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## **Biodiversity, endogenous and customary law, and traditional knowledge**

Victor David, C. Peteru, S. Aupetit, S. Bouard, J.L. Mahé, M. Maloney, E. Razafimandimbimanana, D. Robinson, S. Rouy, F. Wacalie, et al.

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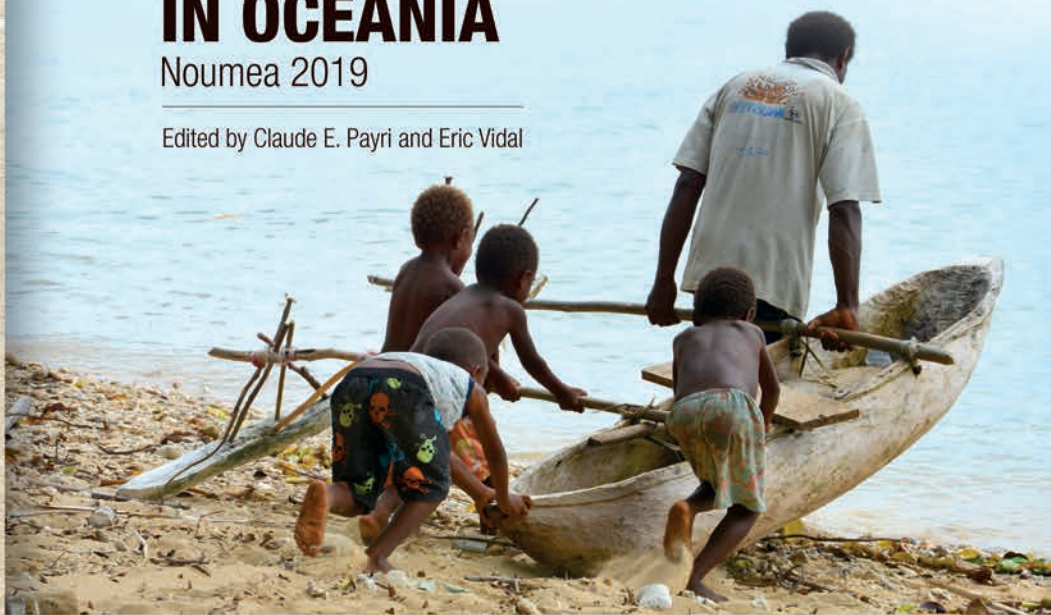
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# BIODIVERSITY, A PRESSING NEED FOR ACTION IN OCEANIA

Noumea 2019

Edited by Claude E. Payri and Eric Vidal



**Cipa pai picaapwi kârâ âboro mâ Göröpuu mâ Nâwië**

**Manaaki tangata, Manaaki whenua, Manaaki moana, kia kotahi whakahaere ki mua**

**Waa cèki céfé tö vèâ pâfâ Kâmö, Bwêêjë mâ Nérhëë mâi**

**Tausia lelei o tatou tagata, laueleele, ogasami, malaga fa'atasi i le agaga e tasi**

**Ta'ofi ke ma'u fakatasi le Tagata, le Kele mo le Moana**

**Icaasikeune la itre atr, hnadro me hnagejë**

**Co aodeneni Ngome ne Rawe ne Cele**

**Strengthening connections between people, islands and the ocean in the Pacific**

**E hakatahi'ia to te Enana i te Henua me te Tai**

**Me vakaqacotaki na veiwakani ni tamata vata kei na nodra vei yanuyanu kei na nodra vanua kei na wasa liwa kei na kedra yau bula vakavolivolita na Pasifika.**

**Kraon, solwota mo pipol emi wan oltime**

**Kia vai kôrari noa te Tagata, te Henua e te Moana**

**E natira'a mana tö te ta'ata i te moana 'e te fenua**

**Tâ'ofi ke ma'u fakatahi te Ha'atagata, te Fenua mo te Moana**

**Me vakaqacotaki na veiwakani ni tamata vata kei na nodra vei yanuyanu kei na nodra vanua kei na wasa liwa kei na kedra yau bula vakavolivolita na Pasifika.**

