitigation and adaptation funding: The view from New Ireland Province”, Australian National University, August 7 (co-authored with John Aini).

2014 “Conservation as Dispossession? Some thoughts on expanding our critiques,” April 11, the National Museum of Natural History, Paris, France.

2014 "Accumulation, Dispossession, Conservation and Indigenous Sovereignty in Papua New Guinea" April 17, Temple University Department of Anthropology.

2014 “Value and Capacity in Papua New Guinea,” February 27, Wesleyan University, Department of Anthropology.

2014 “Environmental Conservation and so-called “capacity” in Papua New Guinea February 13, 2014. U of California, Santa Barbara. Environmental Science and Anthropology.

2014 “Sovereignty, Loss, and ‘Capacity’ in Papua New Guinea” February 11, The University of Hawai’i, Department of Sociology.

2014 “Political rhetoric, commoditization, and dispossession: Forty years of environmental conservation in Papua New Guinea (1974 – 2014)”, January 17, “Cultures of Biodiversity: Perceptions and Practices,” Oslo, Norway, sponsored by the Norwegian Research Council and the University of Oslo.

2013 “Making a Tree Kangaroo Filled World: Species Relations, Meanings and Value”, New York University, “Thinking Further with Animals” conference, October 4.

2013 “Kuru Sorcery Revisited: Knowing and Narrating a world in rupture”, Event in honor of Shirley Lindenbaum, New York Academy of Sciences. October 10.

2006 – 2013 “Genealogy of ‘Culture’” each September for Dr. Alisa Solomon’s graduate course on Arts and Culture Writing, Columbia University Journalism School, September, yearly.

2013 “Value and Capacity in Papua New Guinea,” March 11, 2013, The University of Minnesota Department of Anthropology Colloquium Series.

2012 “Land Tenure in the Pacific,” November 28, 2012, Columbia University Law School expert panel on land and development.

2012 “Conservation, Commodities, and the New Nature,” 18, 2012, Aarhus University (Hojbjerg, Denmark).

2012 “Accumulation by Dispossession and the Elusive Concept of “Capacity Building” in Papua New Guinea**”,** April 21, 2012, Fredrik Barth Seminar Series, Department of Anthropology, University of Bergen. Bergen, Norway.

2011 Appalachian State University, North Carolina, “Sustainable Development and Conservation in Papua New Guinea,” November 29, 2011.

2011 Columbia University Law School, Panel discussion participant on the film “Sun Come Up”, November 8.

2011 Panel Discussion, Association for Women in Science, AMNH, “Journeys into the field”, April 28, 2011.

2011 “Effecting conservation after the anthropological critique,” Yale University School of Forestry, April 22, 2011.

2011 “Such a site for play, this edge: Surf tourism in Papua New Guinea,” University of Texas, San Antonio, Department of Anthropology. March 23, 2011.

2010 “The End Brings the Beginning: Decline, Violence, and Rebirth in a Papua New Guinean Conservation Story”, Distinguished lecture, Texas A & M, NSF-IGERT: Applied Biodiversity Sciences: Bridging Ecology, Culture, and Governance for Effective Conservation. October 21.

2009 “Ecology and Religion in Papua New Guinea,” Center for the Study of Science and Religion, Columbia University, November 12.

2009 “Climate, Society, and Papua New Guinea,” School of International and Public Affairs, Columbia University, September 17.

2009 “Images of Primitive Nature and Culture as Contemporary Generators of Value.” School of Natural Resources. The University of Michigan, April 9.

2009 “Imagining the world: Coffee consumers and coffee producers and how the produce space,” Drew University, March 24.

2009 "From Modern Production to Imagined Primitive: Certifying and Selling Organic and Fair-Trade Coffee from Papua New Guinea." University Lecture, University of Wisconsin, Madison, March 5.

2009 "The Fate of Crater Mountain: A Conservation-as-development Tragedy.” Environmental History, University of Wisconsin, Madison, March 4.

2008 “Ethical Consumption as Environmental Politics?” University of California at Berkeley Workshop on Environmental Politics. October 24.

2008 “Previous Research and Current Research in Papua New Guinea,” National Fisheries College, New Ireland Province, Papua New Guinea, July 22.

2008 “From Modern Production to Imagined Primitive: Crystallizing Coffee from Papua New Guinea,” The University of Western Ontario, March 13.

2008 “The Politics of Value in New Guinea’s Forests,” Co-Sponsored by The School of Forestry and Environmental Studies and Anthropology, Yale University, February 11.

2008 “Sustaining Conservation in Papua New Guinea: The life and death of the Crater Mountain Wildlife Management Area,” Ecology and Evolution Graduate Program Seminar, Rutgers University, February 7.

2007 “Coffee as agriculture; Coffee as Society” Agrarian Studies, Yale University, September 21.

2007 “Coffee is the bones of the Highlands” National Research Institute, Boroko, Papua New Guinea, May 18.

2007 “Open Access and the Academic Article: Tools for Research” Wildlife Conservation Society, Goroka, Papua New Guinea, March 27.

2006 “Why Development AND Environment?” School of International and Public Affairs, Columbia University, December 5.

2006 “From Modern Production to Imagined Primitive: Coffee, Money, and Power” Earth Institute Post Doc Lecture Series, Columbia University, December 4.

2006 "Making Value in the Pacific Tropics: The Case of New Guinea Crocodiles" Green Bag Lunch Speaker Series, Earth Institute, November 21.

2006 “What is Culture?” Columbia University School of Journalism, September 12.

2006 "Conserving Birds in Human-Dominated Landscapes: Weaving a Common Future" American Museum of Natural History Symposium, Center for Biodiversity and Conservation (CBC), April 27 - 28.

2006 “Value and Meaning: Conserving New Guinea Birds of Paradise in a Human Landscape” American Museum of Natural History Symposium, Center for Biodiversity and Conservation (CBC), April 27 - 28.

2006 “Coffee, Gold, and Souls” Center For Research on Women, Barnard College, April 26.

2006 “Tracing the global commodity chain for coffee from Papua New Guinea” University of Georgia, March 30.

2005 International Union of Concerned Scientists / United Nations forum on rights and resources, to be held in Kruger National Park, April 9 -13. Gave commentary on two panels.

2005 “Why Should Songs About Tree Kangaroos Matter to Economists: Environmental Conservation, Cultural Anthropology and the Evaluation of ‘Ecosystem Services’” The Asia Pacific School of Economics and Government, Australian National University, August 15.

2005 “Scaling Up and Scaling Down: What Ethnographic Understanding of Tree Kangaroos can tell Conservation Biology” New York Zoological Society, Wildlife Conservation Society, Bronx Zoo, New York City, May 6.

2005 “Tree kangaroos, songs, selves” Department of Anthropology, University of Georgia, April 1.

2005 “Nature and Culture in Papua New Guinea: Notes for Policy Experts and Business People” Business School / SIPA, Columbia University, February 20.

2004 “Making Hunters into part of the ‘Bushmeat trade’: Articulating the other in Papua New Guinea”, Sarah Lawrence College, February 18.

2004 "The Production of Space, Place, Nature, and Culture in Papua New Guinea" Spring 2004 School of Forestry Colloquia Series, Yale University, February 11.

2004 "The Political Ecology of Conservation and Commodities" Spring 2004 Department of anthropology Colloquia Series, New York University, February 5.

2004 “From Bandicoot to Bushmeat: The articulation of new conservation paradigms in Papua New Guinea” Anthropology Department Boas Seminar, Columbia University, January 28.

2003 “My Fathers Spilled Blood on this Land: The Political Ecology of Hunting In Papua New Guinea” Department of Anthropology Colloquia Series, Rutgers University, November 8.

2003 "Living an Anthropological Life," Centennial Scholars Program, Barnard College, September 23.

2003 "Naomi's Big Night: Feminist Leadership in a Big Man's World" Barnard College, March 17.

2002 “Conservation is our Government Now” Center for Environmental Research and Conservation, Columbia University, December 2.

2002 “The Political Ecology of Integrated Conservation and Development Projects in Papua New Guinea” Rockefeller Center, Dartmouth College, May 8.

2002 “Environmental Conservation in Papua New Guinea” Department of Anthropology, Amherst College, April 15.

2002 “How I became an Anthropologist” “Taste of the Social Sciences” Mellon Foundation Funded Seminar for First Year Students, Barnard College, Spring.

2002 “Conservation as Development: the Social Effects of Conservation Interventions in Papua New Guinea” Departments of Anthropology and Geography, University of Iowa, February 1.

2001 "Tinned Fish for the Ancestors: The Political Ecology of Conservation and Development in Papua New Guinea" Department of Anthropology, University of Colorado.

2001 “Tinned Fish for the Ancestors: The Political Ecology of Conservation and Development in Papua New Guinea” Department of Anthropology, Hunter College, City University of New York.

2001 "Political Ecology or Political Economy: Income Generation Projects in Papua New Guinea" Department of Anthropology and Sociology, College of Charleston.

2000 "Tinned Fish for the Ancestors: The Political Ecology of Conservation and Development in Papua New Guinea" Department of Anthropology, Barnard College and Columbia University.

2000 "Tinned Fish for the Ancestors: The Political Ecology of Conservation and Development in Papua New Guinea" Department of Anthropology, Macalester College.

1999 "Knowing the Fight: Science, Ethnography, and Development in the Eastern Highlands of Papua New Guinea" Sociology Department Lecture Series, Wofford College.

1997 "Conservation as a Transnational Process" Center For the Critical Analysis of Contemporary Culture, Rutgers University.

1995 "Wilderness in the South" Biology Department, Winthrop University.

1994 "Culture, Praxis, Nature, and Swamps" Anthropology Association Spring Brown Bag Series, University of Georgia.

1994 "Praxis, Wilderness, and Values" Environmental Ethics Graduate Student Discussion Group, University of Georgia.

CONFERENCE PRESENTATIONS

2024 "Disappearing the Anthropologist" in "Dialogics of Fieldwork Imagery" (formal session). Association for Social Anthropology in Oceania annual meeting, on-line meeting. To be given February 1 -3.

2024 "Collaboration or Moves to Innocence" in "Collaborative Research : Knowledge, Impact, Repair" (informal session) Association for Social Anthropology in Oceania annual meeting, on-line meeting. To be given February 1 -3.

2023 "Social Control and Gender in Papua New Guinea" in "Freedom and Freedoms" Association for Social Anthropology in Oceania annual meeting, Hilo, Hawai'i, Feb 4-7.

2023 "Digital Repatriation?" in "Dialogics of Fieldwork Imagery". Association for Social Anthropology in Oceania annual meeting, Hilo, Hawai'i, Feb 4-7

2022 "Bonnie J. McCay: Rockstar", Anthropology and Environment of-site event, American Anthropological Association, Annual Meeting, November 7 – 12, Seattle, Washington.

2022 "Climate Change and Collaboration", Roundtable Participant, "Anthropology and Climate Change" American Anthropological Association, Annual Meeting, November 7 – 12, Seattle, Washington.

2021 "Some thoughts on Conviviality", discussant role "Ideologies, Tools, and Advocacy" panel at "Conviviality" October 4 – 9, Massey University, New Zealand. October 3.

2021 "Race and Authorized Voice Regarding Papua New Guinea" Association for Social Anthropology in Oceania annual meeting, Virtual, February 3 - 5

2020 "Theorizing Whiteness in Melanesia" Association for Social Anthropology in Oceania annual meeting, Hilo, Hawai'i, January 21 - 25

2020 "Animals, Place, and Affect" Association for Social Anthropology in Oceania annual meeting, Hilo, Hawai'i, January 21 - 25

2019 “The Gender of the Ancestors”, American Anthropological Association Annual Meeting, Vancouver BC, November 19 – 23.

2019 “The Laboring and Inequality of Awareness,” Festschrift for Prof. Martha Macintyre, Melbourne, Australia, February 21-22.

2019 “Affect, Climate, and Kinship,” Association for Social Anthropology in Oceania annual meeting, Aotearoa, February 13 – 16.

2018 “Extraordinary Ordinary: Ethnography of Prisoner Lives, Manus Island,” European Society for Oceanists (ESFO), University of Cambridge, December 15.

2018 “Walk, Water. Forest, Sea.: Coming to terms with loss of place in Papua New Guinea,” in “Affect and Place in the Contemporary Pacific,” Association for Social Anthropology in Oceania annual meeting, New Orleans, LA, January 30 – February 4.

2018 “Small cities and climate migration in Papua New Guinea,” in “The Urban Pacific” Association for Social Anthropology in Oceania annual meeting, New Orleans, LA, January 30–February 4.

2017. “Nokondi as Trickster and Guide: The Feminist Anthropology of Prof. Shirley Lindenbaum,” in “Knowledge and Action: The Value of Critical Ethnographic Engagement in the Work of Shirley Lindenbaum”, Annual meeting of the American Anthropological Association, Washington, DC, November 28 – December 3.

2017 Discussant, “How Nature Works 3: Excesses and Overflows”, Annual meeting of the American Anthropological Association, Washington, DC, November 28 – December 3.

2017 “Kokoda, Rape, and Whiteness in the Mainstream Media,” in “Sovereignties and Dispossessions”, Association for Social Anthropology in Oceania annual meeting, Hawai’i, February 7-12.

2017 “Climate and Change In New Ireland, Papua New Guinea,” in “Climate Change: Experience and action in the Pacific Islands,” Association for Social Anthropology in Oceania annual meeting, Hawai’i, February 7-12.

2017 “Knowing and Writing the Socio-Ecological Now: Manus Island and the Pacific Solution,” in “Ethnographic Approaches to Contemporary Issues in Papua New Guinea,” Association for Social Anthropology in Oceania annual meeting, Hawai’i, February 7-12.

2017 Discussant, “Women and Fieldwork,” Association for Social Anthropology in Oceania annual meeting, Hawai’i, February 7-12.

2016 Participant, “The Anthropocene as an Accumulation Strategy,” Roundtable, Annual meeting of the American Anthropological Association, Minneapolis, Minnesota, November 16 – 20.

2016 Discussant, Rappaport Panel Prize Panel, Annual meeting of the American Anthropological Association, Minneapolis, Minnesota, November 16 – 20.

2016 Discussant, “Pacific Spaces,” Symposium, Association of Social Anthropology in Oceania, San Diego, California, February 9 – 13.

2016 "F'ing the Ineffable: Can Anthropology really know 'affect' and if so, is it our right?" In Sovereignties and Dispossession, Association of Social Anthropology in Oceania, San Diego, California, February 9 – 13.

2015 "Dispossession and the Ancestors" in Ecological Anthropology I, Annual meeting of the American Anthropological Association, Denver Colorado, November 17 – 21.

2015 Discussant, "Translating natures: Relations, (in)determinacies, and the work of translation in natural resources use. Annual meeting of the American Anthropological Association, Denver Colorado, November 17 -21.

2015 "Capacity Building as a Racist Discourse," Annual meeting of the Association of Social Anthropology, February 1 – 8.

2014 Round Table Participant, "Anthropology and STS: Generative Interfaces and the Practice of Discourse," Annual meeting of the American Anthropological Association, Washington, DC. December 2 – 7.

2014 Discussant, "Modern Monsters," Annual meeting of the American Anthropological Association, Washington, DC. December 2 – 7.

2014 "Tree Kangaroos as Dispossession? Creating Science in and of Papua New Guinea," Annual meeting of the Association of Social Anthropology in Oceania, Hilo, Hawai'i, February 5 – 9.

2013 "Semiotic Dispossessions? Nature, Culture, Science, and Journalism in Papua New Guinea." Annual meeting of the Association of Social Anthropology in Oceania, San Jose, Texas, February 8 – 12.

2012 "Dispossession in Melanesia," Annual meeting of the American Anthropological Association, San Francisco, November 14 – 18.

2012 "Statesmen, Economists, Journalists, and 'Savages'", Annual meeting of the Association of Social Anthropology in Oceania, Portland, Oregon, February 8 – 12.

2011 Discussant, "Islands as contemporary locations: How tourism and environmentalism recreate island forms, reconstruct vulnerabilities, and promote exceptionalism," Annual meeting of the American Anthropological Association, Montreal, Canada, November 16 – 19.

2011 "The End Brings the Beginning: Change at Crater Mountain in Papua New Guinea." Annual meeting of the Association of Social Anthropology, Honolulu, Hawai'i, February 12 – 15.

2010 "Reading Science Studies through Gimi Ontology and Epistemology," at the "multi species salon" Annual meeting of the American Anthropological Association, New Orleans, L.A. November 17 – 21.

2010 "The secrets of the sea: Surf tourism, fantasy, and space in Papua New," Annual meeting of the American Anthropological Association, New Orleans, L.A. November 17 – 21.

2009 "Towards a theory of Uneven Development in the Natural Sciences," Annual meeting of the American Anthropological Association, Washington, D.C., December 5 – 9.

2009 Discussant, "Indigenous peoples, environmental projects and anthropological interventions," Annual meeting of the American Anthropological Association, Washington, D.C., December 5 – 9.

2009 "Scaling the Surf: Development Choices in Kavieng, Papua New Guinea," Annual meeting of the Association of Social Anthropology, Santa Cruz, CA, February 12 – 15.

2008 "The Fate of Crater Mountain," Annual meeting of the American Anthropological Association, San Francisco, CA, November 19 – 23.

2008 Discussant, "Articulating Symbolic / Political / Technological Representations of Nature," Annual meeting of the American Anthropological Association, San Francisco, CA, November 19 – 23.

2008 "Ethical Consumption and Commodities from Papua New Guinea," at the Manchester University "Conservation and Capitalism Conference," Manchester, U.K., September 8, 9, and 10.

2007 "Salt-Water Crocodiles (*Crocodylus porosus)*: Making Value across the Wallace Line," Annual meeting of the American Anthropological Association, Washington, D.C., November 28 – 30.

2007 Discussant, "Environmental Science Frictions: Nature and Knowledge Across Difference," Annual meeting of the American Anthropological Association, Washington, D.C., November 28 – 30.

2006 "Producing Tree Kangaroos and the politics of their status as endangered." UC Santa Cruz, "Multi-species Salon," Santa Cruz, California. November 21.

2006 "Making Value, Tracking Meaning: The Politics and Ecology of Tree Kangaroo Conservation," American Anthropological Association Meetings, San Jose, California, November 16 – 19.

2006 "From modern production to imagined primitive," Society for Cultural Anthropology, Milwaukee, Wisconsin, May 5-8.

2006 "The labor theory of value and the (material and discursive) production of Papua New Guinea coffee," Association of Social Anthropology in Oceania, San Diego, California, February 8 – 12.

2005 "The Role of Anthropologists in Interdisciplinary Projects," Annual meeting of the American Anthropological Association, Washington D.C., November 30 – December 4.

2005 "A Wookie wouldn't drive a Hummer any more than an Ewok would shop at a Walmart: Media and the making of contemporary American environmental politics," Annual meeting of the American Anthropological Association, Washington D.C., November 30 – December 4.

2005 "Indaba on Social Research in Protected Areas, Kruger National Park," Organized by the IUCN and the Transboundary Protected Areas Research Initiative, South Africa, April 10 – 13.

2004 "Preliminary Results of a Study of Hunting Off take in Papua New Guinea: Summary of Wildlife Consumption," Annual meeting of the Society for Conservation Biology, New York City, July 30.

2004 "Cash Money, Strong Drink, and A Night on the Town: The political Economy of Coffee in Papua New Guinea," Association for Social Anthropology in Oceania Annual Meetings.

2004 "They are doing WHAT in Maimafu: Gold Mining and the art of Surprise in Papua New Guinea," Association for Social Anthropology in Oceania Annual Meetings.

2003 "From Bandicoot to Bushmeat, The articulation of a new Preservationists Rhetoric in Global Environmental Governance," Annual meeting of the American Anthropological Association.

2003 "Political Ecology of Hunting In Papua New Guinea," presented at a "State of the Art" university funded conference on Conservation and Anthropology, Athens, Georgia, October 16.

2003 "The Poetics and Politics of Nature in Papua New Guinea," City University of New York: Graduate Center, New York City, April.

2002 "Maimafu, Goroka, Moresby, and Overseas: The Production of Space in the Eastern Highlands," Informal Session: The Social Understanding of Localities in Melanesia, Association for Social Anthropology in Oceania Annual Meetings, Vancouver, B.C., Canada, February.

2002 "The Man and the Mine," Working Session: Social Life and Mining in the Pacific, Association for Social Anthropology in Oceania Annual Meetings, Vancouver, B.C., Canada, February.

2002 "Jesus and The Crocodile: The Political Ecology of Conservation and Christianity in Papua New Guinea," American Anthropological Association, New Orleans, Louisiana, November 19 –21.

2002 "Conservation Legislation, Implementation, and Results in Papua New Guinea: A Social and Historic Analysis of Environmental Policy at Crater Mountain," Environment, Resources, and Sustainability: Policy Issues for the 21st Century, Athens, Georgia, September 7 – 8.

2002 "People, Conservation, and Social Science: An Introduction" (with David M. Ellis), The Society for Conservation Biology 16th Annual Meeting, Canterbury, United Kingdom, July 14 – July 18.

2001 "Environmentalism and the Nature of Ethnographic Inquiry," The American Anthropological Association Annual Meetings, Washington, D.C., November 28 – December 2.

2001 "Making Men in Maimafu, Papua New Guinea," Research School of Asia and Pacific Studies, Australian National University, Canberra, Australia, August.

2001 "Historicizing Whiteness / Essentializing Whiteness: Gimi Approaches to Understanding White Power in the Eastern Highlands of Papua New Guinea," Association for the Study of Anthropology in Oceania, Miami, Florida, February.

2000 "Internet Crunch: Selling Papua New Guinea's Rainforest in the Age of New Media," Annual Meeting of the American Anthropological Association, San Francisco, California, November 18 – 22.

2000 "Graduate Studies in Melanesian Anthropology," Annual Meeting of the American Anthropological Association, San Francisco, California, November 18 – 22.

2000 "Local History as 'Indigenous Knowledge': Bringing History into 'Conservation and Development' Practices in Papua New Guinea," Association of Social Anthropologists Conference, London, England, April 2 – 4.

1999 "Dialogues on the Political Economy of 'Community Based Conservation' in Papua New Guinea," Annual Meeting of the American Anthropological Association, Chicago, Illinois, November 17 – 21.

1999 "Is Marijuana to Alcohol as Nature is to Culture: Ideas about Culture and Nature in International Conservation and Development," American Ethnological Society, Portland, Oregon, March 25.

1998 "The Anthropology of Biodiversity Conservation," National Research Institute, Port Moresby, Papua New Guinea, September 22.

1997 "Only Her Fringe Was Nervous to the Touch of Voyagers: Late Colonial (and Current Upper East Side) Imaginations and the Representation of New Guinea," Rutgers Graduate Student Annual Conference, New Brunswick, New Jersey, March 9.

1997 "Conservation and the Production of Nature," Annual Meeting of the American Anthropological Association, San Francisco, California, November 19 – 24.

1996 "Conservation and the Production of Identity in Papua New Guinea," First Annual Rutgers University Department of Anthropology Graduate Student Colloquia, New Brunswick, New Jersey, October 26.

1994 "The Idea of Wilderness as Defined by Human Action," Southern Anthropological Society, Atlanta, Georgia, April 19.

PUBLIC SPEAKING EVENTS

2023 Panelist, "Interorganizational Global Forum: Senior Leaders Roundtable" United States Institute for Peace (USIP), Washington, D.C., October 25.

2023 Panelist, "A Local Approach to Papua New Guinea's Wildfires of Violence" United States Institute for Peace (USIP), Washington, D.C., October 2.

2023 "Forging New Ways of Being in Community", Explorers Club Weekend, Lake Geneva Region and Online, September 1.

2023 "Communities, Conservation, Coffee, Collaboration" with Dr. Leo Douglas, Fajallraven and Explorers Club, Fjallraven Meatpacking, New York City, May 3.

2022 Panelist, "Post COP27 Debrief", Columbia Climate School, December 5

2021 Discussant role for "Look But Don't Ask Question", new book virtual event, Heyman Center, Columbia University, September 28.

2021 "The Species Among Us: Women in Biodiversity Conservation". The Explorer's Club. August 24.

2021 "Youth Empowerment Event". The Explorers Club, April 28.

2021 Columbia Secondary School Career Day guest speaker. April 30.

2020 Barnard College Center for Engaged Pedagogy, "Fail Forward" event. March 2.

2020 Barnard College Center for Research on Women "Scholar and Feminist Conference" – presented research on climate change in Papua New Guinea on a panel on the Pacific Islands. February 8.

2019 National Geographic Community Engagement Webinar: Building Community, On Line, one of two distinguished lecturers. (7/30)

2018 Panelist, "Toxic Tourism or Sustainable Travel," A/D/O design Lab, Brooklyn, New York (10/12).

2018 Panelist, "Third International Indigenous Women's Symposium on Environmental and Reproductive Health," United Nations / ISHR, (4/15)

2017 Panelist, "Good Food Writing", Alpha Domiche Extraction Lab, New York Coffee Festival, Brooklyn, NY (10/13)

2017 Discussion of "The Opposition", Margaret Mead Film Festival, New York. (10/19).

2017 Plastiglomerates, a conversation with Kelly Jazvac and Paige West. Fierman Gallery, New York. (10/7).

2017 Guest Lecturer, The World: Residences at Sea. (2/27 to 3/19).

2016 Discussant for the new play, "Orphans & Outsiders," American Theatre of Actors, New York. (11/15). (with JC Salyer)

2016 Literary Fiction about Climate Disaster, a conversation with Ilija Trojanow and Paige West, Goethe-Institut New York. (5/16)

2014 Guest Lecturer, The World: Residences at Sea. (6/1 to 6/25).

2013 United States Embassy, Port Moresby, Papua New Guinea, "*Everything I think you should know about PNG to work here,"* (7/12).

2012 Book Culture, New York, NY, reading of *From Modern Production to Imagined Primitive* (4/26)

2008 United States Embassy, Port Moresby, Papua New Guinea, reading of *Conservation is our Government Now: The Politics of Ecology in Papua New Guinea* (8/11).

2006 Labyrinth Books, New York, NY, reading of *Conservation is our Government Now: The Politics of Ecology in Papua New Guinea* (10/26)

2006 Culture and Ecology Seminar, Columbia University, reading of *Conservation is our Government Now: The Politics of Ecology in Papua New Guinea* (10/24)

2005 American Association of University Women (AAUW), Manhattan Fund Raising Event (3/20)

2005 AAUW, Long Island Fund Raising Event (3/17)

2004 What is Environmental Anthropology? (Goroka Day School, Goroka, Papua New Guinea) (9/10)

SERVICE TO BARNARD COLLEGE AND COLUMBIA UNIVERSITY

Fall 2023 Fourth Purpose Cluster Hire Committee Chair, Columbia Anthropology.

Fall 2023 Presidential Taskforce on Climate and Sustainability, Barnard College

2023- 2024 Earth Institute Faculty Taskforce, Columbia University

2021 – Present Junior Faculty Mentor for A&S Tenure Process, for Dr. Naeem Mohaiemen School of the Arts, Columbia University.

2021 - Present Publications Committee, Columbia University Press.

2021- Present Co-Chair, Ph.D. Program Development Committee, The Climate School, Columbia University.

2019 - Present Executive Design Committee, The Climate School, Columbia University.

2019 – Present Junior Faculty Mentor, Barnard College for Dr. Logan Brenner.

2013 – Present Advisory Board, University Seminars, Columbia University.

2010 – Present Advisory Board, Barnard Center For Research on Women, Barnard College.

2019- 2023 Executive Committee, Institute for Research on Women, Gender and Sexuality, Columbia

2019- 2023 Women's, Gender, & Sexuality Studies Council, Columbia

Spring 2023 External Panel Member, TRAK, Columbia University, one case.

Spring 2023 Third year review committee, Columbia University anthropology, one case.

2022/2023 Search committee, junior hire in anthropology

2022/2023 Search committee, junior hire in ethnomusicology

2022/2023 Graduate Committee, Columbia Anthropology.

2020/2021 Graduate Committee, Columbia Anthropology.

2021 ACLS Emerging Voices Fellowship Committee, Office of the Dean of Humanities, Columbia University (Spring).

2021 University Seminars Nominating Committee, Columbia University (Spring).

2020 Society of Fellows Application Committee, Columbia Anthropology (Fall).

2020 - 2021 Coastal Viability Working Group, The Climate School, Columbia University.

2012 – 2021 Advisory Board, Athena Center, Barnard College.

2017 – 2021 Director, Barnard College Barbara Silver Horowitz '55 Scholars of Distinction Program.

2019/2020 President's Task Force on Climate Change, Columbia University.

2018/2020 Grants Committee, Barnard College

2018/2020 Anthropology Department Graduate Student Professionalization Seminar Coordinator, Columbia Anthropology

2013 – Present Advisory Committee, University Seminars, Columbia University.

2018/2019 Graduate and Graduate Admissions Committee, Columbia Anthropology

2016 – 2019 Executive Committee, Center for the Study of Social Difference, Columbia University

2018/2019 Columbia Anthropology, 3rd year faculty review committee.

2016 – 2017 Society of Fellows Application Review Committee, Columbia Anthropology

2016 – 2018 Chair, Columbia University Judicial Board.

2016 – 2018 Faculty advisor to the "First-Gen" student group at Barnard College

2015 – 2020 Executive Committee, Athena Center, Barnard College.

2015 – 2017 Provost's Committee on the revision of Centennial Scholars.

2013 – 2016 Columbia, Department of Anthropology, Executive Committee (BCD committee) – governing committee for joint Barnard / Columbia Department.

2005 – 2018 Co-chair anthropological methods seminar for Columbia Anthropology Ph.D. students with Prof. Lila Abu Lughod (Sept 2005, Sept 2006, Sept 2007, Sept 2008, Sept 2009, Sept 2010, Sept 2011, May 2012, Sept 2013, Sept 2014, Sept 2015, May 2016, May 2017, Sept 2017, May 2018)

2015 – 2016 Chair of Faculty Chairs, Barnard College.

2015 – 2016 Member, President's Taskforce on Diversity, Barnard College.

2016 Admissions Committee, Columbia Anthropology Department.

2016 Review Committee, Earth Institute Postdoctoral Fellows Program, Columbia University.

2016 Review Committee, Barnard Education Department for faculty 3rd year review.

2016 One time TRAK member for Barnard Case, March 2016.

2012 - 2015 College committee to restructure Barnard Human Rights, Chair of Committee.

2013 – 2015 President's Campaign Advisory Group (CFAC).

2006 - 2015 Barnard Representative to the Columbia University Faculty Senate (Elected Position).

2006 - 2015 Columbia University, Faculty Affairs Committee.

2014 - 2015 MAO committee, Columbia University Department of Anthropology
Note – this included both doing MAO admissions AND serving on the MAO Postdoc Search committee.

2014 (fall)	Society of Fellows application review panel (anthropology) Columbia University.
2014 (Spring)	Internal Committee, Academic Review in the Arts and Sciences (ARC), Columbia University (review of E3B).
2013	Development office hiring committee for grants officer position at the college.
2011- 2013	President's Diversity Taskforce, Faculty Rep, Barnard College.
2012- 2013	Faculty representative to the Board of Trustees, Barnard College.
2011- 2013	Faculty Diversity and Development Committee, Barnard College.
2011- 2013	Chair, Boas Seminar organizing committee, Department of Anthropology, Columbia University.
2010 – 2012	Provost's Human Rights Studies Advisory Board, Barnard.
2010 – 2013	Co-Chair, Barnard College Institutional Review Board (IRB).
2013	Parent's Day Weekend, Dean's office panel on First Generation student experiences, Barnard College. October 19.
2012	Faculty Respondent, Sheldon Scheps talk by Darryl Wilkinson, Ph.D. candidate, Anthropology, Columbia. December 7.
2011	Chair, Columbia Faculty Affairs Committee Sub Committee on the University "Consensual Relations Policy".
2011	Barnard First Year Dean's Office Faculty Panel for first year students on how to navigate the college. August 31.
2011	Barnard Parent's day weekend talk for parents by "recently tenured faculty" October 2011.
2011	Graduate Admissions Committee, Department of Anthropology, Columbia University.
2011	Barnard Admission Office Faculty Panel, "What's in a Faculty to Student Ratio?" April 11 (for incoming / perspective students).
2010- 2011	Member, Faculty Advisory Committee for the upcoming Barnard Global Symposium in South Africa.
2010	Panel Chair, Theorizing Native Studies: An Interdisciplinary Symposium. The Center for the Study of Race and Ethnicity, Columbia University, October 16, 2010.
2010	Guest speaker, Barnard Office of Institutional Support forum on grant writing for junior faculty "Pre Award Workshop". October 13, 2010.
2010 (Fall)	Committee chair, Department of Anthropology Columbia University review committee for hire of Elizabeth Dunn, a candidate for the university-wide chair in Polish Studies.

2008-2009 Committee to review the "9 ways of Knowing" at Barnard College.

2008 – 2010 Social Science Advisor, MA program in Climate and Society, Columbia University.

2008 Provost's "Presidential Transition Committee," Barnard College (to help facilitate the transition from the current president of the college to the new president).

2008 Facilitator, "Difficult Dialogues," Barnard College (ran focus group for Junior Faculty).

2008 Admissions Committee (read 5 applications), MA Program in Climate and Society, Columbia University.

2008 Read Social Science related applications for the Earth Institute Post- Doctorial Award, Columbia University.

2006-2009 Barnard Representative to the Columbia Faculty Senate.

2006-2008 Columbia University Planning and Development Faculty Senate Committee.

2006 Columbia University Anthropology Ph.D. program admission committee.

2006 Admissions Committee (read 20 applications), MA Program in Climate and Society, Columbia University.

2005 Admissions Committee (read 10 applications), MA Program in Climate and Society, Columbia University.

2005 Earth Institute, Columbia University, Review committee for Earth Institute Marie Tharp Visiting Fellowship applications.

2004 Admissions Committee (read 10 applications), MA Program in Climate and Society, Columbia University.

2002 – 2003 Barnard College Center for Research on Women programming committee.

2002 – 2004 Barnard College Committee on Instruction.

2003 Barnard College/ Columbia University "Urban New York Program" Faculty leader, November 2003.

2002 Attended several meetings with President, Provost, Dean and Trustees to discuss housing issues for faculty. Convened meeting of new faculty to discuss proposed 117th housing site.

2002 Barnard College / Columbia University "Urban New York Program" faculty leader, September.

2002 Faculty Panelist, panel on graduate school admissions and life for Barnard College students interested in applying to graduate school. April 9.

2001 – 2002 Worked with faculty from Environmental Science, Political Science, and Economics to create new major in Environmental Policy.

2001 Teaching Faculty for the Johns Hopkins University Center for Talented Youth Program, "Environmental Science and Policy," Program, November 11, Columbia University.

2001 Faculty Discussant, Barnard College Anthropology Club "Nature / Culture Film Series."

2001 Barnard College / Columbia University "Urban New York Program" faculty leader, September.

2001 Panelist, Faculty Forum on the September 11 tragedy, September 19, Held Auditorium, Barnard.

SERVICE to Other Institutions

2024 Blue Ocean Law. Served as an advisor regarding climate change in Papua New Guinea for a brief being written for the International Court of Justice. February.
2023 Invited guest and advisor, United States Institute for Peace, convened meeting on the Global Fragility Act and Papua New Guinea. September 26 – October 3, Washington DC.

2017-2021 President's Advisory Council, Wofford College

2019-2022 Mentor & Faculty Advisor, Obama Scholars Program, Columbia University

SERVICE TO THE American Museum of Natural History

2009 – 2018 Conference Abstract Review, SCCS-NY (yearly)
2014 – 2015 AWIS member – Each Fall, hour long workshop with young scientists
2009 – 2014 Annual Graduate Student conference, faculty mentor
2009-2010 RGGS Academic Affairs and Fellowships Committee anthropology seat
2009-2010 Museum Planning Committee
2009-2010 Anthropology Accessions Committee
2009-2010 Anthropology Loan Committee

CONFERENCES ORGANIZED

2024 The Co-Production of Knowledge for What and by Whom?", Columbia University, March 28 – 30. Co-Organized with Ajit Subramaniam, and Michael A. Petriello.

2019 Decolonizing Conservation. SNAPP, Santa Barbara, May 21-23.

2016 American Democracy Under Threat? A Learn-In After the 2016 Election. Monday, 12 December. Barnard College and Columbia University. Co-organized with Julie Crawford, Merlin Chowkwanyun, and Shanny Peer.

2016 Zora Neale Hurston @ 125, co-organized with Monica Miller, Tina Campt, and Tami Navarro, to be held October 28, 2016, Barnard College

2015 Comparative Settler Colonialisms, co-organized with Nadia Abu El-Haj and Audra Simpson, April 9, Columbia University.

SESSIONS ORGANIZED AT PROFESSIONAL MEETINGS

2023 "Freedom and Freedoms" (informal session) Association for Social Anthropology in Oceania annual meeting, Hilo, Feb 4-7 (with Thorgeir Kolshus).

2021 “We will get over it when it is over. Race and Racism in Oceania” (working session) Association for Social Anthropology in Oceania annual meeting, Virtual, February 5-8 (with Daniel Hernandez)

2020 “We will get over it when it is over. Race and Racism in Oceania” (informal session) Association for Social Anthropology in Oceania annual meeting, Hilo, Feb 22 – 25 (with Daniel Hernandez)

2019 “Affect and Place in the Contemporary Pacific,” (Working Session) Association for Social Anthropology in Oceania annual meeting, Aotearoa, February 13 – 16. (With Jamon Halkavsz).

2018 “Affect and Place in the Contemporary Pacific,” (Informal Session) Association for Social Anthropology in Oceania annual meeting, New Orleans, LA, January 30 – February 4. (With Jamon Halkavsz).

2018 “The Urban Pacific” (Informal Session) Association for Social Anthropology in Oceania annual meeting, January 30 – February 4. (With JC Salyer)

2017 “Citation Matters: An Updated Reading List for a Progressive Environmental Anthropology”, Annual meeting of the American Anthropological Association, Washington, DC, November 28 – December 3. (With Amelia Moore) (Roundtable).

2017 “Ethnographic Approaches to Contemporary Issues in Papua New Guinea,” (Informal Session), Association for Social Anthropology in Oceania annual meeting, Hawai’i, February 7-12.

2016 “The Anthropocene as an Accumulation Strategy,” Roundtable, Annual meeting of the American Anthropological Association, Minneapolis, Minnesota, November 16 – 20.

2014 “Contemporary Theory in Environmental Anthropology I and II” (chair and discussant) Annual meeting of the American Anthropological Association, December 2 – 7.

2013 “Refashioning the Body THREE: Building Critical Theory across the Pacific”, (Formal Session) Association for Social Anthropology in Oceania annual meeting, San Antonio, TX February 5 – 10, (with Lisa Uperesa and Bethany Matai Edmunds)

2012 “New Forms of Dispossession”, American Anthropological Association, Meeting to be held November 14 – 18, San Francisco, CA).

2012 “Refashioning the Body TWO: Building Critical Theory across the Pacific”, (Intermediate Session) Association for Social Anthropology in Oceania annual meeting, Portland, OR, February (with Lisa Uperesa and Bethany Matai Edmunds)

2011 “Refashioning the Body ONE: Building Critical Theory across the Pacific”, (Informal Session) Association for Social Anthropology in Oceania annual meeting, Honolulu, HI, February (with Lisa Uperesa and Bethany Matai Edmunds)

2011 “Forest of Oceania: Symposium” (Formal Sessions) Association for Social Anthropology in Oceania annual meeting, Honolulu, HI, February (with Joshua Bell)

2010 “Natural Circuits: the Political Ecology of Environmental Commodities” Annual Meeting of the American Anthropological Association, invited session Anthropology and Environment Section, New Orleans, Louisiana, November 17 –21. (with Molly Doane)

2010 “Forest of Oceania: Symposium” (Intermediate Sessions) Association for Social Anthropology in Oceania annual meeting, Richmond, VA. February. (with Joshua Bell)

2009 “Forests of Oceania: Environmental Histories, Present Concerns and Future Possibilities” (Informal session) Association for Social Anthropology in Oceania annual meeting, Santa Cruz, CA. February. (with Joshua Bell)

2009 “Contemporary Political Economies of Sport in Oceania” Association for Social Anthropology in Oceania annual meeting, Santa Cruz, CA. February. (Informal Session) (with Lisa Uperesa)

2006 “Trading in Coffee: Commodity Chains, Nature, and Space” Society for Cultural Anthropology Annual Meeting, Milwaukee, Wisconsin, May. (with Molly Doane)

2006 “Is there a 'new new Melanesian ethnography'?” Association of Social Anthropology in Oceania Annual Meeting, San Diego, California, February. (Informal Session) (with Alex Golub)

2006 “Why the Culture War will not be covered by the History Channel: United States culture and change from the 1980s to the present” Washington D.C., November. (with J.C. Salyer)

2005 “Conservation and Anthropology: A three day conference” (with James G. Carrier) Oxford, U.K., September.

2004 “Trading in Coffee: Nature, Space, and Commodity Chains” Invited Session (Anthropology and Environment Section) Annual Meeting of the American Anthropological Association. (With Molly Doane)

2004 “Working Session: Social Life and Mining in the Pacific” Association for Social Anthropology in Oceania Annual Meetings, Vancouver, B.C., Canada, February. (with Martha Macintyre)

2004 “Informal Session: The Social Understanding of Localities in Melanesia” Association for Social Anthropology in Oceania Annual Meetings, Vancouver, B.C., Canada, February. (with Tom Strong)

2002 Co-organizer and Chair, “Ethnography and Political Ecology” Annual Meeting of the American Anthropological Association, invited session Anthropology and Environment Section, New Orleans, Louisiana, November 19 –21.

2002 Co-organizer, “People, Conservation, and Social Science” Symposium at the 2002 Society for Conservation Biology 16th Annual Meeting, Canterbury, U.K., July 14 – 18.

2001 Co-organizer, “Conservation and Community” Innovative Resources Management, Washington, D.C., November 28.

2001 Co-organizer and Chair, "Beyond Rhetoric and Reproach: Theorizing an Anthropological Environmental Conservation Agenda" panel held at Annual Meeting of the American Anthropological Association.