**Ntano ngo ntas epei Namouriana**

**Maintenir unis les Hommes, la Terre et l'Océan**

**Buildim wan yunion wetem ol pipol, ol aelan mo solwara mo ol plant mo anamol long Pasifik**

**Ke fakamaŋlohingŋi ange ngŋae ngŋanhi fehokotakingŋanga ngŋo e kakai ngŋo e ngŋanhi ngŋotu motu ngŋo e Pasifiki pea mo honau ngŋanhi fonuɔɔ, kae umanŋŋa ngŋae moana, pea moe menŋŋa monŋŋui kotoa pe ngŋoku iai.**

**Waa cèki céfé tö vèâ pâfâ Kâmö, Bwêêjë mâ Nérhëë mâi**

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The authors of the book would like to warmly thank the many people who made it possible to translate the “tagline” of this synthesis work into Oceanian languages, especially the members of the various Oceania language academies, the invited speakers, and the numerous colleagues who forwarded our request. Following this exercise, a large number of different adaptations of this “tagline” have emerged, once again reflecting the vibrant cultural and philosophical diversity of this region of the world.



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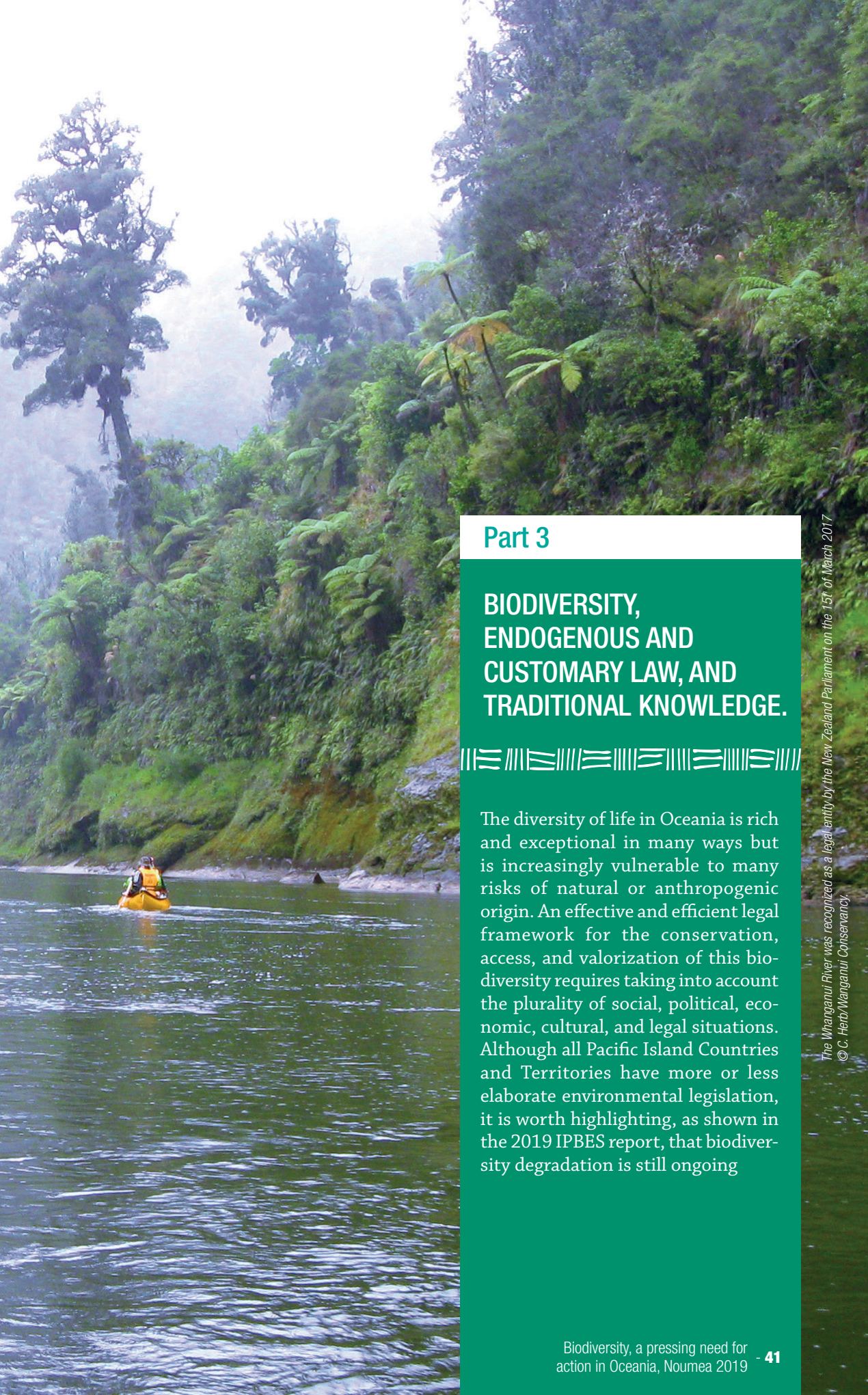
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## Part 3