1999 Co-organizer and Co-Chair, "Taking Time to Communicate: Anthropology and Conservation in South East Asia and The Pacific" Annual Meeting of the American Anthropological Association, invited session Anthropology and Environment Section, Chicago, Illinois, November 17 – 21.

1997 Discussant, "Theorizing Conservation" Center for the Critical Analysis of Contemporary Culture, 17th Annual Interdisciplinary Conference for Graduate Scholarship, New Brunswick, New Jersey, November 10.

1997 Co-organizer, "Ecologies: Rethinking Nature / Culture" Center for the Critical Analysis of Contemporary Culture, 17th Annual Interdisciplinary Conference for Graduate Scholarship, New Brunswick, New Jersey, November 10.

1996 Organizer and Chair, "Intersections: Place, Space, Nature, History, Science" Annual Meeting of the American Anthropological Association, invited session Anthropology and Environment Section, San Francisco, California, November 19 – 24.

SERVICE TO THE PROFESSION

Current	Associate Editor, *Environmental Conservation* (Joined Board, Spring 2024).
Current	Editorial Board, Elements in Indigenous Environmental Research, Cambridge University Press (Joined Board, Spring 2022).
Current	Editorial Board, *Suomen Anthropologi: The Journal of the Finnish Anthropological Society* (Joined Board, Fall 2021).
Current	Ex Officio member, Board of Directors, Association of Social Anthropology in Oceania, Distinguished lecture coordinator for organization. (Began position in 2017).
Current	Advisory Board, Cambridge University Press, Elements in Indigenous Environmental Research Series. (Joined Board in 2020).
Current	Associate Editor, *American Ethnologist* (this is one of the flagship journals in anthropology). (Joined as an editor in 2016).
Current	Editorial Board, *Environmental Anthropology and Ethnobiology*, monograph series, Berghahn Publishers (Joined board in 2015).
Current	Editorial Board, Association of Social Anthropology In Oceania monograph series, Berghahn Publishers (Joined board in 2007).
2009-2019	Editor, *Environment and Society: Advances in Research,* Annual Review Journal published by Berghahn Books and edited by Paige West and Daniel Brockington. Founded 2009.
2012-2019	Editorial Board, *Environmental Humanities,* (Australian journal of environment and the humanities).
2007-2019	Associate Editor, *Conservation and Society*. (Joined board in 2007)
2017	Volunteer mentor, Society for Cultural Anthropology, AAA meetings, December 2017.
2016 – 2018	Chair, Presidential Committee on Gender and Citational Practices in the Discipline, Society for Environmental Anthropology. American Anthropological Association.

2015 – 2017	International Advisory Panel, DDF Project "Carbon Multiple: Exploring the value and values of carbon," (European Union funded multi-national research project), Host University, The IT University of Denmark, Copenhagen.
Spring 2017	Faculty Search Committee, Aarhus University, Denmark, Department of Anthropology. ** acted as an external distinguished expert for an assistant professor search.
2011- 2015	Board of Directors, Association of Social Anthropology in Oceania. Elected Position. February 2011 to February 2015.
2014	Volunteer mentor, "Anthropology and Environment Society Dissertation Writing Workshop" Annual meeting, American Anthropological Association, December 2 – 7.
2012 - 2014	Chair, Association of Social Anthropology in Oceania. Elected Position. February 2012 – February 2014.
2014	Faculty Search Committee, Institute of Culture and Society, Faculty of Arts, Aarhus University (Denmark). ** acted as an external distinguished expert for a full professor search.
2007 – 2012	Associate Editor, *Conservation Letters.* (Joined board in 2007)
2009 - 2011	President, Anthropology and Environment Section of the American Anthropological Association. Elected Position. (also served as "acting president" 2008-2009)
2010, 2011	Volunteer Mentor, Center for Biodiversity Conservation (AMNH), Student Conference on Conservation Science, (October 12 to 14, 2011) (Nov 3-5, 2010).
2005 – 2010	Advisory Committee, New York Academy of Sciences Anthropology Section.
2005 – 2010	Board of Editors, *Journal of Ecological and Environmental Anthropology.*
2005 – 2009	Editorial Board, *After Culture.*
2007 - 2009	Community Participation Adviser, Pacific Invasive Initiative, IUCN/Invasive Species Specialist Group (program run out of the University of Auckland, New Zealand).
2007 - 2009	Wenner-Gren Foundation for Anthropological Research, Proposal Review Committee.
2008	Chair, Anthropology and Environment Committee to "Green" the American Anthropological Meetings.
2007 -2008	Committee for a symposium on "Conserving Biocultural Diversity," AMNH.
2005 – 2007	Elected member American Anthropological Association Committee on Public Policy.
2005	Advancing Conservation in a Social Context, Conservation and Sustainable Development Program Area of the John D. and Catherine T. MacArthur Foundation.
2004	Paper selection committee, Society for Conservation Biology.

2003 - 2004 Advisory board for the development phase of *Science Out There* from May-December 2003. An NSF funded film series on science and scientists in action.

2002-2004 Co-convener, American Anthropological Association Melanesian Interest Group.

2003 Chair, Conservation and Community Working Group Special Event, Wednesday November 20 American Anthropological Association Annual Meeting, New Orleans, LA.

1999 – 2002 Editor, Anthropology and Environment Section, American Anthropological Association Monthly Newsletter.

1996- 1998 Elected Member, The American Anthropological Association, Anthropology and Environment Section, Board of Directors (Graduate Student Seat).

OTHER SCHOLARLY WORKS

Blog Pieces

An interview with Paige West, https://blogs.ei.columbia.edu/2021/02/17/paige-west-papua-new-guinea/ State of the Planet, Earth Institute, Columbia University.

West, Paige and Zoe Wool. 2020. Introducing the Collective Anthro Mini Lectures Project for #COVIDcampus. https://anthrodendum.org/2020/03/16/introducing-the-collective-anthro-mini-lectures-project-for-covidcampus/

West, Paige and J.C. Salyer. 2017. Global Anthropology 101. https://app.frame.io/f/NA52MqSZ)

Salyer, J.C. and Paige West. 2017. Hannah Arendt and Martin Luther King Jr. (https://savageminds.org/tag/jc-salyer/).

West, Paige and J.C. Salyer. 2017. Resistance, Hegemony, Violence, Empire. (https://savageminds.org/2017/03/08/the-next-anthreadin-on-march-24-2017/).

West, Paige and J.C. Salyer. 2017. Society Must Be Defended. (http://savageminds.org/2017/01/12/society-must-be-defended-a-read-in-on-20-january-2017/)

West, Paige and J.C. Salyer. 2017. What Are You Reading Now? (https://culanth.org/fieldsights/1049-what-are-you-reading-responses-to-the-election-and-inauguration) Cultural Anthropology.

West, Paige. 2017. Dispossession. A lexicon for the Anthropocene. (https://culanth.org/fieldsights/788-introduction-lexicon-for-an-anthropocene-yet-unseen) Cultural Anthropology.

West, Paige. 2016. Teaching Decolonizing Methodologies. Savage Minds: Notes and Queries in Anthropology (http://savageminds.org/2016/07/25/teaching-decolonizing-methodologies/)

West, Paige. 2015. S is for Spectacular. http://www.multispecies-salon.org/abc/.

West, Paige. 2009. Hearing Stories, Telling Stories: What narratives could tell Jared Diamond about the world. http://www.stinkyjournalism.org/latest-journalism-news-updates-162.php

Podcasts

2020. How To Read – The Value of Local Knowledge https://www.howtoreadpodcast.com/paige-west-the-value-of-local-knowledge/

2018. CENHS weekly pod cast – Center for Energy and Environmental Research in the Human Sciences. Rice University. http://culturesofenergy.com/150-paige-west/

2018. Denkin University @Anthropology https://player.fm/series/anthropologydeakin-podcast/episode-12-paige-west-and-jo-chandler

2018. NPR Tulsa, Oklahoma interview. http://www.publicradiotulsa.org/post/phi-beta-kappa-visiting-scholar-lecture-paige-west-barnardcolumbia

2017. Animals and Anthropology (part of a larger group) https://culanth.org/fieldsights/1119-animals-and-anthropology

2016. CENHS weekly pod cast (with J.C. Salyer) – Center for Energy and Environmental Research in the Human Sciences. Rice University. http://culturesofenergy.com/ep-46-paige-west-j-c-salyer/

Working Papers

Mack, Andrew, and Paige West. 2006. *Ten Thousand Tonnes of Small Animals: Wildlife Consumption in Papua New Guinea, a vital resource in need of management.* RMAP Working Papers, Resource Management in Asia and the Pacific Working Group, Australian National University.

Book Reviews

West, Paige. 2007. *Review of* Reverse Anthropology: Indigenous Analysis of Social and Environmental Relations in New Guinea. *The Journal of Anthropological Research* 63 (3):425-426.

West, Paige. 2007. *Review of* Rethinking Urban Parks: Public Space and Cultural Diversity. *The Journal of the Royal Anthropological Institute* 13:494-495.

West, Paige. 2006. *Review of* Yali's Question: Sugar, Culture, and History. *The Journal of the Royal Anthropological Institute* 12 (1):245-246.

West, Paige. 2005. *Review of* Friction: An Ethnography of Global Connections. *Comparative Studies in Society and History Comparative* 47: 667-668.

West, Paige. 2004. *Review of* Culture and the Question of Rights: Forests, Coasts, and Seas in Southeast Asia. *American Ethnologist* 13 (4).

West, Paige. 2004. *Review of* Materializing the Nation: Commodities, Consumption, and Media in Papua New Guinea. *Anthropological Forum* 14 (3).

West, Paige. 2003. *Review of* Kastom or Komuniti: A study of Social Process and Change among the Wam People, East Sepik Province, Papua New Guinea. *Journal of Anthropological Research*.

West, Paige. 2002. *Review of* Bridewealth for a Goddess. *Visual Anthropology Quarterly* 17 (2):20-21.

West, Paige. 2002. *Review of* Ecology and the Sacred: Engaging the Anthropology of Roy A. Rappaport. *American Anthropologist* 104 (4):1244-1245.

West, Paige. 2001. *Review of* Common Worlds and Single Lives: Constitution Knowledge in Pacific Societies. *Pacific Studies* 24 (1):128-131.

West, Paige. 2001. *Review of* Endangered Peoples of Southeast and East Asia. *The Journal of Asian Studies* 60 (3):829-830.

West, Paige. 2001. *Review of* Paradise For Sale: A Parable of Nature. *Pacific Affairs* 74 (2):296-297.

West, Paige. 1994. *Review of* The World and the Word. *Journal of Linguistic Anthropology* 4 (2).

Anthropology News

2013 "Imagining and Actualizing an Anthropology of Non-Capitalist Possibilities." December 2013.

2006 "Social Dimensions of Conservation," *Anthropology News,* January 2006.

2004 "Trading in Coffee," *Anthropology News*, December 2004.

2000 "The Environment and the Candidates," *Anthropology News*, September 2000.

COVID19 Response Work

West, Paige and Zoe Wool. 2020. Introducing the Collective Anthro Mini Lectures Project for #COVIDcampus. https://anthrodendum.org/2020/03/16/introducing-the-collective-anthro-mini-lectures-project-for-covidcampus/ Anthrodendum.

Volunteer Teacher, grade 3, Youth Remote Learning project. "Nature and Culture in New Guinea" March 24 – June 2. (Delivered through Zoom). https://youthremotelearning.com/2020/03/18/nature-and-culture-in-papua-new-guinea/

OTHER SERVICE

Peer Review

Critique of Anthropology
American Ethnologist
American Anthropologist
Cultural Anthropology
Society and Natural Resources
American Ethnologist
Environmental Conservation
American Anthropologist
Social Analysis
Antipode
American Ethnologist
Oceania
Biodiversity and Conservation
Environmental Conservation
Journal of Linguistic Anthropology
Current Anthropology

Human Ecology
Indonesian Coastal and Ocean Management
Journal of Anthropological Research
Journal of Social Archeology
Society and Space
Journal of the Royal Anthropological Institute
Ecological Economics
Human Organization
Conservation and Society
Conservation Biology
Environmental Management
Comparative Studies in Society and History

Duke University Press (over 40 manuscripts)
University of California Press
University of Hawai'i Press
Berghahn Books
Palgrave Macmillan
Cornell University Press
University of Washington Press
University of Toronto Press
University of Arizona Press

Grant Proposal Reviewing
The Rockefeller Foundation (2022)
Fulbright Scholar Program (Faculty, East Asia and the Pacific) (Fall 2020)
Radcliffe Institute for Advanced Study at Harvard University Fellowship (Fall 2020)
The Rockefeller Foundation (2010 – 2019)
The National Science Foundation (2015 – panel review; and previous years individual proposals)
The Wenner Gren Foundation for Anthropological Research (2007 – 2012)

Media

2021 The State of the Planet Blog (second feature)
https://news.climate.columbia.edu/2021/04/29/paige-west-environmental-anthropologist-wins-guggenheim-fellowship/

2021 New York Times
https://www.nytimes.com/2021/03/11/climate/nature-conservation-30-percent.html

2021 Forbes
https://www.forbes.com/sites/jimdobson/2021/01/28/the-iconic-explorers-club-honors-50-members-including-21-remarkable-women/?sh=5ae0f23f64e6

2021 The State of the Planet Blog
https://blogs.ei.columbia.edu/2021/02/17/paige-west-papua-new-guinea/

2016 EdX
https://www.youtube.com/channel/UCqy2P0rrqfbvMTDUFwNBE5w

http://nymag.com/scienceofus/2015/06/anthropocene-debate.html

http://america.aljazeera.com/articles/2015/8/14/american-conservation-hurts-biodiversity-natives.html

http://www.themonthly.com.au/issue/2015/february/1422709200/jo-chandler/manus-balance

http://www.theepochtimes.com/n3/1253442-communities-encouraged-to-aid-conservation-in-peru/

http://news.mongabay.com/2015/01/indigenous-territories-play-dual-role-as-homelands-and-protected-areas/

2006 Lucas Films, JKA Films, "Young Indiana Jones" documentary production of educational component, "New Guinea," Interview on camera and advisor on content. May and June.

2006 Earth and Sky, National Public Radio, April
http://www.earthsky.org/shows/show.php?date=20060422

CURRENT MEMBERSHIP IN PROFESSIONAL SOCIETIES

- American Anthropology Association, (AAA)
- Anthropology and Environment Section, AAA
- Melanesian Interest Group, AAA
- Association for the Study of Anthropology in Oceania (ASAO)

CURRENT Graduate Dissertation Committees

Dakota Straub, Columbia, Anthropology (Ph.D. committee chair)
Fern Thompsett, Columbia, Anthropology (Ph.D. committee chair)
Stephanie Ratte, Columbia, Anthropology (Ph.D. committee chair)
Alyssa James, Columbia, Anthropology (Ph.D. committee co-chair)
Chazelle Rhoden, Columbia, Anthropology (Ph.D. committee chair)
Antara Chakrabarti, Columbia, Anthropology (Ph.D. committee chair)
Jared Sacks, Columbia MESAAS (Ph.D. committee co-chair)
Tommy Bierkit, Columbia, Anthropology
Prateek Paul, Columbia, MESASS

Current MA Students, Columbia University

Minny Lee, Anthropology
Erian Ai Lin Wen, Anthropology

Current Postdocs

Dr. Lydia Gibson, co-advised with Prof. Ajit Subramaniam (Lamont)
Dr. Mike Petriello, co-advised with Prof. Ajit Subramaniam (Lamont)

Current External Ph.D. and MA Committee Membership

Jennifer Torpie-Sweterlitsch, University of Texas (Ph.D.)
Reem Elhassan Mohamed – American University, Cairo (MA)

Visiting Scholars (scholars who have come to spend a term or year with me)

Alfred Kik, University of South Bohemia (22 fall) (Ph.D. candidate)
Catherine Windy, University of Antwerp, (19/20) (Ph.D. candidate)
Dr. Gisa Weszkalnys, Oxford (16 spring) (faculty)
Kay Lewis-Jones, University of Kent at Canterbury (15 fall) (Ph.D. candidate)
Nina Alnes Haslie, The University of Oslo, Oslo, Norway (14/15) (Ph.D. candidate)
Arthur Laurent, Sciences Po, Paris, France (13/14) (Ph.D. candidate)
Johanna Markkula, Stanford University (12/13) (Ph.D. candidate)

International Viva / Examination

Bianca Hennessy, Australian National University, Australia (2021)
Rowina Belapuna, Queensland University of Technology, Australia (2021)
Lydia Gibson, UCL, UK (2020)
Joseph Alizzi, University of New South Wales, Australia (2020)
Vaitoskirja Molkanen, University of Helsinki (2020)
Sophie Pascoe, U of Melbourne, Australia (2020)
Michael Main, ANU, Canberra, Australia (2019)
Mark Love, University of Queensland, Townsville, Australia (2016)
Robert Bino, ANU, Canberra, Australia (2015)
Artuhur Laurent, Sciences Po, Paris, France (2014)
Marieke Blondet, Anthropology, Gender and Sociology, University of Otago, New Zealand (2012)

Previous Committee membership outside Columbia in USA

Chris Green, Anthropology, University of Pennsylvania
Dawn Wells, Rutgers University
Jason Roberts, Anthropology, University of Texas, San Antonio
Hi'ilei Hobart, History, Food Studies and History, New York University
Tristan Lee-Jones, Rutgers University
Patrick Gallagher, Anthropology, Stanford University
Catherine Benson, Anthropology &SNR, the University of Michigan
Sandhya Ganapathy, Anthropology, Temple University
Ryan Huish, Botany, CUNY Graduate Center
Ryan Ehrhart, Environmental Psychology, CUNY Graduate Center
Mark Weckel, Ecology, CUNY Graduate Center

Former Ph.D. Students at Columbia

Eduardo Romero Dianderas, Columbia, Anthropology, (Ph.D. committee chair) (defended 2022)
Amelia Herbert, Columbia Teachers College, Anthropology (defended 2022)
Leslie James Sabiston, Columbia, Anthropology (defended 2021)
Margaux Kristjansson, Columbia, Anthropology (defended 2021)
Patrick Nason, Anthropology, (Ph.D. committee chair) (defended 2017)
Sudy Majd, Psychology (defended 2017)
Eric Goldwyn, Urban Planning, Columbia (defended 2016)
Adhan Iwasha, Anthropology (Ph.D. committee chair) (defended 2016)
Kaet Heupel, Anthropology (defended 2016)
Vivian Valencia, E3B (Ph.D. committee co-chair) (defended 2015)

Goutam Gajula, Anthropology (defended 2015)
Matthew West, Anthropology (defended 2015)
Ariela Zycherman, Anthropology (Ph.D. committee co-chair), (defended 2015)
Sarah Elizabeth Vaughn, Anthropology (Ph.D. committee co-chair) (defended 2015)
Meha Jain, E3B (defended 2015)
Georgian Cullman, E3B (Ph.D. committee co-chair) (defended 2014)
Elizabeth Nicholes, E3B (defended 2014)
Scott Freeman, Anthropology (defended 2014)
Jessie Barnes, CGSD (Ph.D. committee chair)
Leo R. Douglas, E3B (Ph.D. committee co-chair) (defended 2012)
Danielle Dinovelli-Lang, Anthropology (Ph.D. committee chair) (defended 2010)
Adriana Garriga-Lopez, Anthropology (defended 2010)
Lisa Uperesa, Anthropology (defended 2010)
Karen Holmberg, Anthropology (defended 2009)
Nancy Damman-Davis, EB3 (defended 2008)
Brian Harmon, Anthropology (defended 2008)
Vishnupad Mishra, Anthropology (defended 2008)

COURSES TAUGHT

Graduate Seminars
Research Methods in Anthropology (required for all second year Ph.D. students)
Place, Space, and Nature
Decolonizing Methodologies
Political Ecology
Culture and Consumption
Cultural and Biological Diversity
Parks and Peoples: The social effects of protected areas

Undergraduate Courses
The Interpretation of Culture
Anthropology of Consumption
Environment and Cultural Behavior
Introduction to Environmental Anthropology
Environment and Development
Political Ecology
Food, Ecology, and Globalization
The Anthropology of Cultural, Biological, and Linguistic Diversity
Anthropology of the Anthropocene
The Anthropology of Climate Change
Senior Seminar (required of all fourth year BA students)

Exhibit 37

INTERNATIONAL COURT OF JUSTICE

Case No. 87

Request for an Advisory Opinion on Obligations of States in respect of climate change

Expert Report for the Melanesian Spearhead Group from the Pacific Community's Geoscience, Energy and Maritime Division, Fisheries, Aquaculture and Marine Ecosystems Division, Land Resources Division, and Human Rights and Social Development Division

Compilation and Authorship by Johanna Gusman, M.Sc., J.D.