# BIODIVERSITY, ENDOGENOUS AND CUSTOMARY LAW, AND TRADITIONAL KNOWLEDGE.



The diversity of life in Oceania is rich and exceptional in many ways but is increasingly vulnerable to many risks of natural or anthropogenic origin. An effective and efficient legal framework for the conservation, access, and valorization of this biodiversity requires taking into account the plurality of social, political, economic, cultural, and legal situations. Although all Pacific Island Countries and Territories have more or less elaborate environmental legislation, it is worth highlighting, as shown in the 2019 IPBES report, that biodiversity degradation is still ongoing

*The Whanganui River was recognized as a legal entity by the New Zealand Parliament on the 1st of March 2017  
© C. Herb/Wanganui Conservancy*

## AN ENVIRONMENTAL LAW THAT IS CURRENTLY NOT ACHIEVING ITS OBJECTIVE

*The evidence is that the environmental law currently in force in the countries and territories of Oceania most often results from the transposition of international treaties and model laws and does not achieve its objective, which is to contribute to the preservation of biodiversity. Anthropocentric conception, state sovereignty, vulnerability to environmental offenses... many factors can explain this situation.*

### **Key message 1 – The current environmental law does not protect biodiversity from the extinction crisis because several factors make regulations ineffective**

The first and most obvious reason for the ineffectiveness of environmental law is that the current legal framework is often a transposition of international standards or the adoption of model laws developed without taking into account the Oceanians view of the world. The anthropocentric perspective of nature, which prevails in Western law, remains predominant and does not reflect the more integrative conceptions of Nature that are specific to the Oceanians.

The second reason is that the Sovereignty of states can be a limit to the harmonization of environmental management in the region, even if this sovereignty can, in some cases prevent the standardization of legislation.

The third reason is that environmental law struggles to control both the impacts of the daily activities of local populations and those of international companies.

The fourth reason is that, although almost everyone is aware that some resources are not infinite and some ecosystems are vulnerable, laws do not go as far as to integrate ecological and planetary boundaries into the measures they enact.

Finally, the last reason we identified is the difficulty faced by States to reconcile short-term policies with more sustainable management, which is essential given the decline in resources.

More generally, faced with pressures from all sides (economic pressure, pressure from other states, climate pressure, etc.), states face difficulties in applying or even strengthening their national laws. This vulnerability is also reflected in environmental crime, with, as an aggravating circumstance, large exclusive economic zones whose surveillance is made particularly difficult because access to modern technologies is often not available.



*Protected species in Oceania are frequently the target of illegal international trafficking. Only one specimen of the palm tree Saribus jeanneneyi now exists in its natural state in New Caledonia. Its geographical location is kept secret because its seeds are worth several thousand francs on the black market and are highly sought-after by collectors ©Lincks/E. Bonnet-Vidal.*



*The legendary Torres boa, Candoia biboni, Torres, Vanuatu. Some of the rare reptiles in Oceania are worth \$6,000 on the black market ©J.-L. Menou.*

**Key message 2 – Environmental law must take into account local populations, both during its drafting and in its application, to achieve its objective of biodiversity conservation**

Environmental law is one tool that can be used to limit the anthropogenic impact on biodiversity erosion or climate change and to support populations in their resilience. Existing legal tools must pay as much attention to the diversity of coexisting legal systems as to sociological approaches that allow for a better understanding and appraising of local concepts. Indeed, traditional societies offer many opportunities for the evolution of environmental law in general. For example, the Australian government has considered Indigenous representations of the sea by Aboriginals to develop, with them, coastal management rules for the entire southeastern part

of the island continent. In Fiji, the NGO Fiji Locally Managed Marine Area supports communities in their efforts to protect their resources and environment and proudly displays on its website the progress made by villagers for biodiversity conservation. The IUCN report of October 2018, resulting from the “Blue Solutions” project, illustrated the successes achieved by some 20 local communities in marine conservation in the Pacific and elsewhere. Elsewhere in the world, from Honduras to Madagascar and Africa, bright spots are emerging as successful examples of biodiversity conservation by local communities that can serve as a support and model for public policies.

As a result, many avenues can already be identified to propose new recommendations for a future post-2020 agenda: protecting traditional knowledge, ensuring the effectiveness of environmental law, and reconciling human populations and natural resources.



1



2



3

1. Rahui meeting in Puhine, French Polynesia. The Rahui is a traditional fallow system specific to Polynesia. Before the arrival of Europeans, chiefs used to ban hunting on certain lands or fishing in particular areas of the lagoon. Abandoned for a while, this way of managing natural resources is being resumed and based on consultations with local populations ©INTEGRE/CPS – 2. Raui signboard in Polynesia ©D. Robinson – 3. Marine beacon ©C. Vieux.

## SAFEGUARDING TRADITIONAL KNOWLEDGE TO PROTECT BIODIVERSITY

*The United Nations proclaimed 2019 as the International Year of Indigenous Languages and estimated that 40% of the 6,700 languages spoken in the world are threatened with extinction. In Oceania, whether Polynesian, Aboriginal, Austronesian, or Papuan, there are hundreds of indigenous languages representing the invaluable traditional knowledge that has enabled indigenous peoples to live in harmony with Nature over the centuries.*

### Key message 3 – Linguistic diversity and biological diversity are closely linked. Safeguarding indigenous languages and traditional knowledge plays a key role in protecting biodiversity

There is a fundamental link between linguistic diversity and traditional knowledge associated with biodiversity. For example, indigenous languages around the world:

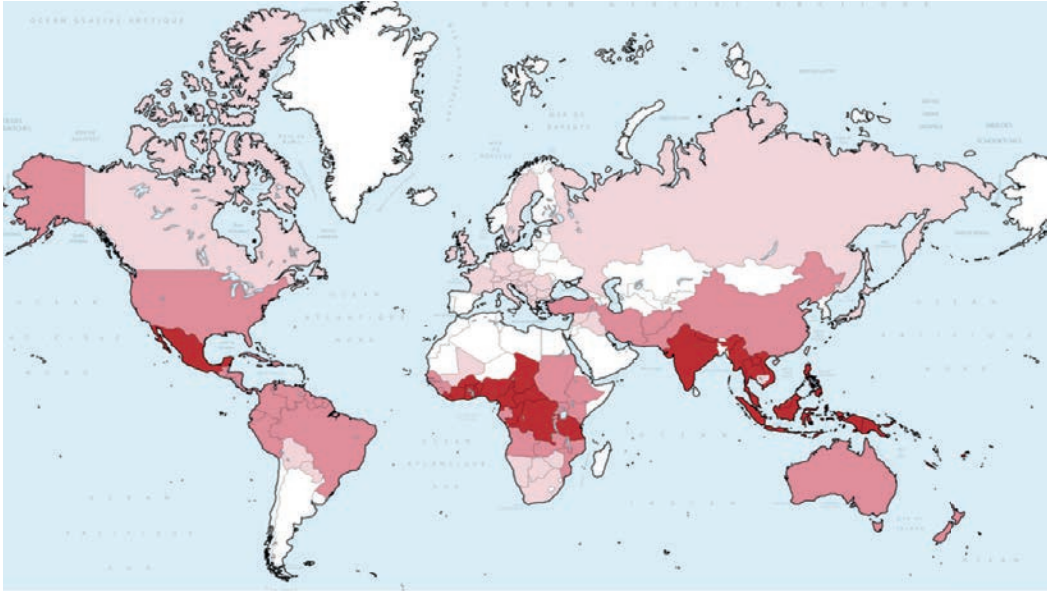
- Provide access to alternative knowledge.
- Reflect non-industrial economies.
- Are the best way to raise awareness among populations speaking rare or minority languages.