5 March 2024

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I. INTRODUCTION & EXPERTISE

The Pacific Community (SPC) supports Pacific countries and territories with scientific and technical solutions to address the region's greatest challenge—climate change. SPC is one of the Pacific region's scientific and technical intergovernmental organisations working alongside its Pacific Island Country and Territory (PICTs) Members[1] to understand and develop effective solutions to the challenges they face. In this case, SPC's core technical abilities to provide the objective science behind observed impacts of the adverse effects of climate change will help provide further expertise for the Melanesian Spearhead Group's (MSG) submission with focus on Fiji, Papua New Guinea, and the Solomon Islands.[2]

SPC's mandate and work programme addresses the many facets of climate change and its impacts on the region, including but not limited to marine ecosystems, fisheries,[3] coastal hazards, and human rights protections.[4] Additionally, SPC is the regional lead for the implementation of many climate change mitigation and adaptation programmes, including on sea level rise as well as loss and damage, and it sustainably manages Pacific maritime zones, ecosystems, and resources from 'ridge to reef' for current and future generations.[5] Its expertise in global and regional analyses of the impacts of climate change on the marine environment led to its inclusion in the advisory opinion proceedings at the International Tribunal for the Law of the Sea in Case No. 31.[6]

Finally, SPC is a consultative and advisory body to participating governments in matters affecting the economic and social development of the territories within its scope of the Pacific Community and the welfare and advancement of their peoples.[7] SPC sustainably manages social and environmental risks and impacts of all its activities in an inclusive manner, with a people-centred approach to maximise whole-of-society benefits. SPC is committed to openness and transparency, maintaining the highest ethical standards, and as such, the statements contained in this report are factually correct and materially complete.

The Secretariat of the Pacific Regional Environment Programme (SPREP) is the regional organisation established by the Governments and Administrations of the Pacific charged with protecting and managing the environment and national resources. SPREP's mandate is to promote cooperation in the Pacific region and provide assistance to protect and improve its environment as well as ensure

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[1] The Pacific Community (SPC) has 26 members, including 22 Pacific Island countries and territories (PICTs): the Cook Islands, Fiji, Kiribati, The Northern Marianna Islands, New Caledonia, Palau, Papua New Guinea, the Pitcairn Islands, French Polynesia, Tokelau, Tonga, Tuvalu, Niue, the Republic of the Marshall Islands, the Federated States of Micronesia, Wallis and Futuna, Nauru, The Solomon Islands, American Samoa, Vanuatu, and Samoa.

[2] Vanuatu is not included only because SPC has completed an expert report specific to its state submission.

[3] Note that, under the United Nations Convention on the Law of the Sea (UNCLOS), fishing is singled out among the legitimate uses of the sea that are negatively affected by pollution (*'pollution of the marine environment means the introduction by man, directly or indirectly, of substances or energy into the marine environment, including estuaries, which results or is likely to result in such deleterious effects as harm to living resources and marine life, hazards to human health, hindrance to marine activities, including fishing and other legitimate uses of the sea, impairment of quality for use of sea water and reduction of amenities)*, UNCLOS, 10 December 1982, 1833 United Nations Treaties Series (U.N.T.S.) 397 (entered into force 1 November 1994) at Article 1(1)(4).

[4] Article IV, §§ 6-10, of the Canberra Agreement establishing the South Pacific Commission (U.N.T.S., vol. 97, p. 227).

[5] For the full range of SPC's implementation for mitigation and adaptation programming, *see* Pacific Community Strategic Plan 2022-2031 (available at: https//www.spc.int/strategic-plan).

[6] *See* Request for an Advisory Opinion submitted by the Commission of Small Island States on Climate Change and International Law (Request for an Advisory Opinion submitted to the Tribunal, Intergovernmental Organizations invited to submit written statements pursuant to the Rules of the Tribunal, available at https://www.itlos.org/en/main/cases/list-of-cases/request-for-an-advisory-opinion-submitted-by-the-commission-of-small-island-states-on-climate-change-and-international-law-request-for-advisory-opinion-submitted-to-the-tribunal/

[7] *Supra* note 3 at para. 6.

sustainable development for present and future generations.[8] SPREP is guided by its vision for the future: 'A resilient Pacific environment, sustaining our livelihoods and natural heritage in harmony with our cultures.'[9]

SPREP provides its 21 Pacific Island Members with technical advice and support for capacity building for the region's environmental and development priorities. It also promotes sustainable development and cooperation in the region. With the support of the Secretariat, much progress has been made by SPREP Members to address environmental concerns. Both SPREP and SPC are Members of the Council of Regional Organisations of the Pacific (CROP) that with peer CROP agencies to serve the region's people and governments.

Pacific Island Leaders recognise climate change as the biggest threat facing the region, with serious implications for sustainable development and the environment that has nurtured the Pacific's unique cultures. Climate change is a dynamic, fast-moving area of action, and SPREP is well placed as a leader, coordinator, and implementer for this important issue in its areas of competence and expertise.

II. METHODOLOGY

MSG requested this expert report to include the full scope of climate-related losses and damages experienced, including environmental, human health, socio-economic, and cultural impacts. From this request, several of SPC's largest and most relevant divisions provided the necessary science to put together this report, compiled by an international lawyer with a scientific background to ensure proper competencies.[10] SPC also worked closely with SPREP to ensure the best possible science was included in this report, so where SPREP's competencies were required, it provided relevant data in line with the request. For example, **s**pecific science on the Kikori River Basin and coral health were provided by SPREP experts on those topics.

The science captured in this expert report builds upon the best available science, including the Sixth Assessment Report by the Intergovernmental Panel on Climate Change (IPCC).[11] It covers climate impacts that have already been observed as well as those currently occurring, like extreme weather events such as cyclones, changing rainfall patterns and drought, ocean warming, acidification and deoxygenation, and more.

It concludes that (i) the MSG countries have experienced significant harm because of anthropogenic climate change, and (ii) future losses and damages are bound to occur, with the extent of future harm depending on actions taken to avert, minimize, and address such losses and damages.

III. CLIMATE CHANGE-RELATED IMPACTS

Small island developing states, due to their geographical circumstances and level of development, are specially affected and particularly vulnerable to the adverse effects of climate change. For MSG countries, these well-documented climate change-related impacts include but are not limited to sea-level rise; extreme weather events (tropical cyclones); rainfall; temperature rise; and sea surface

[8] SPREP Agreement, 1993 (available at: https://www.sprep.org/governance/agreements-establishing-sprep)
[9] Secretariat of the Pacific Regional Environment Programme, Strategic Plan 2017-2026, (available at: library.sprep.org/sites/default/files/strategic-plan-2017-2026.pdf), p.5.
[10] SPC's relevant Divisions include Geoscience, Energy and Maritime (GEM), Fisheries, Aquaculture and Marine Ecosystems (FAME), Land and Resources Division (LRD), and Human Rights and Social Development (HRSD). The profiles of the Directors of each SPC Division that provided science and the author's CV can be found packaged at the end of this report.
[11] Intergovernmental Panel on Climate Change (IPCC), *Climate Change 2022: Impacts, Adaptation, and Vulnerability*. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change, Cambridge University Press, 2022 (also available at: https://report.ipcc.ch/ar6/wg2/IPCC_AR6_WGII_FullReport.pdf).

temperature effects on coral and ocean health.[12] These impacts are described under the progression of time and corresponding increased temperature projections, and where possible, including climate impacts likely to occur at 2.8°C—the level of warming projected to occur if nationally determined contributions (NDCs) submitted under the Paris Agreement are fully implemented. To keep this report focused and brief, it will describe the most pertinent climate change-related impacts that best characterize the harm this region faces.

At the onset, it is pertinent to recognise that Melanesian countries—Papua New Guinea (PNG), Fiji, New Caledonia, Solomon Islands and Vanuatu—represent 90% of the total Pacific Island population and 85% of its total land area. MSG countries also hold between them some of the most biodiverse ocean areas in the world. While PNG, Solomon Islands, and Fiji are within the same region, they do have distinct elements that effect how climate change interacts with each. Hence parsing each of the overall climate change-related impacts with the data specific to each country as highlighted at the front of each paragraph.

Perhaps most notably distinct is PNG with a total land area of 462,840 km^2 and an EEZ of 2.4 million km^2, which makes it the world's third largest island nation. It is also home to the third largest tropical rainforest on the globe and contains 7% of the world's total number of biodiverse species. It forms part of the Coral Triangle, which is the centre of biodiversity for the world's marine life. PNG is the largest carbon sink in the Pacific (outside the ocean itself). Located at the equatorial/tropical South Pacific and it is also home to several major rivers, including the Sepik River. As such, its profile is unequivocal to that of other Pacific countries; its unique climate includes mountain glaciers, humid tropical rainforests, swampy wetlands, and coral reefs. Many of the impacts of climate change on PNG have the potential to translate into global issues if these pockets biodiversity and carbon-storage are harmed beyond repair.

A. Sea-level rise

Rising sea-levels remain an existential threat to the Pacific, and MSG countries are no stranger to this fact. Figure 1 (below) depicts sea-level rise for the Melanesian region from 1993 – 2020. PNG, Solomon Islands, and Fiji are all located in parts of the Pacific that have seen some of the most drastic rises in sea levels, above that of global averages.

PNG: For PNG, the highest sea levels typically occur in the months November – February, with the majority in December/January. La Niña brings noticeably higher sea levels in December and January, with the year 2021 representing almost half of the exceedance hours in the 27-year record. Sea-level rise within PNG's exclusive economic zone (EEZ), measured by satellite altimeters from 1993 to mid-2020, ranges from about 2.5 to 5.0 mm per year, with highest estimates in the east and southwest. Tidal analysis of Lombrum sea level data shows that it experiences a diurnal tide, meaning only one high and one low tide per day, with the highest tides predicted to occur mostly in December and January. La Niña years typically have higher sea levels in December and January. In January and December 2021 alone, PNG recorded accounts for almost half of all exceedance hours in the entire record. In other words, of the number of hours in the 99th percentile (1.29 metres) that exceeded the sea level threshold, nearly half of those hours were measured in the bookend months of 2021.[13]

Solomon Islands: Honiara experiences a mixed tidal cycle, meaning it can be both diurnal and semidiurnal depending on the time of month. Sometimes there are two high and two low tides a day, and sometimes there is only one high and one low tide per day. The highest predicted tides of the year typically occur during the wet season months of November – January and also April/May. Sea level

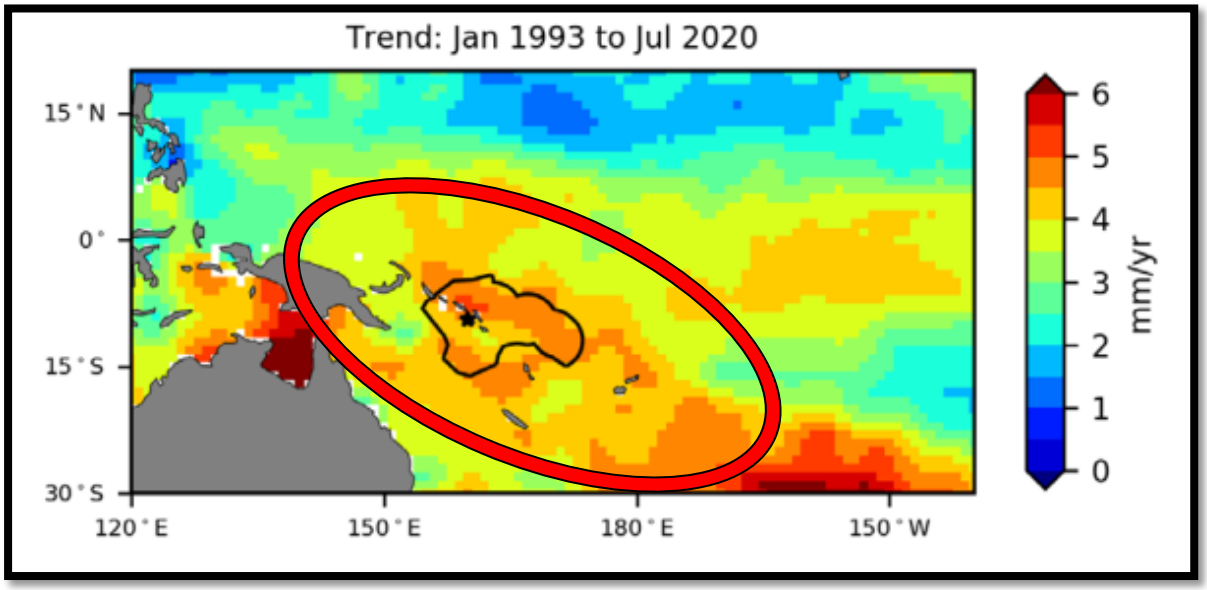
[12] *See mainly*, Simon McGree, Grant Smith, Elise Chandler, Nicholas Herold, Zulfikar Begg, Yuriy Kuleshov, Philip Malsale and Mathilde Rittman, SPC. *Climate Change in the Pacific 2022: Historical and recent variability, extremes and change.* Chapters 4, 10 and 12, 'Fiji', 'Papua New Guinea', and 'Solomon Islands', respectively; SPC also received data on *Coral Reefs* and on *Biodiversity* from experts at the Secretariat of the Pacific Regional Environment Programme (SPREP) in consultation with the Melanesian Spearhead Group representatives.

[13] *Climate Change in the Pacific 2022* at 144.

within the EEZ, measured by satellite altimeters since 1993, has risen between 3.5 and 5.5 mm per year, with a confidence interval of up to ±1.2 mm across the islands, higher than the global average of 3.1 ± 0.4 mm per year. It is important to note a high uncertainty estimate in the numbers, which means that the trend could be as low as 2.3 mm/year or as high as 6.7 mm/year. Trend estimates at the Honiara tide-gauge over a shorter time period are provided in the Pacific Sea Level and Geodetic Monitoring (PSLGM) Project, which provides numbers that are updated on a monthly basis.[14]

Fiji: Fiji experiences a semidiurnal tidal cycle, meaning two high and two low tides per day. The highest predicted tides of the year typically occur during the wet season months of December– February and the highest sea levels typically occur in the months from October to March. La Niña brings noticeably higher sea levels outside the austral summer, specifically March/April and September/October. Sea-level rise within Fiji's EEZ, as measured by satellite altimeters from 1993 to mid-2020, ranges from 4 to 5 mm per year, with highest trend estimates in the far north, also higher than the global average. Since approximately 2009, the number of hours where sea level exceeds the 2.39 m sea level threshold has increased steadily. This is due to a combination of sea-level rise and subsidence occurring in Fiji.[15]

Figure 1. Satellite altimetry annual trend for the Pacific from 1993 to 2020, with the Melanesian Spearhead Group of countries highlighted (in red circle) and the Solomon Islands EEZ highlighted (in black).[16]



Case Study: Kikori River Basin and Delta (Papua New Guinea)

PNG is ranked as the tenth most vulnerable country in the world to the risk of climate change. PNG's highlands region is susceptible to extreme weather such as heavy rainfall, which may increase the occurrence of landslides and inland flooding. The coastal regions, the islands and the low-lying atoll areas are mostly vulnerable to extreme weather events, storm surge, sea-level rise, and coastal inundation. The sea level surrounding PNG has risen by approximately 7mm per year since 1993, which is higher than the global average of 2.8-3.6mm per year.38 Projections anticipate a continued rise. Under a high emissions scenario, the sea is expected to rise between 4cm - 15cm by 2030.39 This will impact

[14] *Id.* at 157.
[15] *Id*. at 55.
[16] Figure adapted from *Climate Change in the Pacific 2022* at 158.

storm surges and flooding to coastal regions.40 Risk of flooding (both coastal and inland flooding) is ranked amongst the highest level of climate risks in PNG.[17]

The Kikori River is 445 km in length and is Papua New Guinea's fifth largest river. The Kikori River is included in the Kikori River Basin, a nominated World Heritage Area because of its biodiversity and cultural diversity values. Climate Change Impacts in the Kikori Delta, Gulf Province of Papua New Guinea includes the rising of sea levels. Increased flooding and increased intensity of storm surges. A number of villages have already relocated as their villages have become unable to sustain the human population. Fresh water sources have become more saline as salt intrusions enter into water sources. June and July are the peak months for storm surges in the Gulf of Papua and many villages have faced the destruction of these storms. Villages have moved themselves up the river to the small township of Kikori, this forced climate change migration is already causing friction amongst the tribes as settlers and traditional landowners argue overfishing and food resources.[18]

Figure 2. Outline of climate change impacts on Kikori's coast undertaken by the Piku Biodiversity Network.[19]



B. Coastal Erosion

The loss of land due to coastal erosion can pose a significant threat to coastal infrastructure and threaten the livelihood of coastal communities. In addition, coastal erosion decreases the space available for much-needed community facilities and development initiatives. For example, most of PNG experiences flooding during the monsoons. The highlands—where average rainfall can reach 10,000 mm—have a long history of severe flooding. In the coastal plains, floods cause erosion and heavy sedimentation that

[17] Government of Papua New Guinea (2020), Papua New Guinea's Nationally Determined Contribution, available at https://unfccc.int/sites/default/files/NDC/2022-06/PNG%20Second%20NDC.pdf at 19.
[18] Piku Biodiveristy Network (2020), Climate Change Impacts in the Kikori River Delta, available at https://www.ohchr.org/sites/default/files/documents/issues/climatechange/cfi-promotion-and-protection/non-states/2022-07-06/Environmental-Defenders-Office-2-cfi-promotion-and-protection.pdf.
[19] Piku Biodiveristy Network (2020) at 13.

impact agricultural productivity and downstream settlements.[20] Perhaps this has been best documented in Fiji. Compounding factors like sea-level rise, wave inundation, and extreme weather, means that Fiji's coast has undergone significant change overtime. For example, over 80 coastal towns have had to relocate due to rising sea levels and subsequent coastal erosion.[21]

C. Tropical Cyclones

A large number of tropical cyclones pass through the Melanesia region of the Pacific Ocean each year. Tropical cyclones cause major economic harm to the region. For example, in Fiji, tropical cyclones cost around 5% of its GDP every year, with a 65% probability that it will experience a storm every year.[22] While the complexity of the science behind cyclone hazard and climate change is developing,[23] known risks include the adverse effects that sea-level rise has on enhancing the damage caused by cyclone-induced storm surges as well as intensified wind and rainfall. While the number of cyclones passing through MSG EEZs may be somewhat decreasing, there is significant evidence that the cyclones that do pass are more extreme.

PNG: Tropical cyclones usually affect PNG between November and April. Over the period 1969–2018, an average of 16 cyclones passed within the PNG exclusive economic zone (EEZ) per decade. Tropical cyclones were most frequent in neutral El Niño–Southern Oscillation (ENSO) years and least frequent in La Niña years. Interannual variability in the number of tropical cyclones in the EEZ is large, ranging from zero in some seasons to six in 1971/72 and five in 2013/14.[24] PNG has been affected by devastating cyclones on multiple occasions. For example, in November 2007, tropical cyclone Guba resulted in at least 164 fatalities and caused severe damage across southeastern PNG, including displacing over 13,000 people. A State of Emergency was declared as torrential rains and high tides caused extensive flooding that destroyed over 13 bridges and numerous roads via landslides and floodwater.[25]

Solomon Islands: Tropical cyclones usually affect Solomon Islands during the southern hemisphere tropical cyclone season, which is from November to April, but also occasionally occur outside the tropical cyclone season. The Southern Hemisphere Tropical Cyclone Archive indicates that between the 1969/70 and 2017/18 seasons, 138 tropical cyclones passed within the EEZ. This represents an average of 28 cyclones per decade. Tropical cyclones were most frequent in El Niño years (42 cyclones per decade), followed by neutral years (25 cyclones per decade) and least frequent in La Niña years (20 cyclones per decade).[26] The most recent tropical cyclone Jasper (category 4) affected the Solomon Islands in December 2023, compromising water supplies in the Western Province, disrupting shipping routes in the Central Province, and suspending domestic air travel, totalling a conservatively estimated USD$675 million in damage.[27]

Fiji: Tropical cyclones usually affect Fiji during the southern hemisphere tropical cyclone season, which is from November to April. Tropical cyclones also occasionally occur in October and May of El

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[20] Climate Change Impacts on Natural Hazard Vulnerability and Reducing the Risk of Disasters and Climate Variability in the Pacific Islands: PAPUA NEW GUINEA Country Assessment." World Bank, Global Disaster Risk Reduction Facility and South Pacific Applied Geoscience Commission.

[21] *See* Storymap ArcGIS, Fiji Climate Impacts: Rising Sea Level available at https://storymaps.arcgis.com/stories/f0168f19be45481792f85fc7a8dde8f7.

[22] Climate Investment Fund Factsheet, *Nature, People & Climate: Fiji Profile* (2023).

[23] Records of tropical cyclones exist from the late 1800s in some countries in the Southwest Pacific, but trends in tropical cyclones have only been presented from 1981/82. Satellite-based observations began in the Southwest Pacific in the early 1970s, but consistent coverage and reliable intensity estimates have only been available since the early 1980s. Confidence in tropical cyclone trends is moderate as the definition of a tropical cyclone has changed and satellite observation methods have continued to improve over the last 40 years.

[24] *Climate Change in the Pacific 2022* at 129.

[25] United Nations Office of the Coordination of Humanitarian Assistance (OCHA), *Papua New Guinea: Cyclone Guba OCHA Situation Report No. 2* (2017) available at https://www.unocha.org/publications/report/PNG.

[26] *Id*. at 155.

[27] Solomon Islands Meteorological Service, December 2023.