- Have the same dynamics as biodiversity with, currently, an increased threat of extinction.

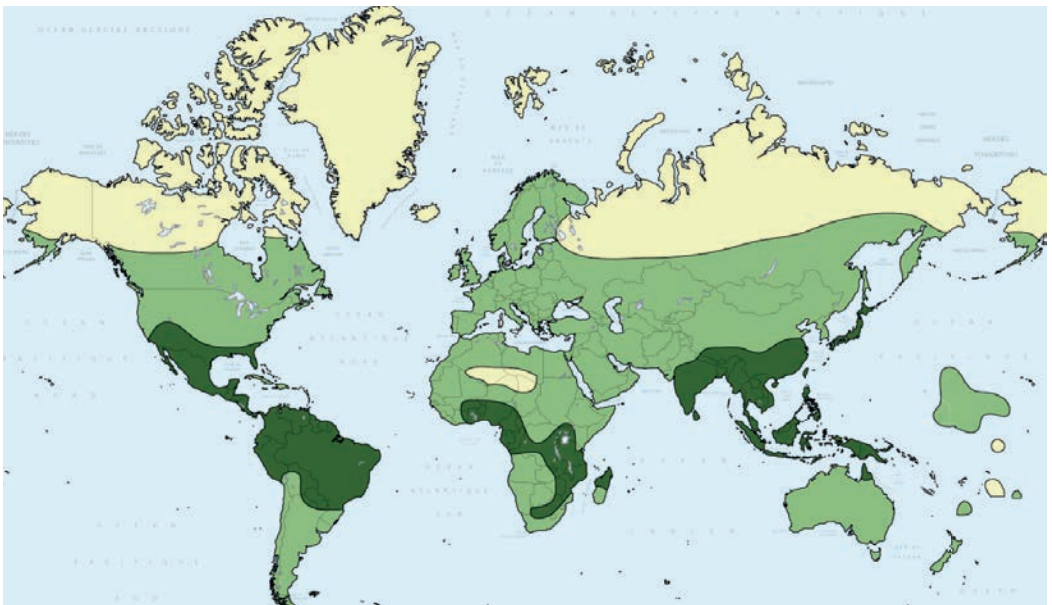
At the same time as biological biodiversity is decreasing, linguistic diversity is eroding. The co-occurrence of the two trends was identified by several surveys that argue endangered languages have a role in providing access to ecological knowledge. These surveys also show that biodiversity hotspots account for 70% of the world's languages. The issue of biodiversity in Oceania, an exceptional multilingual and plurilingual region, therefore requires strategies in terms of co-management of Oceania's linguistic diversity. Linguistic rights and diversity must, therefore, be advocated, in particular for the protection of biodiversity.



*Vanuatu has the highest linguistic density in the world with 108 distinct vernacular languages for 272,000 inhabitants and 81 islands © Lincks/E. Bonnet-Vidal.*



**High linguistic diversity**



**High biological diversity**

*There is a close correlation between the distribution of biological diversity and that of linguistic diversity: hotspots of biodiversity are home to 70% of the world's languages. Source: Grinevald C., 2008.*

**Key message 4 – Indigenous peoples must be more involved in safeguarding their traditional knowledge because the Nagoya Protocol, while it is useful and necessary in terms of intellectual property rights, is not a sufficient instrument for the conservation of such knowledges and practices**

The Nagoya Protocol on Access to Genetic Resources and Fair and Equitable Sharing of Benefits Arising out of Their Utilization (ABS) to the Convention on Biological Diversity (CBD) was adopted at the 10<sup>th</sup> Conference of the Parties in 2010 in Nagoya, Japan. It was ratified by some states of Oceania including Vanuatu, Fiji, the Marshall Islands, Micronesia, Palau, Samoa, Tuvalu, Australia, and France, under its Act No. 2016-1087 of the 8<sup>th</sup> of August 2016, for the recovery of biodiversity, nature, and landscapes. The objective of this Protocol is to provide for more legal certainty and transparency to providers and users of genetic resources to prevent biopiracy. It oversees

the implementation of agreements on bioprospecting and biodiscoveries, with the informed consent of local populations. The protocol allows for equitable benefit-sharing, not necessarily financial, resulting from resource use, as well as the protection of traditional knowledge. While the Nagoya Protocol and the associated structuring of local people's consent is a necessary tool, it is not sufficient to protect traditional knowledge, which is often key to biodiversity conservation. Conciliating oral traditions and commitments with contractual approaches based on individual will is often challenging to achieve on the medium to long term when sharing uncertain benefits. There is a need to strengthen the involvement of indigenous peoples for safeguarding their knowledge in modalities and forms that are familiar to them. In this context, we propose to develop a regional network for customary authorities, with a platform dedicated to indigenous knowledge and practices. Besides, where possible and relevant, the customary law system should be made the very foundation of legal systems.



Tests of natural substances extracted from New Caledonian plants © IAC-N-Petit



© OEIL/M. Juncker

*We, the customary people, endorse all the recommendations that have been made. But tradition must be valued as an element of research, a constituent part of knowledge. Oral traditions are too often reduced to tales. We must recognize the customary actors, the chiefdoms, who are different from the local population. We must acknowledge the traditional custodians of knowledge, the clans of the sea and the land. And it is not only a question of science but a global vision of nature.*

Raphaël Mapou, Clan chief, Yaté, New Caledonia

*At the regional level, there is no dedicated space for customary and indigenous people to share their knowledge. When you follow the customary path, you start from New Caledonia and go to Vanuatu. The Vanuatu Council of Chiefs is our gateway to Fiji, which is itself our gateway to the Solomon Islands, Papua New Guinea and then Polynesia. However, all these countries are involved in biodiversity research. It would,*



© IRD/I. Gasser.

*therefore, be useful that local authorities and the customary people of all these countries could exchange ideas together and set their framework.*

Jean-Luc Mahé,  
Secretary-General  
of the Customary  
Senate of New  
Caledonia

*Each island must define its cultural, natural, tangible, and intangible heritage, but we must speak with a united voice. The critical question is how islands can benefit from their natural heritage. One example is traditional medicine. How to recognize it? How to preserve it? Some contributions provided a new vision, such as the one on the link between linguistic diversity and the protection of biodiversity or the one on the recognition of the Rights of Nature.*



© IRD/M. Vilayleck.

Matilite Tali,  
President of the  
Federation of  
Environmental  
Protection  
Associations  
HAOFAKI TE  
ULUFENUA,  
Wallis and  
Futuna



Maori sculptor in Rotorua, New Zealand © Lincks/E. Bonnet-Vidal.

## ENSURING THE EFFECTIVENESS OF THE LAW TO PREVENT ENVIRONMENTAL DAMAGE

*Improving the effectiveness of environmental law, i.e., moving from words to action, is an urgent need that requires new areas of legal research. In this perspective, it is necessary to consider not only the most appropriate content of environmental legal rules but also the potential leverages to promote their implementation. The challenge for environmental law is to effectively influence behaviors, i.e., that the “ideal world” described in the law translates into the “real world.”*

### Key message 5 – We must develop meaningful legal rules that everyone knows, understands and respects

Environmental law is effective if the authors are legitimate, if the procedures promote the identification of the offenders, if the sanctions are convincing and useful, and if the legal rule makes it possible to prevent the damage. It is essential that the public acknowledges the legitimacy of the authors of the legal standard and trusts the necessity of the restrictions imposed on uses and projects. For the environmental law to reflect the ecological and social requirements of society, in a context of representative democracy, it is essential to determine “who” to involve and “how.” Elected officials may not be experts and do not necessarily have the same perception of the environment as those to whom the legal rule is addressed. The former must be able to rely on third parties such as committees, experts, users, customary people, associations, professionals, citizen juries, etc. The legitimacy of third parties is not

always characterized in the same way if, for example, it is about prohibiting hunting in a customary area or prohibiting luminous pollution in the city. The modalities chosen must be legitimate on a case-by-case basis while remaining coherent and legal. For anticipating good compliance with the recommendations, it is necessary to consider the modalities of public participation so that everyone can express their point of view. Special effort must also be made to promote education for sustainable development so that everyone understands the challenges in their home territory. Significant resources must be deployed to provide access to environmental information.