Niño years. The tropical cyclone archive of the southern hemisphere indicates that between the 1969/70 and 2017/18 seasons, 135 tropical cyclones passed within its EEZ, representing an average of 28 cyclones per decade.[28] In 2016, tropical cyclone Winston—one of the strongest tropical storms on record in the southern hemisphere—hit Fiji causing massive destruction. Winston is one of the deadliest storms in Fiji's history, causing 44 deaths and affecting more than 60 percent of Fiji's total population.[29] and caused an estimated USD$1.4 billion (approximately 31% of Fiji's GDP) in damages, the second costliest ever in the South Pacific basin. The cyclone damaged at least 495 schools, 88 health facilities, disrupted basic public services, and destroyed crops and livelihoods.[30]

D. Subsistence agriculture and food security

MSG countries are distinct in their land cultivation capabilities, so agriculture is very important to them. However, it also leaves them vulnerable to the impacts of climate change on that sector. More intense rainfall events exacerbate soil erosion and nutrient loss. Rising sea-levels have increased the incidence of soil and groundwater salinization, which also impacts water security. In fact, saltwater intrusion into agricultural lands has devastating effects on food production that PNG, Solomon Islands and Fiji have all witnessed.

The effects of climate change can influence food security via direct and indirect effects on crop growth processes. Direct effects include alterations to carbon dioxide availability, precipitation, and variable temperatures. Indirect effects include through impacts on water resource availability, soil organic matter transformation, soil erosion, changes in pest and disease profiles, the arrival of invasive species, and declines in arable areas due to the submergence of coastal lands. This section will discuss impacts of changing rainfall and drought conditions as well as temperature rise as these factors directly affect the agricultural industry, and by extension, food security for MSG countries.

PNG: The agriculture sector and subsistence farming employs a majority of Papua New Guinea's population (~85%) and accounts for approximately 30% of the national GDP.[31] The majority of PNG receives more than 2500 mm of rainfall annually, so both subsistence and commercial farming depends on rainfall. Primary cultivated crops include sweet potatoes, taro, yam, cassava, banana, breadfruit, sugarcane, and aibika, while a diverse range of vegetables are produced for local consumption, including pumpkins, corn, carrots, peppers, beans, and tomatoes. Higher temperatures resulting from climate change result in more heat stress and increased humidity with negative consequences for agricultural production. Rising temperatures could lead to faster rates of crop deterioration after harvesting, with significant implications for food security.[32] PNG is among the group of PICTs where the estimated sustainable production of fish and invertebrates from coastal and freshwater habitats is unable to supply the national population with the number of fish needed per person per year for good nutrition.[33]

Solomon Islands and Fiji: In the Solomon Islands, 75% of its labour force is engaged in subsistence farming and/or fishing. As with the other Melanesian countries, agriculture and fishing are an especially important source of income for rural households in Fiji and changes in rainfall, more extreme weather

[28] *Id*. at 53.
[29] Australian Government, Department of Foreign Affairs and Trade, *Tropical Cyclone Winston Education Response Evaluation*, October 2017 available at https://www.dfat.gov.au/sites/default/files/tropical-cyclone-winston-education-response-evaluation.pdf.
[30] Government of Fiji, *Fiji Post-Disaster Needs Assessment – Tropical Cyclone Winston (*2016) available at, https://reliefweb.int/report/fiji/fiji-post-disaster-needs-assessment-may-2016-tropical-cyclone-winston-february-20-2016.
[31] Pacific Adaptation to Climate Change Papua New Guinea Report of In-Country Consultations. GEF, UNDP, SPREP.
[32] Facts taken from the World Bank Climate Knowledge Portal, Climate Risk and Adaptation Country Profile for Papua New Guinea, available at: https://climateknowledgeportal.worldbank.org/sites/default/files/2018-10/wb_gfdrr_climate_change_country_profile_for_PNG.pdf.
[33] *Vulnerablity of tropical fisheries and aquaculture to climate change* at 186.

events, higher average temperatures, sea-level rise, and ocean acidification all negatively affect yields of crops, fisheries stock and livestock health, particularly affecting subsistence farmers in remote locations.[34]

E. Changing rainfall and drought

Annual rainfall across the Melanesia region varies significantly making crop yields less predictable as climate change-related impacts intensify and become more frequent. This is especially true in the case of prolonged drought. For example, the 2015–16 drought seriously reduced food security in PNG. For areas with very high elevation (2200 to 2800 m), the effects of the drought were compounded by the effects of frost on crops. The drought and frost affected ~700,000 people and ~ 450,000 people faced critical food shortages.[35] Droughts also affect the livelihood of people by destroying economic crops. For example, in Fiji, the 1997 – 1998 El Niño event is a case in point where losses in the sugar cane industry were around $US53 million, while other agriculture losses including livestock death amounted to $US8 million. In the 1998 drought, Fiji lost approximately $US63 million in the agriculture sector.[36]

With changes in precipitation, rainfall, and temperature patterns predicted to occur, a range of follow on impacts are foreseeable. For example, forests (particularly applicable to PNG) will become more susceptible to invasive species and fire resulting in broad ecosystem shifts like loss of ecosystem services and loss of habitats for certain species. In the Solomon Islands, annual rainfall is projected to increase slightly with more extreme rain events, including increased rainfall intensity of around 20% within 100km of the cyclone centre. Projections show extreme rainfall days are likely to occur more often and be more intense.[37]

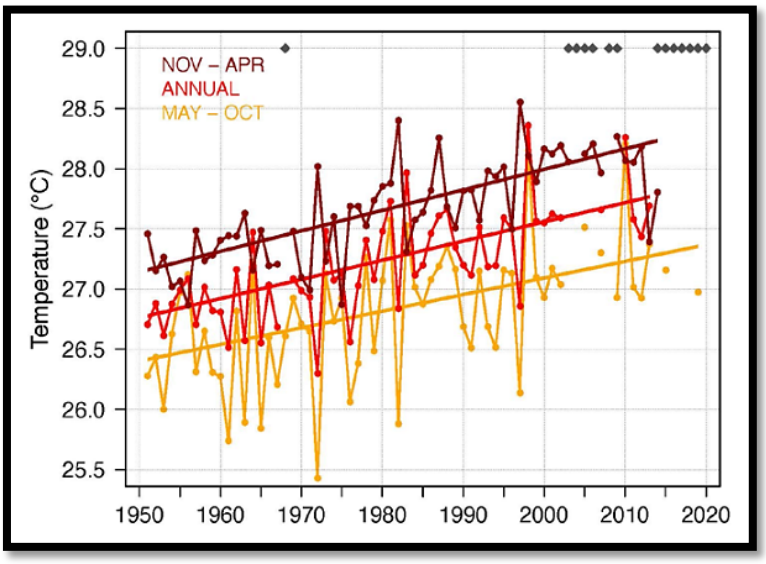
F. Increased frequency of high-temperature days

Temperature rise and global warming caused by climate change are wreaking havoc across the planet and have particular climate affects for small island developing states like PNG, Solomon Islands, and Fiji.

PNG: Annual and seasonal air temperatures at Port Moresby increased over the period 1951–2019. The annual number of hot days and warm nights has increased, while the number of cool days and cold nights has decreased. The energy required for cooling indoor environments has increased and the difference between daytime and night-time temperatures has decreased.[38] Coastal locations on the PNG mainland and offshore islands experience small seasonal variations in temperature, the largest of which is a maximum temperature range of 1.3 °C at Port Moresby for the 1961–1990 climatology period and 1.2 °C for the 1991–2020 period. There is a peak in maximum temperature during the wet season and a minimum during the dry season months of June–August. There has been a clear shift towards warmer average minimum monthly temperatures between the climatology periods of 1961–1990 and 1991–2020.[39] Average annual and seasonal temperatures have increased significantly at Port Moresby (Figure 2) and daily minimum temperatures are warming faster than daily maximum temperatures.

[34] Climate Change Impacts on Health and Livelihoods: Fiji Assessment (2021).
[35] ese, V., Kiem, A.S., Mariner, A. *et al.* Historical and future drought impacts in the Pacific islands and atolls. *Climatic Change* 166, 19 (2021). https://doi.org/10.1007/s10584-021-03112-1.
[36] Iese, V. et al., *Community-based loss and damage assessment toolkit for the tourism and agricultural sectors*, Pacific Centre for Environment and Sustainable Development, Fiji (2016).
[37] See *Current and future climate of the Solomon Islands Update,* Solomon Islands Meteorological Service and PACCSAP.
[38] *Climate Change in the Pacific 2022,* Chapter 10 'Papua New Guinea' at 123.
[39] *Id*. at 127.

Figure 2. Average annual, November – April and May – October temperatures at Port Moresby, PNG.[40]



Solomon Islands: Average annual and seasonal temperatures have increased significantly at Honiara (Table 1). Air temperatures throughout the year show only small seasonal variations as they are strongly linked to the surrounding ocean temperatures. The most significant variation in air temperatures is in July and August, when cooler air blows in from the south. This change is most evident in the average minimum temperatures at Munda, which has a minimum temperature range of 1.6 °C for the 1961 – 1990 climatology period. Both Honiara and Munda display a clear warming of average minimum temperatures between the 1991–2020 climatology period and the 1961–1990 period for all months throughout the year.[41]

Table 1. Trends in annual and seasonal air temperatures for Honiara.[42]

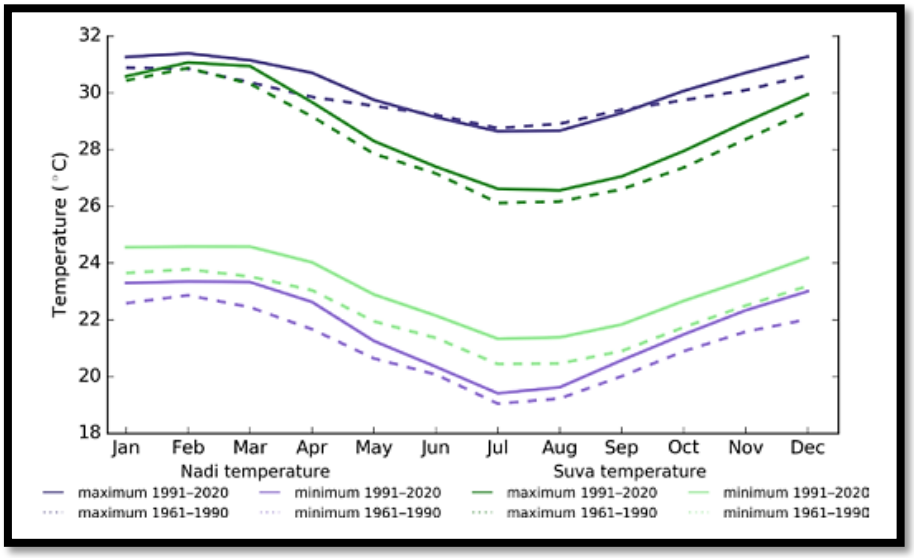
	Honiara Tmax (°C/decade)	Honiara Tmin (°C/decade)	Honiara Tmean (°C/decade)
	1951–2020		
Annual	**+0.23** (+0.17, +0.28)	**+0.19** (+0.14, +0.24)	**+0.21** (+0.17, +0.25)
November–April	**+0.26** (+0.19, +0.31)	**+0.20** (+0.15, +0.27)	**+0.23** (+0.19, +0.27)
May–October	**+0.22** (+0.16, +0.27)	**+0.18** (+0.13, +0.22)	**+0.19** (+0.16, +0.23)

Fiji: The range in average monthly maximum temperatures throughout the year is about 5 °C for Suva and 3 °C for Nadi Airport. The average monthly minimum temperature range is about 3 °C for Suva and 4 °C for Nadi Airport for 1991–2020. There has been a clear shift towards warmer average monthly temperatures between the climatology periods of 1961–1990 and 1991–2020 (Figure 3), with warmer

[40] Figure lifted from *Climate Change in the Pacific 2022* at 127. Straight lines indicated linear trends and the diamonds indicate the years with insufficient data for one or more variables.
[41] *Climate Change in the Pacific 2022* at 153.
[42] *Id*. at 154. The 95% confidence intervals are shown in parentheses and trends significant at the 95% level are shown in bold.

average temperatures occurring in all months throughout the year for both Suva and Nadi Airport, except for average maximum temperatures at Nadi Airport between June and September.

Figure 3. Maximum and Minimum air temperatures in Fiji for different periods of time.[43]



G. Biodiversity

As mentioned earlier, Melanesia is one of the richest biodiverse regions on the planet. Although consisting of just over one percent of the earth's total land area, Melanesia contains a disproportionately high percentage of the planet's terrestrial and marine biodiversity. Numerous studies show that the island of New Guinea (the country of Papua New Guinea and Indonesia's Papua province) and its associated archipelagos as well as the major Melanesian islands (located in the countries of Solomon Islands, Vanuatu, Fiji, and the French Pacific territory of New Caledonia) are major global priorities for conservation.[44]

PNG: Data shows that ocean acidification around PNG has slowly been increasing since the 18th century, impacting the growth of corals and organisms that require carbonate minerals to develop. This damage will impact the health and viability of PNG's marine ecosystems, including the coral reefs that provide ecosystem services to communities. There are 15 coastal provinces in PNG with a population of approximately 4.5 million that rely on food, shelter and livelihoods sourced from coral reefs. Not only do the reefs contribute to livelihoods, but also protect the coastlines from storms and loss of land.[45]

Solomon Islands: Seagrass, mangrove and coral reef ecosystems perform important ecosystem services and support high levels of biodiversity. Ideally, these ecosystems are monitored by recording percentage cover over time and a target trend is stable or increasing. These ecosystems (particularly coral reef ecosystems) are vulnerable to changes in sea temperatures.[46]

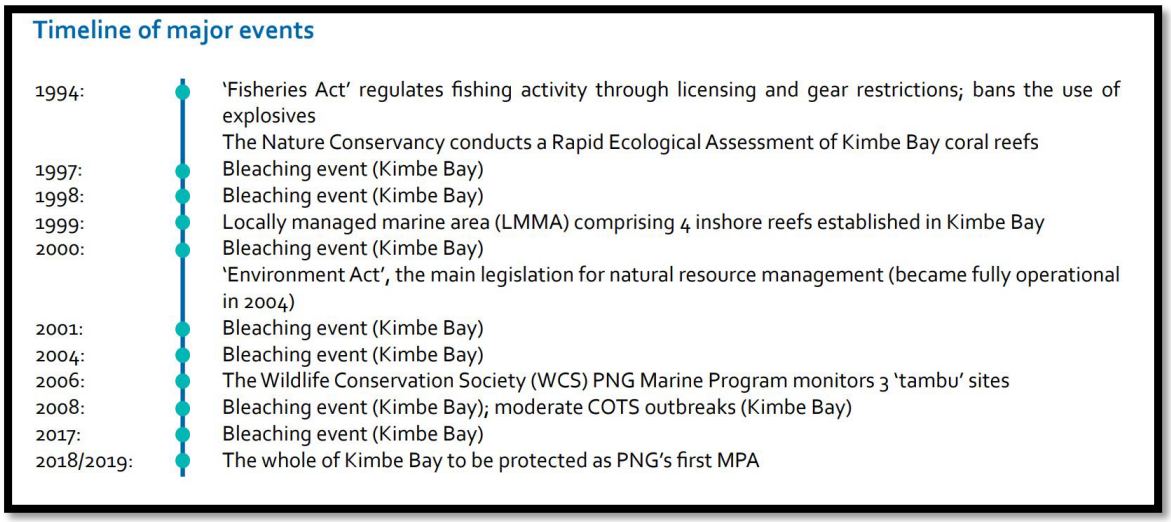
H. Coral Reef Health

[43] Figure excised from *Climate Change in the Pacific 2022* at 50. Purple represents the air temperatures for Nadi Airport (West) and green represents Suva (East) for the periods of 1961 – 1990 (dotted lines) and 1991 – 2020 (full lines).
[44] Stephen J. Leisz, et al., *Consensus Report Climate Change and Biodiversity in Melanesia: What do we know?* available at https://www.cakex.org/sites/default/files/Consensus%20Report.
[45] Papua New Guinea's Nationally Determined Contribution, p.22
[46] Solomon Islands State of the Environment Report (2019), available at https://www.sprep.org/sites/default/files/documents/publications/soe-solomon-islands-2019.pdf), at 68.

Coral reefs are unique ecosystems that also provide habitats for other species (fish, turtle, dugong) as well as having other benefits such as providing protection/resilience against wave action and supporting tourism. Each of these habitats are vulnerable to pollution, loss of water quality and sedimentation from land-based activities. They are also vulnerable to changes in sea temperature and pH, as well as extreme weather events, associated with climate change.[47]

PNG: Most of PNG's reefs are fringing or patch reefs which dominate the northern coast and islands, and barrier reefs, which occur along the south coast. Included within the 'Coral Triangle' of biodiversity, which contains the highest marine biodiversity in the world, these reefs are extremely rich in marine species. For example, there are an estimated 400 species of coral and 860 species of fish on the coral reefs of Kimbe Bay on the island of New Britain. Many local communities in PNG are highly dependent on natural resources for food security, with an estimated 85% of the population reliant on subsistence activities to meet daily needs.[48] As atmospheric CO_2 concentrations continue to rise, oceans will warm and continue to acidify. Under all three emissions scenarios, ocean acidification is projected to increase in the waters surrounding PNG.[49]

Figure 4 provides a timeline of major events on PNG Coral Reefs.[50]



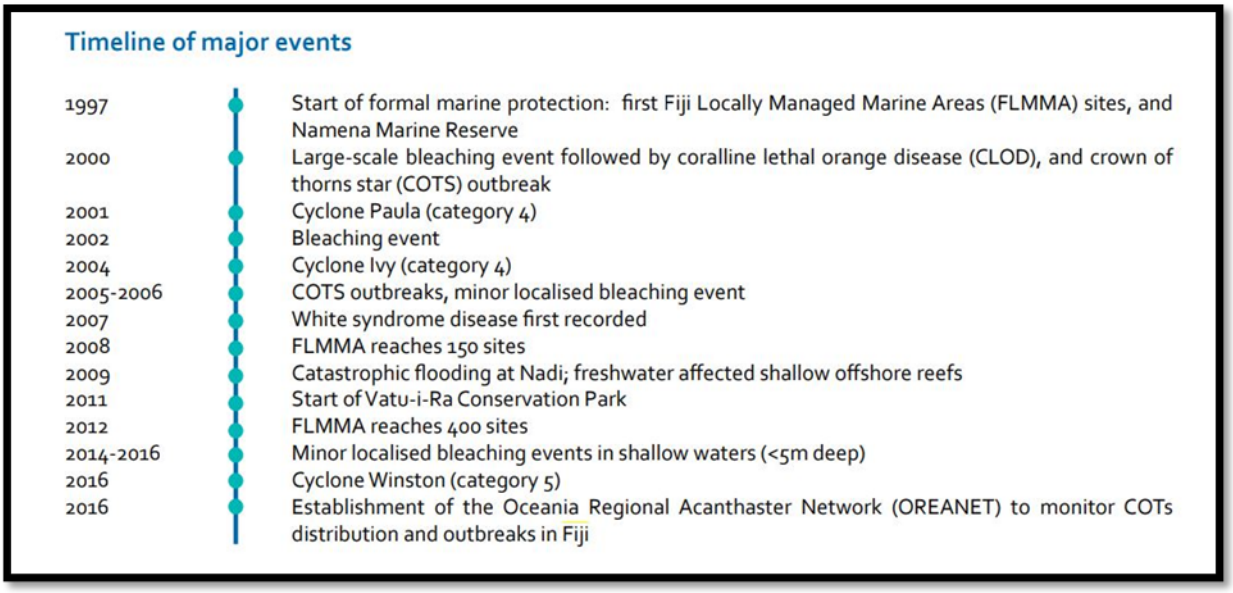
Solomon Islands: Extensive coral reef surveys were conducted in the Solomon Islands in 2004 across 113 sites around the major islands and a total of 485 described species belonging to 76 genera were recorded (Green et al. 2006). This is the second highest species diversity in the world, second only to the region of the Raja Ampat Islands of eastern Indonesia (Green et al. 2006). Seven coral community types were recognised and those found in very sheltered inlets were of particular interest as they had high species richness, usually high living coral cover (32% average live coral cover) and were generally in good health (Green et al. 2006). Overall, reefs and coral communities of the Solomons were in good condition and, with the exception of some localised areas, impacts and reef degradation were low to moderate at most sites (Green et al. 2006). Crown of thorns starfish damage was the most widespread threat and significant at some locations (Green et al. 2006). Damage from the 2000 coral bleaching event was noted at some locations however sediment-associated impact was rare (Green et al. 2006).[51]

Fiji: Over half the population is rural with many communities relying on small-scale commercial and subsistence fishing. About 75% of the dietary protein is sourced from the ocean. Tourism is the major

[47] Solomon Islands State of Environment Report, at 91.
[48] Moritz C, Vii J, Lee Long W, Tamelander J, Thomassin A, Planes S (editors) (2018) Status and Trends of Coral Reefs of the Pacific. Global Coral Reef Monitoring Network, at 194.
[49] Papua New Guinea's Nationally Determine Contribution, at 22.
[50] Status and Trends of Coral Reefs in the Pacific: Papua New Guinea, at 194.
[51] Solomon Islands State of the Environment Report, at 69.

source of foreign income, with most tourist activity concentrated on the beaches and reefs of the coast of the main islands and smaller adjacent islands. Reef biodiversity is high, with at least 422 taxa of marine algae, 342 species of hard corals, 253 species of marine molluscs and 1075 recorded reef-associated fish species. Fiji also has mangrove forests and seagrass beds, with 8 species of mangrove and 6 species of seagrass.[52]

Figure 5 provides a timeline of major events on Fiji's Coral Reefs.[53]



I. Health and social impacts, particularly on children, especially rural youth

Food shortages caused by drought and other climate change impacts affect peoples' health and social well-being. For example, the 2015 – 2016 drought in PNG, reported an increase in the death rate for some locations. People were relegated to eating unusual foods or famine foods in abnormally large quantities. The drought caused water shortages and forced many women and girls to walk long distances to obtain drinking water, often from sources that they would not normally use. Women reported experiencing increased harassment on the journey to and from water collection points. Women and girls also reported an increased share of the workload as they were involved in collection of water from distant sources as well as charged with the reestablishment of familial gardens, particularly in rural areas. Other social and health impacts were also reported (e.g., theft, high consumption of alcohol, increased incidences of gut and skin diseases, etc.).[54] The impacts of climate change are affecting all aspects of life for Fijians - the environment, economy, social development, as well as cultural practices and traditional ways of life. Fiji is facing loss and degradation of vital ecosystems and natural resources, including its coral reefs, coasts and catchments, on which key sectors of its economy such as agriculture and fisheries are dependant.[55]

IV. CONCLUSION

Climate change is causing significant harm to Pacific Island countries, including the Melanesian region. This harm materializes in the form of sea level rise, threats to some of the world's most biodiverse regions, extreme weather events, prolonged drought, and other impacts. Projections indicate that these impacts are bound to intensify. In line with IPCC AR 6, the reduced habitability of small islands from

[52] Status and Trends of Coral Reefs in the Pacific: Fiji, p.132
[53] Status and Trends of Coral Reefs in the Pacific: Fiji, p.132
[54] *See* Centre PNG National Disaster Centre, *El Niño 2015/2016 Post Drought Assessment: report of the interagency post drought assessment in Papua New Guinea*, 2016.
[55] Fiji's Update Nationally Determined Contribution 2020, p.16

a combination of these factors poses significant risk, even under the global scenario of 1.5 degrees (*high confidence*), which at its current trajectory, the planet is certain to exceed. As discussed throughout this report, key risks that face the Melanesian region in this regard include, increased intensity and intensification rates of tropical cyclones, marine and coastal biodiversity, submergence of reef islands, water security, degradation of health and wellbeing, economic losses, and non-economic losses related to culture, custom, and traditional knowledge. The extent to which this existential threat materializes will heavily depend on actions taken to curb anthropogenic greenhouse gas emissions—the vast majority of which is generated outside of its borders—as well as measures to adapt to climate change and respond to the loss and damage it causes.

Exhibit 38

Expert Report on Health Impacts of Climate Change

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I. Introduction

I have been asked to provide an independent expert report on the health impacts of climate change, with a particular focus on Pacific Island Nations. As a medical doctor and a former senior leader of humanitarian and development organisations including the United Nations and the International Federation of Red Cross and Red Crescent Societies, with extensive experience in humanitarian and health response during crises, my expertise allows me to testify to the escalating health risks faced by populations due to climate change. I have attached at Annexure 1 my CV. I provide this report on the basis of my expertise and to provide information to assist the International Court of Justice. Thus, I affirm that the conclusions in this report are impartial, unbiased and objective and are based on my expertise and experience in the field of health and its interrelationship with climate change.

Scientific evidence confirms that climate change represents one of the most significant threats to global public health in the 21st century and one that is an immediate and escalating crisis. The effects of climate change are already being felt acutely in vulnerable regions such as the Pacific Islands. In this report I will lay out the direct and indirect health consequences of climate change. This report will also reflect the impacts of the climate crisis in the Pacific region. I will outline how the climate crisis is a force multiplier and its impacts, including increasing temperatures, rising sea levels, extreme weather events, and changing disease patterns, pose unprecedented challenges to the health and well-being of the population.

II. Background and context:

Climate change poses a significant risk to human health, impacting not only the natural environment but also social, economic, and health systems. It acts as a threat multiplier, jeopardizing and potentially undoing years of progress in public health. That is why the Lancet and University College London Commission on Climate Change declared **"*climate change as the biggest global health threat of the 21st century*"** in 2009 [1].

It is also important to note that the climate crisis is not a crisis of the future. We are living it now as adverse health outcomes are already observable. Climate change-fuelled extreme weather in 2023 led to severe temperatures, heat stress, excessive rainfall, and floods globally. Increases in water- and vector-borne diseases and more frequent extreme weather events are all evidence of global warming and transformations in planetary cycles and meteorological conditions as discussed by the IPCC in its Sixth Assessment Report. Here are a few examples of the devastating climate induced events we have witnessed in 2023 alone:

- In 2023, the world saw the highest global temperatures in over 100,000 years, and heat records were broken across all continents [2].
- In the Horn of Africa, a three-year drought [3] that caused food insecurity for millions was followed by massive floods that have killed more than 300 people [4].
- In July 2023, deadly heat waves brought extreme temperatures to large regions of Europe, North America and China for weeks on end – an event that would have been extremely rare or even impossible [5] without human-caused warming.
- In September 2023, more than 3,400 people lost their lives in Libya when three dams collapsed after incessant downpours. While conflict-related insecurity and poor dam maintenance created the conditions for the disaster to occur, it was found that climate change increased the intensity of the heavy rainfall by up to 50 percent [6].
- 2023's wildfire season in Canada was the most extreme ever recorded. Fires burnt more than 18 million hectares, shattering the previous record by more than 10 million hectares. A study found that climate change made the hot, dry and windy conditions that drove the wildfires in Québec at least two times more likely [7].

The Pacific region was not spared with several climate-related events taking their toll on the populations of several of the Pacific Island nations:

- In 2015, Cyclone Pam struck Vanuatu, causing widespread devastation. The cyclone's intensity and impact were exacerbated by climate change, leading to severe damage to infrastructure, homes, and livelihoods [8]. Vanuatu, like many other Pacific Island Countries (PICs), faces increasing risks from extreme weather events due to rising sea levels and changing weather patterns [9].
- Tuvalu, a low-lying atoll nation, experienced accelerated sea level rise in 2023. Rising sea levels pose an existential threat to the habitability of small island nations like Tuvalu. Slow-onset events, such as saline intrusions and coastal erosion, adversely affect these vulnerable communities [10].
- In 2023, Fiji and the Solomon Islands faced severe flooding due to heavy rainfall and rising river levels. These hydro-meteorological disasters caused significant economic losses and disrupted communities. Climate change-induced extreme weather events continue to strain PICs' capacities to respond effectively [11].

Indeed, as climate patterns shift, we are witnessing more frequent and severe weather events such as storms, heatwaves, floods, droughts, and wildfires. These environmental hazards directly and indirectly compromise health, heightening the likelihood of fatalities, chronic illnesses, the proliferation of infectious diseases, and health crises.

III. Vulnerable populations more at risk and increasing health inequities:

Marginalized communities are on the frontlines of the worst impacts of our changing climate. According to a World Bank estimate, "Climate change could drag more than 100 million people back into extreme poverty by 2030" [12]. Much of this reversal would be due to the "negative impacts on health". The reason

that the most marginalized and impoverished are more severely affected is because they are usually living in areas that are more vulnerable to the impacts of climate change; they often lack the resources and infrastructure to protect themselves from these impacts; and often have limited access to health care and other services that can help them cope. The climate risk index shows that eight out of the ten countries most impacted by extreme weather events are Low- and Middle-Income countries [13].

The 2023 report of the Lancet Countdown on Climate Change notes that, "the multiple and simultaneously rising risks of climate change are amplifying global health inequities and threatening the very foundations of human health. Health systems are increasingly strained, and 27 percent of surveyed cities declared concerns over their health systems being overwhelmed by the impacts of climate change" [14]. The report explains that "Often due to scarce financial resources and low technical and human capacity, the countries most vulnerable to climate impacts also face the greatest challenges in achieving adaptation progress, reflecting the human risks of an unjust transition." According to the report "only 44% percent of low Human Development Index (HDI) countries and 54 percent of medium HDI countries reported high implementation of health emergency management capacities in 2022, compared with 85 percent of very high HDI countries. Additionally, low and medium HDI countries had the highest proportion of cities not intending to undertake a climate change risk assessment in 2021." The report further explains that these inequalities "are aggravated by the persistent failure of the wealthiest countries to deliver the promised modest annual sum of $100 billion to support climate action in those countries defined as developing within the UN Framework Convention on Climate Change."

IV. Health Impacts of Climate Change:

1. **Heat-related illnesses:** Climate change is causing rising global temperatures and more frequent and intense heat waves. Elevated temperatures contribute to an increased frequency and intensity of heatwaves, leading to heat-related illnesses such as heat exhaustion and heatstroke [15]. These conditions can result in dehydration, heat cramps, and, in severe cases, organ failure or death. Higher temperatures exacerbate cardiovascular [16] and respiratory conditions [17]. Rising temperatures contribute to poor air quality, particularly in urban areas. Increased heat fosters the formation of ground-level ozone and particulate matter, which can worsen respiratory conditions, including asthma, and contribute to the development of respiratory diseases. Vulnerable individuals may experience heightened risks of heart attacks, respiratory distress, and complications related to chronic diseases. In addition, increased temperatures pose risks to pregnant individuals [18], potentially leading to adverse birth outcomes such as preterm birth, low birth weight, and developmental issues in infants. Altered temperature and precipitation patterns influence the quality and distribution of food and water sources. This can lead to contamination, increasing the risk of foodborne and waterborne diseases, impacting nutritional health. Vulnerable populations, including the elderly, children, and those with pre-existing health conditions, face heightened susceptibility to the health impacts of rising temperatures. Socio-economic factors and limited access to healthcare further compound these disparities.
2. **Other extreme weather events:** Climate change is causing an increase in the frequency and intensity of extreme events such as hurricanes, cyclones, rainfalls, floods, and wildfires, and sea

level rise which in turn cause injuries and deaths, as well as forced displacement and potential social conflicts. IPCC research [19] indicates that all the risks from these extreme weather events will escalate the more the planet warms. More frequent and intense extreme weather events also manifest in severe mental health issues [20], and disrupted healthcare services, thus exacerbating existing health disparities.

3. **Food and water insecurity:** Climate change significantly impacts agricultural productivity and fisheries, contributing to food insecurity and malnutrition. Altered precipitation patterns and frequent droughts also affect water availability and quality, resulting in inadequate sanitation and waterborne diseases, such as diarrhea and cholera. Climate change is impacting the means of global food production, and we are witnessing a drastic escalation in food insecurity because of changing weather patterns, heatwaves, heavy rainfall, and droughts. The most vulnerable, constituting about 80 percent of the global population, are at risk of crop failures and hunger due to climate change, residing in Sub-Saharan Africa, South Asia, and Southeast Asia [21]. Rising temperatures also intensify evapotranspiration, stressing plants and soils, increasing demand for sufficient water for crops to flourish. For water-constrained regions, climate change exacerbates adverse effects on agricultural production, including diminished water supplies, increased extreme events, heat stress, and a surge in pests and diseases.

4. **Rising Sea Levels:** Global sea levels are rising due to meltwater volume added from glaciers, polar ice caps, and ice sheets, and from the thermal expansion of warming ocean waters. Sea level rise intensifies coastal hazards such as storm surge and will increase the occurrence and severity of coastal flooding and erosion. Sea level rise also brings longer-term gradual encroachment of the sea into low-lying land. There are several direct risks to human health [22] from events exacerbated by sea level rise, such as coastal flooding and erosion, as well as slow onset and indirect risks that may lead to significant health impacts for coastal populations around the world.

   Water safety and security [23], and specifically salinization of drinking water, is a significant risk to human health from sea level rise, affecting as many as 500 million people globally. Saltwater intrusion has been called a “slow poison” as seawater enters groundwater systems from beneath the surface, leading to a continuous invasion of saltwater into freshwater aquifers, particularly during times of drought and low freshwater levels. Sea level rise is expected to allow saltwater to reach further inland and cause increased salinity in the drinking water of coastal communities that rely on groundwater for their source water. Exposure to elevated salinity can occur through drinking, cooking, and bathing. At low concentrations, salty water is more of a nuisance than a health threat. However, at high concentrations, individuals can develop hypertension, which exacerbates pre-existing health conditions, puts the elderly at higher risk of stroke, and increases the frequency of hospital visits for cardiovascular disease and abdominal pain. Elevated salinity in drinking water has also been linked to increased risk of preeclampsia and gestational hypertension, infant mortality, cholera outbreaks, renal disease, cirrhosis, and skin and diarrheal diseases. Communities that are unable to find alternative water sources or implement suitable treatment may face displacement as a result of dwindling water security. The loss of habitable land because of rising sea levels, saltwater intrusion into freshwater sources, and displacement

of populations can result in overcrowded living conditions, inadequate sanitation, and increased risk of infectious diseases. The mental health impacts of sea level rise arising from loss of livelihoods, homes and communities are already manifesting.

5. **Vector-borne disease spread:** Climate change significantly impacts vector-borne diseases, including malaria, dengue fever, and Zika virus, with a potential risk increase for 4.7 billion people by 2070 [24]. Global warming alters weather patterns, expanding the geographic spread of disease vectors like mosquitoes and ticks. Rising temperatures and changes in precipitation create more breeding areas for vectors, while droughts can support breeding by forming pools of standing water. Warmer climates extend the disease transmission season, and temperature changes affect vector behavior, reducing the effectiveness of preventive measures like bed nets. The link between climate change and vector-borne diseases is complex, as factors such as human movement, land-use changes, and control measures also play a role. The risks include an expanded geographic distribution of diseases like dengue, with climate change becoming a dominant cause of vector expansion by 2030. For example - dengue (break-bone fever) is a viral infection that spreads from mosquitoes to people. Most people who get dengue won't have symptoms. But for those that do, the most common symptoms are high fever, headache, body aches, nausea and rash. Most will also get better in 1–2 weeks. Some people develop severe dengue and need care in a hospital. In severe cases, dengue can be fatal. Severe dengue, may involve shock, severe bleeding or severe organ impairment. This stage often starts after the fever has gone away and it is preceded by warning signs such as intense abdominal pain, persistent vomiting, bleeding gums, fluid accumulation, lethargy or restlessness, and liver enlargement [25]. As many as 3.6 billion people, or 40% of the world's population, reside in dengue-endemic areas. Each year, an estimated 400 million people are infected with dengue virus, 100 million become ill with dengue, and 21,000 deaths are attributed to dengue [26]. According to the WHO report, "In Pacific Island countries/territories (n = 21), in 2023, dengue-like illness was reported from nine Pacific countries/territories, resulting in a total of 13339 cases, a 28% increase reported as of 30 November compared to 2022. Among the most affected are Fiji, which reported 8418 cases in 2022 and 11522 cases and 2023, reflecting a 37% increase" [27]. The Intergovernmental Panel on Climate Change warns [28] of increased dengue risk with longer seasons and wider distribution, potentially affecting billions of people globally. Malaria, sensitive to climate variations, exhibits spread to higher elevations with temperature increases. The consequences of climate change on vectors extend beyond mosquitoes, including ticks that transmit diseases like Lyme disease and tick-borne encephalitis. The warmer winters due to global warming have facilitated tick expansion, with potentially far-reaching consequences for public health.
6. **Allergies and respiratory diseases:** Climate change is increasing the length of the pollen season and its intensity, with big impacts on the millions of vulnerable populations who already suffer from allergies. Higher carbon dioxide levels cause greater plant growth, resulting in increased pollen production and increased pollen potency. More winter precipitation further contributes to increased pollen [29] production. Higher temperatures also increase the production of ozone which sensitizes the respiratory tract to allergens. Hay fever, asthma, and eczema are the three

major allergic diseases associated with exposure to aeroallergens [30] — pollen from trees, weeds, and grasses, molds, and other indoor allergens. For those with allergies, pollen triggers sneezing, wheezing, asthma attacks, and inflammation of the nose and eye membranes. Outdoor workers face increased exposure to pollen and allergenic plants. Low-wage workers without paid sick leave face job and economic loss if they are forced to miss work due to allergies or asthma. Exposure to aeroallergens can trigger asthma symptoms.

New research [31] from a team of Florida State University scientists shows that rapid weather variability as a result of climate change could increase the risk of a flu epidemic in some highly populated regions in the late 21st century. According to the research published in January 2020, "the continuing change in the Earth's climate will affect the viral activity and transmission of influenza over the coming decades". According to Zhaohua Wu, an associate professor in the Department of Earth, Ocean and Atmospheric Science and scientist with the Center for Ocean-Atmospheric Prediction Studies, "historical flu data from different parts of the world showed that the spread of flu epidemics has been more closely tied to rapid weather variability, implying that the lapsed human immune system in winter caused by rapidly changing weather makes a person more susceptible to flu virus." The researchers specifically analyzed the data from the United States, mainland China, Italy and France. The study revealed that the widely spread 2017–2018 influenza epidemic in the US could be attributed to the abnormally strong rapid weather variability. Researchers demonstrated, from historical data, that the large rapid weather variability in autumn can precondition the deadly influenza epidemic in the subsequent months in highly populated northern mid-latitudes; and the influenza epidemic season of 2017–2018 was a typical case. The climate model projections in the study conclude that "the rapid weather variability in autumn will continue to strengthen in some regions of northern mid-latitudes in a warming climate, implying that the risk of an influenza epidemic may increase 20 percent to 50 percent in some highly populated regions in the later 21st century."

7. **Mental health:** Climate-related increase in global temperatures affects populations in the short term through localized disasters, and also in the long-term, and often through large-scale effects that come from experiencing repeated disasters and their consequences on well-being, economic stability and infrastructure in a given region. Impacts can include cumulative community stress, increases in poverty, domestic violence and substance abuse and forced migration. According to the American Psychiatric Association (APA) [32], "the mental health consequences of single disasters for most people include mild stress and insomnia, high-risk coping behavior such as increased alcohol use, and mental disorders such as depression, anxiety and post-traumatic stress." Flooding and prolonged droughts have also been associated with mental health conditions like elevated levels of anxiety, depression, suicide, and post-traumatic stress disorders. The trauma and losses from a disaster, such as losing a home or job and being disconnected from the neighborhood and community, can contribute to depression and anxiety.

Each year since 2008, an average of more than 20 million people [33] have been forced to move because of weather-related events, such as floods, storms, wildfires or extreme temperatures.

People with already existing mental health conditions are relatively more prone to be affected by extreme weather conditions which can be further precipitated by poverty, migration, ongoing psychiatric medications, food scarcity or food quality issues. Climate change threatens the future of life on earth. Eco-anxiety refers to the psychological impacts due to the same. The APA describes eco-anxiety [34] as "the chronic fear of environmental cataclysm that comes from observing the seemingly irrevocable impact of climate change and the associated concern for one's future and that of next generations." Eco-anxiety is a relatively new concept and is closely linked to another concept, Solastalgia [35] which refers to a set of psychological disorders that occur in a native population following adverse changes in their territory. Thus, while more research needs to be done on the mental health impacts on indigenous peoples, some of the same mental health impacts, such as intergenerational trauma seen in colonised communities, who have been dispossessed, might be relevant to understanding the impact on these peoples

8. **Impacts on women, sexual and reproductive health and rights (SRHR) and gender-based violence**: Climate change is not gender neutral. Women are affected differently and more severely by climate change and its impacts on agriculture, natural disasters, and climate change induced migrations because of social roles, discrimination and poverty. Women often experience additional duties as labourers and caregivers because of extreme weather events and climate change, as well as from society's responses to climate change (e.g. male migration). They face more psychological and emotional distress, reduced food intake and adverse mental health outcomes due to displacement, and in some cases, increasing incidences of domestic violence. Pregnant and postpartum women and their infants are uniquely vulnerable to the health impacts of climate change, due to the many physiologic and social changes that occur as a result of pregnancy. Extreme heat events are also associated with adverse birth outcomes, such as preterm birth, low birth weight and infant mortality. In addition, exposure to air pollutants and ground-level ozone can cause respiratory illness in pregnant women and lead to low birth-weight or pre-term babies. Nutrition is essential to healthy pregnancy, nursing and newborn outcomes. Pregnant women are therefore particularly vulnerable to climate-related impacts to food safety, access and nutritional value. Poor nutrition is related to delivery problems, low birth weight, and even newborn death.

   Climate change threatens SRHR, including menstrual health rights. Climate change is also associated with increases in gender-based violence. A report [36] by Women Deliver found that, "though there are considerable gaps in research and evidence that link climate change and SRHR, it is clear that climate change, its impacts, and subsequent efforts to address them, negatively affect SRHR both directly and indirectly. These negative impacts are felt most by girls and women, and individuals who already experience multiple barriers to the realization of their SRHR. In particular, adolescents; sex workers; people living with disabilities; or those of underrepresented sexual orientation, gender identity, gender expression, and sex characteristics (SOGIESC) face significant barriers in accessing SRHR information and services, including in humanitarian settings."

9. **Adverse health impacts on children:** Nearly 90% of global disease burden related to climate change is borne by children [37] under 5 years of age, in both developed and developing countries. Malnourished children from remote and impoverished parts face severe threats from both air and water pollution, from infectious and parasitic diseases carried by a range of vectors and contaminated water; from acute water scarcity, possible displacement, migration, and violence triggered by climate change and conflict around scarce essential resources. Children who are already deprived in many dimensions of their lives are likely to face some of the most immediate dangers of climate change as their families are most exposed to the potential harm and it is hardest to bounce back from climate-related shocks. Many families living above the threshold of extreme poverty may be just one disaster away from falling into it.

   Children, due to their developing brains and bodies, and their dependence on adult caretakers are particularly vulnerable to the health impacts of climate change. On their own, children have fewer resources at their disposal to cope with climate change hazards that makes them more vulnerable to injury and illness from various exposures related to climate change. Children are often at higher risk due [38] to narrow mobility, susceptibility to infectious diseases, reduced caloric intake, and social isolation; young children are more likely to die from or be severely compromised by diarrheal diseases. Climate-related exposures may lead to adverse pregnancy and newborn health outcomes, including spontaneous abortion, low birth weight, preterm birth, increased neonatal death, dehydration and associated renal failure, malnutrition, diarrhea, and respiratory disease.

   Children often spend more time outdoors (which is the case in the Pacific) which increases their risk of exposure to air pollution, allergens, extreme heat or waterborne pathogens from climate change. Due to their immature thermoregulatory systems, children are more vulnerable to heat stress, especially children under 1 year of age. Climate change is increasing the risk of several vector-borne diseases that influence children, including malaria, dengue fever, and chikungunya. Malaria is a leading cause of global child mortality. Dengue fever is the most rapidly spreading mosquito borne virus in the world and a majority of annual mortality is among children. Diarrhoeal disease is the third leading cause of death in children [39] under 5 years old and is responsible for killing around 450,000 children every year. Because of their higher respiratory rate and amount of time spent doing outdoor activities, children are more vulnerable to air quality exposures than other groups. Disasters can also harm children through devastation of the community resources on which they rely for their healthy mental and physical development, like schools and hospitals. Climate change significantly affects children's mental health and wellbeing. Children experience high rates of PTSD symptoms after natural disasters such as hurricanes and floods.

   Children displaced by extreme events experience disruption in school and have demonstrated [40] poor school performance and behavior problems. It is estimated that children need 4–6 months to recover academically when a severe weather event causes school displacement, though it could be longer depending upon the context. Practitioners have also expressed concern about the levels of anxiety they are seeing in children and youth who understand that climate change will impact their future wellbeing.

10. **Damage to healthcare infrastructure and disruption to health services:** Extreme climate events not only threaten people's health but also health care's own infrastructure and capacity to respond. From Hurricane Sandy [41] in the USA in 2012 to the floods in Pakistan [42] in 2022 (and so many natural disasters in between), the devastating effects of extreme weather events on health systems—such as compromised patient care, evacuation of patients, damage to medicines, vaccines, medical equipment, and health infrastructure — have been well documented. For example, according to the National Disaster Management Authority of Pakistan, the 2022 floods have crippled 10% of the health facilities [43] in the country – which were either damaged or destroyed. These impacts prevent or disrupt the provision of care, and therefore health outcomes.

V. Special Focus on Pacific Island Countries (PICs)

Unique vulnerabilities: Pacific Island Countries (PICs) and territories are ecologically delicate and stand among the most susceptible to the impacts of climate change. The repercussions of climate change give rise to health hazards in the region. Many small islands within PICs already shoulder significant loads of health risks influenced by climate. The changing climate is elevating average temperatures, escalating the frequency and severity of extreme weather events like floods, cyclones, and droughts, rising sea levels (endangering the existence of some small PICs), and adversely affecting food and water security, and the changing patterns of infectious diseases. The low-lying nature of many Pacific Islands makes them especially susceptible to rising sea levels, posing an imminent threat to the health infrastructure, sanitation, and overall well-being of the populations.

Consequently, the well-being and security of Pacific populations, inherently tied to their health, are experiencing worsening health outcomes. According to the World Health Organisation [44], adverse health outcomes, encompassing mental health issues, and fatalities due to extreme weather events and climate-related diseases such as malaria, dengue, cholera, filariasis, leptospirosis, schistosomiasis, and ciguatera fish poisoning, are on the upswing.

Between 2010 and 2012, the World Health Organization Division of Pacific Technical Support led a regional climate change and health vulnerability assessment and adaptation planning project, in collaboration with health sector partners, in 13 Pacific island countries—Cook Islands, Federated States of Micronesia, Fiji, Kiribati, Marshall Islands, Nauru, Niue, Palau, Samoa, Solomon Islands, Tonga, Tuvalu, and Vanuatu [45]. The research assessed the vulnerabilities of Pacific island countries to the health impacts of climate change and planned adaptation strategies to minimize such threats to health.

This study involved a combination of quantitative and qualitative techniques. The findings of the study revealed that "the highest-priority climate-sensitive health risks in Pacific island countries included trauma from extreme weather events, heat-related illnesses, compromised safety and security of water and food, vector-borne diseases, zoonoses, respiratory illnesses, psychosocial ill-health, non-communicable diseases, population pressures, and health system deficiencies. Adaptation strategies relating to these

climate change and health risks could be clustered according to categories common to many countries in the Pacific region."

The study concluded that "Pacific island countries are among the most vulnerable in the world to the health impacts of climate change. This vulnerability is a function of their unique geographic, demographic, and socioeconomic characteristics combined with their exposure to changing weather patterns associated with climate change, the health risks entailed, and the limited capacity of the countries to manage and adapt in the face of such risks."

Additionally the emergence of so-called "climate refugees" carries profound health implications, particularly for Small Island Developing States (SIDS), including PICs. These vulnerable nations face a dual challenge: displacement within their own territories and the possibility of external migration to other countries.

Internal Displacement and Mental Health: Within PICs, communities living in low-lying coastal areas have been displaced or are at risk of displacement. As homes, infrastructure, and livelihoods are threatened by encroaching waters, people may be forced to relocate. This internal migration can lead to psychological distress, anxiety, and loss of cultural identity. The upheaval disrupts social networks, exacerbating mental health challenges. In Tuvalu, for example, where sea level rise directly impacts habitability, residents grapple with the emotional toll of leaving ancestral lands. The uncertainty of relocation and the loss of connection to the environment contribute to mental health strain.

In a 2020 survey [46] performed on the population of Tuvalu, eighty-four per cent of the participants reported a sense of worry and anxiety in response to wave damage, fresh water shortage and cyclones. While seventy-nine per cent reported a sense of profound sadness about observed environmental impacts, particularly in response to losing their homes (due to erosion and cyclones) and their decreasing capacity to grow subsistence crops.

A review of Pacific's people's well-being and mental health [47] emphasized that in the Pacific mental health is often hidden, rife with discrimination and prejudice.

External Migration, Loss of Cultural Heritage and Health Vulnerabilities: Some PICs face the grim prospect of external migration as their landmass diminishes. People may seek refuge in neighboring countries or further afield. In addition to the cultural impacts, this migration poses health risks where displaced populations may encounter inadequate living conditions, limited access to clean water, and sanitation challenges. Infectious diseases can spread in crowded refugee camps. The trauma of displacement, loss of community, and cultural dislocation impact mental health and well-being. Grief, anxiety, depression, and post-traumatic stress disorder (PTSD) are common. The transition involves not only physical adaptation but also emotional adjustment to a new environment.

In summary, the health ramifications of climate related challenges including sea level rise extend beyond physical displacement. Mental health, community resilience, and equitable responses are critical considerations as small island developing states grapple with the consequences of climate change.

VII. Conclusion

In conclusion, I submit that the health impacts of climate change, both overall, and especially in Pacific Island nations have already impacted health. The unique vulnerabilities of Pacific Island Nations necessitate focused attention to safeguard the health and well-being of their populations in the face of worsening climate change impacts.

Prof. Dr. Jemilah Mahmood



Date: 14 March 2024

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Annexure 1

PROF. TAN SRI DR. JEMILAH MAHMOOD

Tan Sri Dr. Jemilah Mahmood is a medical professional with more than two decades of experience managing crises in health, disasters and conflict settings and has held senior management positions in global organisations overseeing strategy, policy, innovation, and partnerships. She is currently Professor and Executive Director of the Sunway Centre for Planetary Health at Sunway University in Malaysia. She is currently a member of the Climate Action Council led by the Ministry of Natural Resources and Environmental Sustainability in Malaysia

Tan Sri Dr. Jemilah is also the sustainability advisor at Air Asia Group and the national advisor of the Malaysian Red Crescent Society. Globally, she is a member of the board of Roche in Switzerland and the Norwegian Refugee Council.

In 2023, she was appointed to the World Economic Forum's Global Future Council of Responsible Resource Use as well as the Co-Chair of the Climate and Health Group at the World Economic Forum. She is also one of three Global Ambassadors for the Grand Bargain in Humanitarian Efficiency and Effectiveness based in Geneva, Switzerland. She also sits of several editorial boards including the World Health Organisation's Special Report on the Commercial Determinants of Health and a member of the jury of the Frontier Prize. In 2023, she was appointed as a Special Advisor to the Internasional Criminal Court at the Hague. She is a strong advocate of planetary health and sustainability and actively advises on Environment, Social and Governance in the advisory and board roles she holds.

Her previous appointments include the Under Secretary General for Partnerships at the International Federation of Red Cross and Red Crescent Societies (IFRC), Chief of the World Humanitarian Summit secretariat at the United Nations, and Chief of the Humanitarian Response Branch at United National Popularion Fund in New York. She was the Special Advisor to the Prime Minister of Malaysia on Public Health and member of the Government of Malaysia's Economic Action Council from April 2020-September 2021 . Previously she also held advisory roles at the Consultative Council for Foreign Policy Malaysia and was a member of the Health White Paper Advisory Council at the Ministry of Health Malaysia. Dr Mahmood was the first Pro Chancellor of Heriot Watt University Malaysia until the end of 2023. She is well known as the founder of MERCY Malaysia, a southern-based international humanitarian organisation renowned globally.

She is the recipient of numerous national and international awards including the most prestigious Malaysian Merdeka Award in 2015 and the ASEAN Prize in 2019, for her contribution to peace, community development and humanitarian work. She also received the inaugural Isa Award for Humanity in 2013 from the Kingdom of Bahrain and the Gandhi- King-Ikeda Award for community development and peace building from Morehouse College, USA. More recently, she was awarded the Wu Lien-Teh Award for Leadership in Public Health 2023.

Tan Sri Dr. Jemilah graduated as a Doctor of Medicine (MD) from the National University of Malaysia, has a Masters in Obstetrics and Gynaecology from the same university and is a Fellow of the Royal College of Obstetricians and Gynaecologists United Kingdom. She also completed executive education at the International Management and Development Centre, IMD Lausanne and University California Berkeley Law.

Exhibit 39

Present and Future Impacts of Climate Change on Fiji, New Caledonia, Papua New Guinea, Solomon Islands, and Vanuatu, the Countries of the Melanesian Spearhead Group

Expert Opinion for

INTERNATIONAL COURT OF JUSTICE

Case No. 87

Request for an Advisory Opinion on Obligations of States in respect of climate change.

Professor Elisabeth Holland
Institute of Strategy Resilience and Security
University College London

15 March, 2023

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Introduction

I have been asked by the Melanesian Spearhead Group (MSG) to provide an expert opinion summarizing the 'best available evidence' of the Intergovernmental Panel on Climate Change (IPCC) and related research on the impact of climate change on the Ocean in relation to its five members: Republic of Fiji, Front De Liberational De National Kanak et Solcialiste (FLNKS), The Independent State of Papua New Guinea, Solomon Islands, and Republic of Vanuatu. I follow the overall model of the IPCC working groups with a section describing the physical science, and another section on the impacts, adaptation, and vulnerabilities. Case studies will illustrate the challenges, impacts and vulnerabilities faced by the five island nations of the MSG.

Expertise

I provide this expert opinion on the basis of my expertise in climate change and its impacts on the Pacific Islands, particularly on the Ocean and sea level rise. I am a distinguished research fellow at the Institute of Strategy, Resilience and Security at the University College London located in London, England. I am a multi-disciplinary climate researcher who has authored more than 100 peer reviewed academic papers on climate change in the Pacific Islands, the Ocean-climate nexus, water and food security and biogeochemistry. I have been a United States, German or Fijian author and/or reviewer for the IPCC Second, Third, Fourth, Fifth and Sixth Assessment Reports as well as the Special Report on the Ocean and Cryosphere in a Changing Climate. I served Professor of Ocean and Climate Change and Director of the Pacific Centre for the Environment and Sustainable Development (2012-2024) at the University of the South Pacific with its twelve member countries: Cook Islands, Fiji, Kiribati, Nauru, Niue, Republic of the Marshall Islands, Samoa, Solomon Islands, Tokelau, Tonga, Tuvalu, and Vanuatu. As Director, I oversaw the academic, research and community programs including the post-graduate program in climate change which offered postgraduate, Master of Science and PhD studies and degrees in climate change to more than a thousand Pacific Islands students. Before USP, I have also conducted climate change research while employed at Stanford University, the National Center for Atmospheric Research in Boulder, Colorado (1989-2012) and the Max Planck Institute for Biogeochemistry (1999-2001). I have contributed to the reports of the IPCC, which was awarded the Nobel Peace Prize in 2007.

Summary

Climate change resulting from the cumulative emissions of greenhouse gas emissions resulting from the combustion of coal, oil and gas by humans has altered the climate system impacting Fiji, , Papua New Guinea, Solomon Islands, and Vanuatu, the four countries of the Melanesian Spearhead Group as well as New Caledonia relevant to FLNKS. The impacts include warming of the atmosphere and Ocean, the intensification of tropical cyclones, rising sea level and changing weather and climate. The result has included water and food scarcity, flooding, coastal erosion, shifting rainfall patterns, the relocation of villages, death, Ocean heat waves, and Ocean acidification.

My focus is on the impact of climate change on the Ocean. The rate of Ocean warming with consequent impacts on sea level rise is accelerating with widespread consequences. Some atoll islands in the MSG

countries have become uninhabitable already. Delta and coastal villages, cities and settlements are already impacted by the rising seas. The projected climate changes promise further acceleration of sea level rise, more warming, further shifts in rainfall patterns. It will limit the ability of the Ocean in the Melanesian region, to continue to provide food security through its fisheries and to serve as a sink for both heat and carbon dioxide.

Physical Aspects of Climate Change

The Ocean, so important to the MSG countries and the Indigenous peoples of New Caledonia, serves as a both a heat and carbon sink for the planet. The Earth's energy budget, like the carbon budget, serves as a window on the Earth system and the rate of climate change.

The imbalance in the Earth's energy budget provides a critical constraint on our understanding[1]. The elements of the energy budget reveal that between 1971 and 2018, 89% of the Earth's heat gain occurred in the Ocean with 52% of the gain in the top 700m of the Ocean, 28% in the depth between 700 and 2000 m deep and 3% below 2000m[2]. In the Earth System energy budget, the Ocean dominates the heat inventory due to its large mass and high heat capacity.

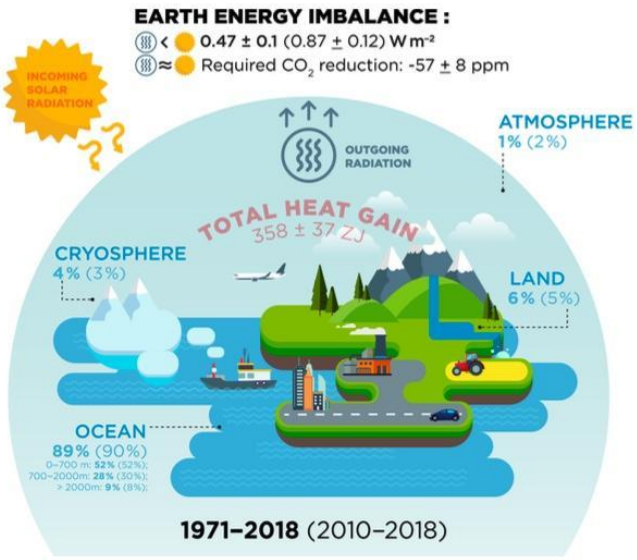


Figure 8. Schematic presentation on the Earth heat inventory for the current anthropogenically driven positive Earth energy imbalance at the top of the atmosphere (TOA). The relative partition (in %) of the Earth heat inventory presented in Fig. 6 for the different components is given for the ocean (upper: 0–700 m, intermediate: 700–2000 m, deep: > 2000 m), land, cryosphere (grounded and floating ice) and atmosphere, for the periods 1971–2018 and 2010–2018 (for the latter period values are provided in parentheses), as well as for the EEI. The total heat gain (in red) over the period 1971–2018 is obtained from the Earth heat inventory as presented in Fig. 6. To reduce the 2010–2018 EEI of $0.87 \pm 0.12\,\mathrm{W\,m^{-2}}$ towards zero, current atmospheric CO_2 would need to be reduced by -57 ± 8 ppm (see text for more details).

Figure 1: The Earth's Energy imbalance, from K. von Shuckmann et al. 2020, original figure legend is retained for clarity and accuracy.

[1] K. von Schuckmann et al. 2016 An imperative to monitor Earth's energy imbalance. Nat. Climate Change, 6, 138-144, doi:10.1038/nclimate2876.

[2] K. von Schuckmann et al. 2020. Heat stored in the Earth system: Where does the energy go? Earth Syst. Sci. Data, 12, 2013–2041, 2020 https://doi.org/10.5194/essd-12-2013-2020

Ocean warming has accelerated more than any other component of the Earth system, atmosphere, cryosphere or the land over the last six decades underscoring the impact for the large Ocean states of the Pacific [3]. Between 1960 and 2020, global Ocean warming has been accelerating at a consistent pace of 0.15 $\pm$ 0.05 W • m^{-2} per decade compared to the atmosphere, cryosphere, and land which have been accelerating at 0.013 $\pm$ 0.003 W • m^{-2} per decade. Ocean warming has increased by 0.91 W • m^{-2} between 1960-1970 and 2010-2020[4].

The IPCC Special Report on Ocean and Cryosphere in a Changing Climate (SROCC) was designed to better understand the role of the Ocean and the frozen components i.e. snow cover, glaciers, ice sheets, ice shelves, and permafrost in determining the Earth System's response to a changing climate. The SROCC found that: 'It is *virtually certain* that the Ocean has warmed unabated since 1970 and has taken up more than 90% of the excess heat in the climate systems (*high confidence*). Since 1993, the rate of ocean warming has more than doubled (*likely*). Marine heatwaves have very likely doubled in frequency since 1982 and are increasing in intensity (*very high confidence*). 'The Ocean will continue to take up heat in all plausible scenarios.[5]By absorbing more CO_2, the ocean has undergone increasing surface acidification (*virtually certain*).[6]

The warming of the Ocean to well below 2 km has caused sea level to rise, storm tracks to change and altering the habitat for life below water. It has also caused an expansion and warming of the Western Pacific Warm Pool due to human induced climate change. The Western Pacific Pool is fundamental to the global water cycle and atmospheric circulation, including the dynamics of El Niño Southern Oscillation and the Madden-Julian Oscillation[7]. All the MSG countries, except for New Caledonia, are within the geographic extent of the Western Pacific Warm Pool.

[3] A Miniere K. von Schuckmann et al. 2023 Robust acceleration of Earth system heating observed over the past six decades. Scientific Reports 13:22975 https://doi.org/10.1038/s41598-023-49353-1

[4] Ibid.

[5] SROCC, Chapter 5, p. 460

[6] IPCC, 2019: Summary for Policymakers. In: IPCC Special Report on the Ocean and Cryosphere in a Changing Climate (SROCC SPM) [H.-O. Pörtner, D.C. Roberts, V. Masson-Delmotte, P. Zhai, M. Tignor, E. Poloczanska, K. Mintenbeck, A. Alegría, M. Nicolai, A. Okem, J. Petzold, B. Rama, N.M. Weyer (eds.)]. Cambridge University Press, Cambridge, UK and New York, NY, USA, pp. 3–35. https://doi.org/10.1017/9781009157964.001.

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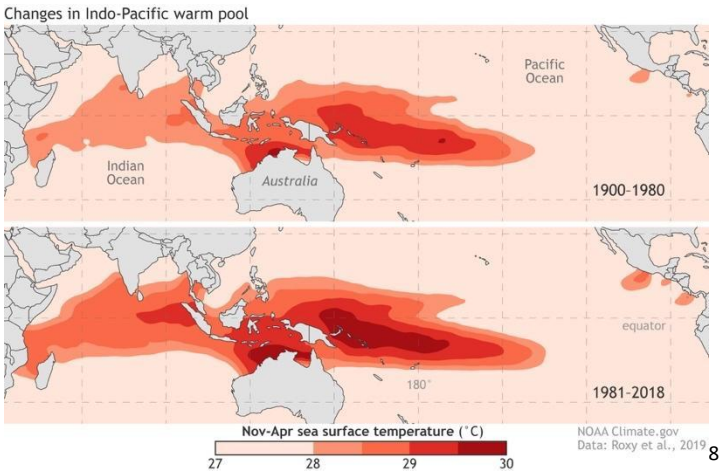


Figure 2: Changing extent of the Western Pacific Warm Pool: 1900-1980 top panel and 1981-2018 bottom panel

The Western Pacific Warm Pool is also where the Thermal expansion component of sea level rise is well expressed in the Western Pacific Warm Pool. Sea level rise is one of the biggest climate threats to the MSG countries. The SROCC Summary for Policy Makers concludes: 'Sea level rise is driven by both the warming of the Ocean and the melting of the Cryosphere. 'Global mean sea level is rising with acceleration in recent decades due to increasing rates of ice loss from the Greenland and Antarctic ice sheets (*very high confidence*), as well as continued glacier mass lass and ocean thermal expansion. Increases in tropical cyclone winds and rainfall and increases in extreme waves, combined with relative sea level rise, exacerbate extreme sea level events and coastal hazards (*high confidence*)'[9]. Global sea level rise for 2006-2015 is 3.6 mm yr^{-1}, ~2.5 times the rate of sea level rise for the 1901-1990 period.' The rate of sea level rise in the Solomon Islands, located in the warmest part of the Western Pacific Warm Pool, was observed to be 7 mm yr^{-1} between 1994 and 2014, almost twice the global mean.

[8] Roxy, M.K., Dasgupta, P., McPhaden, M.J. *et al.* Twofold expansion of the Indo-Pacific warm pool warps the MJO life cycle. *Nature* **575**, 647–651 (2019). https://doi.org/10.1038/s41586-019-1764-https://www.climate.gov/news-features/featured-images/warm-pool-indo-pacific-ocean-has-almost-doubled-size-changing-global

[9] SROCC, SPM, see footnote 3 p. 10.

Additional sea level rise for the Solomon Islands of 21-89 cm is projected for 1996-2090.[10]

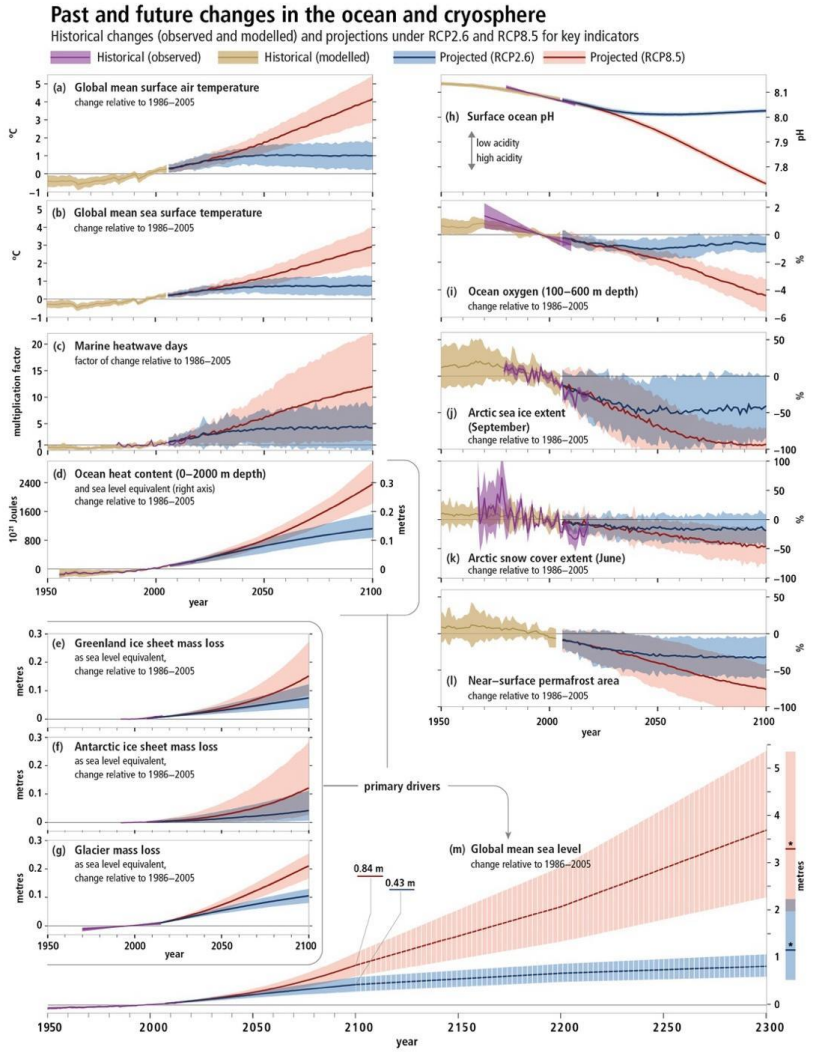


Figure 3: SROCC Figure 1 Summary for past and future sea level rise and the contributing cryosphere components plus the changes to the Ocean: pH, ocygen and Ocean Heat Content. See footnote for complete description

11

[10] Simon Albert *et al* 2016 *Environ. Res. Lett.* **11** 054011 **DOI** 10.1088/1748-9326/11/5/054011

[11] SROCC Figure SPM.1 | Observed and modelled historical changes in the ocean and cryosphere since 1950. , and projected future changes under low (RCP2.6) and high (RCP8.5) greenhouse gas emissions scenarios. {Box SPM.1} Changes are shown for: (a) Global mean surface air temperature change with likely range. {Box SPM.1, Cross-Chapter Box 1 in Chapter 1} Ocean-related changes with very likely ranges for (b) Global mean sea surface temperature change {Box 5.1, 5.2.2}; (c) Change factor in surface ocean marine heatwave days {6.4.1}; (d) Global ocean heat content change (0–2000 m depth). An approximate steric sea level equivalent is shown with the right axis by multiplying the ocean heat content by the global-mean thermal expansion coefficient (ε ≈ 0.125 m per 1024 Joules)12 for observed warming since 1970 {Figure 5.1}; (h) Global mean surface pH (on the total scale). Assessed observational trends are compiled from open ocean time series sites longer than 15 years {Box 5.1, Figure 5.6, 5.2.2}; and (i) Global mean ocean oxygen change (100–600 m depth). Assessed observational trends span 1970–2010 centered on 1996 {Figure 5.8, 5.2.2}. Sea level changes with likely ranges for (m) Global mean sea level change. Hashed shading reflects low confidence in sea level projections beyond 2100 and bars at 2300 reflect expert elicitation on the range of possible sea level change {4.2.3, Figure 4.2}; and components from (e,f) Greenland and Antarctic ice sheet mass loss {3.3.1}; and (g) Glacier mass loss {Cross-Chapter Box 6 in Chapter 2, Table 4.1}. Further cryosphere-related changes with very likely ranges for (j) Arctic sea ice extent change for September13 {3.2.1, 3.2.2 Figure 3.3}; (k) Arctic snow cover change for June (land areas north of 60oN) {3.4.1, 3.4.2, Figure 3.10}; and (l) Change in near-surface (within 3–4 m) permafrost area in the Northern Hemisphere {3.4.1, 3.4.2, Figure 3.10}. Assessments of projected changes under the intermediate RCP4.5 and RCP6.0 scenarios are not available for all variables considered here, but where available can be found in the underlying

Warming of the Ocean from both short and long-lived greenhouse gases has a long lasting effect in the Ocean with a continuing impact on sea level rise. The deeper the warming penetrates in the Ocean, the slower the Ocean releases the heat back to the atmosphere and released back to space to cool off[12]. The penetration of Ocean warming to below 2000m means that sea level rise will continue beyond the end of the century.

A recent study underscores the importance of climate tipping points, the warming threshold beyond which elements of the climate system become self-perpetuating[13]. Three of those tipping points, which could be triggered beyond the 1.5°C degree threshold in the Paris Agreement, are especially important for the MSG members:

1. Coral reefs die off which could result in a loss of coastal protection for the islands protected by fringing reefs as highlighted in the IPCC SROCC[14]. Above 1.5°C, coral reefs face a very high probability of severe impacts, with limited ability to adapt. Ninety-five percent of the coastal wave energy approaching coasts is absorbed by coral reefs, mangroves, and sea grass beds with implications for protecting coastal ecosystems[15]. Coral reefs throughout the MSG and the coral triangle are already suffering bleaching and die off.
2. The collapse of the Greenland and the West Antarctic Ice sheets are shrinking at an accelerated rate and could be poised to further accelerate with early warning signals consistent with an approaching tipping point[16]. The Greenland ice sheet tipping point can occur when the ice sheet loses height, entering warmer air and melting faster. The model analysis suggests a temperature tipping point of between 1.5 & 1.6 °C. for the Greenland ice sheet. The West Antarctic ice sheet is grounded below sea level and the tipping depends on marine ice sheet instability. The instability is based on feedback between the grounding line retreat and ice flux across the grounding line as it reaches thicker ice. For present levels of Ocean warming, model analyses suggest that irreversible retreat of Thwaites glacier, a key part of West Antarctic Ice Sheet, may be underway.
3. Future projections of sea level rise which incorporate surface ice melt, hydrofracturing of ice shelves, and subsequent ice cliff failure increase projections to well beyond the IPCC SROCC estimates of 5.4m of sea level rise for 2300 and a maximum of 1 m above pre-industrial for 2100. Evidence and concern are growing for the high impact low likelihood scenario (HILL) is increasing with an estimated 7-14 m of sea level rise for 2300 and 1.75 m of sea level rise by 2100 [17].

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report. {For RCP4.5 see: 2.2.2, Cross-Chapter Box 6 in Chapter 2, 3.2.2, 3.4.2, 4.2.3, for RCP6.0 see Cross-Chapter Box 1 in Chapter 1}

[12] K. Zickfeld Susan Solomon, and Daniel M. Gilfordet al. 2017 Centuries of thermal sea-level rise due to anthropogenic emissions of short-lived greenhouse gases. Proceedings of the National Academy of Sciences. www.pnas.org/cgi/doi/10.1073/pnas.1612066114

[13] Armstrong McKay et. al 2022 Exceeding 1.5°C global warming could trigger multiple climate tipping points Science 377, eabn7950

[14] SROCC SPM Figure 3

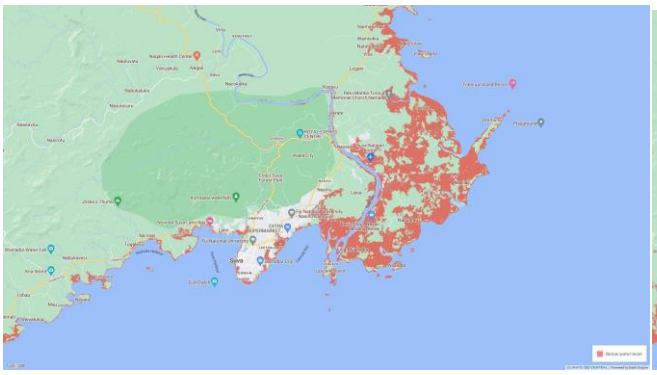
[15] Guannel G, Arkema K, Ruggiero P, Verutes G(2016) The Power of Three: Coral Reefs, Seagrasses and Mangroves Protect Coastal Regions and Increase Their Resilience. PLOS ONE 1(7): e0158094. doi:10.1371/journal.pone.0158094

[16] Armstrong McKay et. al 2022, see above.

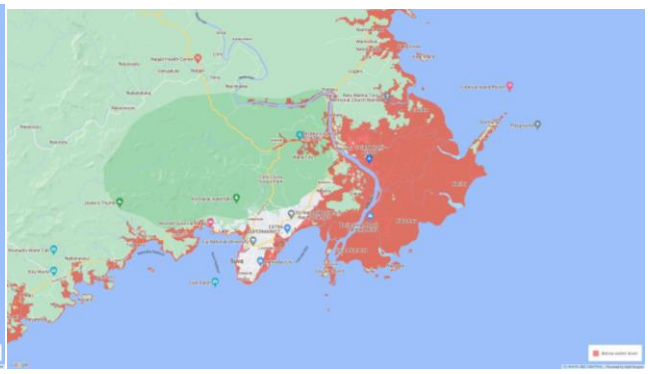
[17] DeConto, R.M., Pollard, D., Alley, R.B. *et al.* The Paris Climate Agreement and future sea-level rise from Antarctica. *Nature* 593, 83–89 (2021). https://doi.org/10.1038/s41586-021-03427-0

A case study of the capital cities of Suva, Fiji and Port Vila, Vanuatu have been done to explore the impact of the HILL scenarios for the future. Simulations of the impact of 1m and 3m of sea level rise were done for Suva and estimates of the impact of 3m and 6m of sea level rise were done for Port Vila Vanuatu based on current geography and coastlines. The estimates are based on the accelerated melting of the Greenland and Antarctic ice sheets. Even 1m of sea level rise, which is inevitable, will inundate much of Suva. The projected sea level rise explores HILL scenarios which are outside the SROCC projected sea level rise shown in Figure 3 is relative to early 20th century sea levels . The projections are based on DeConto et al 2021, Stokes et al. 2022 & Park et al. 2023.

Suva Fiji, 1m Sea Level Rise, inevitable, but by 2050 with current emissions



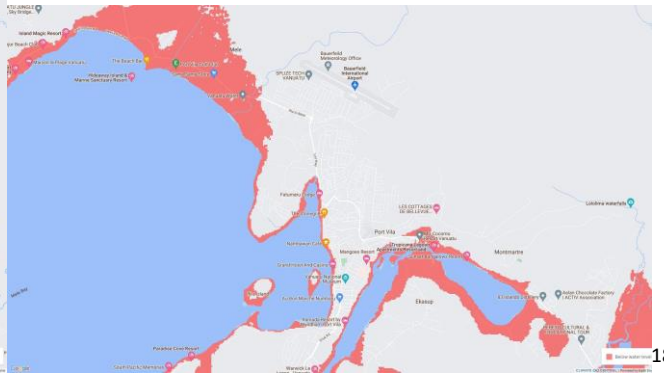
Suva Fiji, 3m Sea Level Rise, 2100 with current emissions



Port Vila, Vanuatu, 3m Sea Level Rise, 2100 with current emissions



Port Vila, Vanuatu, 6m Sea Level Rise, 2200 with current emissions



[18]

[18] DeConto, R.M., Pollard, D., Alley, R.B. *et al.* The Paris Climate Agreement and future sea-level rise from Antarctica. *Nature* 593, 83–89 (2021). https://doi.org/10.1038/s41586-021-03427-0, Stokes, C.R., Abram, N.J., Bentley, M.J. *et al.* Response of the East Antarctic Ice Sheet to past and future climate change. *Nature* **608**, 275–286 (2022). https://doi.org/10.1038/s41586-022-04946-0 & Park, JY., Schloesser, F., Timmermann, A. *et al.* Future sea-level projections with a coupled atmosphere-ocean-ice-sheet model. *Nat Commun* **14**, 636 (2023). https://doi.org/10.1038/s41467-023-36051-9

Climate Change and Habitability

Sea level rise is one of the greatest threat to habitability for the small island nations of the MSG, often referred to as Big Ocean States (BOSS). 'Sea level rise at the end of the century will be higher than present day and continuing to rise in all cases even if the Paris Agreement is followed'[19]. In addition to the direct impact of sea level rise on coastal erosion, there are many other aspects that impact island and coastal habitability. The members of MSG and the Pacific Islands Forum Secretariat, more broadly, have actively been pursuing an adaptation and resilience agenda with the approval of the Pacific leaders[20]. Yet, the impacts of climate change are already exceeding adaptation limits for urban atolls and settlements and the impacts will continue to grow as sea level continues to rise.[21]

Extreme sea level events, flooding resulting from extreme rainfall, king tides, storm surge, rogue waves, and tropical cyclones remains one of the greatest threats to life and habitability of coastal communities[22]. The flooding in the Nadi River Delta in Fiji is an excellent case study of the cascading and compounding nature of sea level rise. Devastating floods in 2009 took 11 lives and left 12,000 people homeless with damages of 54 million USD. Another examples, on 1-4 April 2014[23], a slow-moving tropical depression with daily recorded rainfall peaking at 318 mm and cumulative measured rainfall in Honiara in Solomon Islands exceeding 732 mm of rainfall caused flash flooding in Honiara, Guadalcanal, Isabel, Malaita, and Makira-Ulawa, Solomon Islands Twenty-two people lost their lives. After leaving Honiara, the tropical depression grew into Tropical Cyclone Ita.

A large number of tropical cyclones have hit MSG countries since 2012. Tropical Cyclone Evan, Fiji in 2012, Tropical Cyclone Pam, 2015, Total fatalities: 24, Damage: 360.4 million USD, 6-22 March 2015, Category 5 Hurricane (SSHWS); Tropical Cyclone Winston, 2016, Losses US $1.4 billion, Peak Winds: 306 km/h, 190 mph, Death toll: 43, 350,000 people affected, 65,000 in evacuation centers Tropical Cyclone Keni 2018, Fiji; Tropical Cyclone Sarai December 2019, Fiji; Tropical Cyclone Tino, January 2020: Category 3 affected: Tonga, Rotuma Fiji, Tuvalu, Solomon Islands, Wallis and Futna and Vanuatu; Severe Tropical Cyclone Harold April 2020 Solomon Islands, Vanuatu, Fiji and Tonga; Severe Tropical Cyclone Yasa Category 5 and Zazu Fiji; December 2020, Tropical Cyclone Lucas, New Caledonia January-Feb 2021, Tropical Cyclone Judy and Kevin hit Vanuatu within 10 days of one another in February and March of 2023; Tropical Cyclone Lola, Category 5 hit Vanuatu in early November, 2023. In all of these tropical cyclones, waves and storm surge caused much of the damage. By the last 20 years of the century, rising sea levels will amplify the incidence of these extreme sea level events by more than 1000 fold for all emission scenarios throughout the Pacific.[24]

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[19] SROCC, Chapter 4, p. 361 and Nichols 2018

[20] Pacific Resilience Partnership, https://www.resilientpacific.org/en

[21] SROCC SPM, Figure 5a &b

[22] SROCC, Chapter 4, p. 363-365

[23] Government of Solomon Islands; Global Facility for Disaster Reduction and Recovery. 2014. Solomon Islands: Rapid Assessment of the Macro and Sectoral Impacts of Flash Floods in the Solomon Islands, April 2014. © World Bank, Washington, DC. http://hdl.handle.net/10986/21818 License: CC BY 3.0 IGO.

[24] SROCC, Chapter 4, p. 359

Climate Impacts on Coastal and Ocean Health

The degradation of ecosystem health and resilience with climate change is illustrated by two qualitative case studies for Fiji and New Caledonia.. The studies were based on consultation with local, regional, and national representatives to develop a socio-economic report card.

For New Caledonia,[25]coasts were degraded in greater Noumea, along the Northeast coast, and in Ouveá. Pollution from nutrient and land activities resulted in degradation of coastal waters along the Western and Southeast coasts. Food security was degraded in the Loyalty Islands with overfishing as a concern in the Great South Lagoon, and loss of Indigenous knowledge combined with threats of coastal development on coastal erosion.

For Fiji[26], the main climate threats that emerged, in five of the eight areas of Fiji considered, were reef health and coastal erosion driven by Ocean warming and acidification and sea level rise respectively. The five areas included: Southeast Viti Levu, Kadavu, Lomaiviti, Northern and South Lau. Wastewater pollution threatened environmental resilience in Western Viti Levu and Vanua Levu. Fiji's coasts, culture are impacted and environmental resilience (the ability to continue to withstand further sea level rise and more global warming) is under threat from climate change according to this and related studies conducted for the Pacific Ocean and Climate Crisis Assessment being led by the Pacific Center for Sustainable Development at the University of the South Pacific and the Macmillan Brown Center for Pacific Studies at the University of Canterbury[27] to be released in 2024.

Food security is already affected throughout the MSG member countries and New Caledonia with floods, droughts, extreme weather, and increasingly frequent and severe tropical cyclones despite using resilience measures based on indigenous and local knowledge as well as other adaptive interventions. The projected shift in both coastal and the tuna fisheries and their associated food webs[28] will further exacerbate food security problems.

Conclusion

In theMSG countries and New Caledonia, from individuals to villages, to whole islands, to urban areas, and the MSG nations themselves are suffering from the impacts of climate change today. In other words, MSG nations are already suffering from dangerous anthropogenic interference with the climate system.

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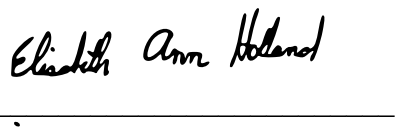
[25]What coastal environment for our children? The first socio-environmental report card for New Caledonia. Available at https://pacpath.org/wp-content/uploads/2023/06/New-Caledonia_ENG.pdf, accessed 13 March, 2024.

[26] Climate Change and Fiji's Coasts, a socio-environmental report card for Fiji. Available at https://pacpath.org/wp-content/uploads/2023/10/Socio-Environmental-Report-Card-Fiji.pdf, accessed 13 March, 2024.

[27] Pacific Ocean and Climate Crisis Assessment, to be found at https://protectpacific.net/Interactive_Map/EEZ_Page_june2023_a.html

[28] Bell et al. 2013 Mixed responses of tropical Pacific fisheries and aquaculture to climate change, Nature Climate Change, DOI: 10.1038/NCLIMATE1838, Bell, J.D., Senina, I., Adams, T. et al. Pathways to sustaining tuna-dependent Pacific Island economies during climate change. Nat Sustain 4, 900–910 (2021). https://doi.org/10.1038/s41893-021-00745-z

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