### Innovating and adapting to local contexts.

A more innovative approach could be developed to involve the Oceanians to whom the environmental rule is addressed, from its design to its maturation. In recent years, a growing number of novel democratic



Access to some islets in the Northern Province of New Caledonia is restricted during the breeding season of protected seabirds. Nature wardens ensure compliance with the regulations © Province Nord/N-Petit.



participatory tools were developed in sub-national territories that could be of interest to the small Pacific Island States and Territories. Examples include citizen workshops that allow non-experts in a given field – particularly controversial ones – to receive training by experts and then participate in joint decision-making. Collaborative workshops also provide an opportunity for small groups to co-construct and manage projects. By diagnosing problems and seeking shared solutions together, they have a chance to overcome possible disagreements between the stakeholders involved. These tools, among others, are perfect candidates to create the synergies, between traditional knowledge and practices and scientific knowledge, that are necessary for the protection of biodiversity. In the Pacific, where Oceanian and Western legal systems coexist, these solutions call for particular considerations and the invention of novel adaptations.



Victor David, chairman of workshop ©IRD/N. Petit.

### Key message 6 – “Prevention is better than cure”: for being effective, environmental law must first and foremost prevent ecological damage

Faced with threats to biodiversity, that are cumulative, we must anticipate. It is the first task of an efficient environmental law, its trademark, its specificity. Why? Because restoration after environmental damage is complicated to achieve both ecologically and economically, sometimes impossible when the damage is irreversible. Moreover, in some cases, the legal liability can be difficult to establish with the recurrent question of the causal link between fault and damage. With this objective of enhanced effectiveness in mind, several research projects, often complementary, are underway to design new legal tools that are immediately and easily applicable. It requires reflection on the definition of biodiversity, nature, their components and the means to protect them; on the ability to introduce new concepts such as risk, the long term, the specificity of nature and its components, harmony and scientific uncertainty, relying where appropriate on the contribution of traditional societies. The ongoing work on the introduction of new offenses is associated with an analysis of their practical implementation, in particular, their geographical application and the conditions required to enable their application. Regional cooperation should also engage in monitoring and enforcement.

### Key message 7 – Sanctions must be dissuasive and have a restorative function

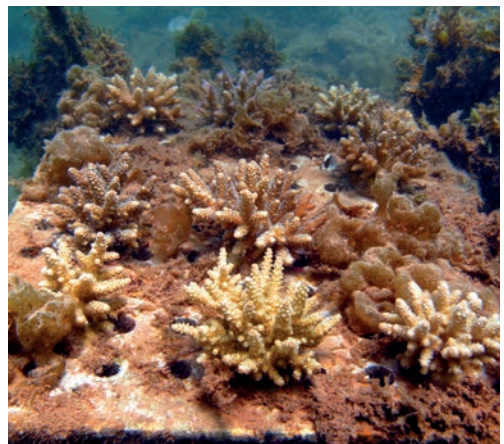
In the event of non-compliance with the regulation, the law is the tool that allows enforcement. The objective is to organize procedures which, while respecting fundamental rights and freedoms, will promote the identification of offenders and the characterization of offenses. This is a major challenge, especially in the open sea or in natural terrestrial environments that are not frequently visited.

Criminal sanctions must be convincing and useful. The aim is to discourage those who have an interest in violating the rule but also to raise awareness among those who did not understand the purpose of the rule, for example, through environmental citizenship training courses. A restorative function of the sanction itself may also be considered, notwithstanding civil reparations. It requires structuring a criminal response on a case-by-case basis, based on a range of sanctions.

Investigation services (gendarmerie, national police) and academics in France have initiated a joint reflection on the relevance of introducing a new criminal offense of “environmental endangerment” which would, in particular, make it possible to act before the damage has occurred.



The Kéa trader ran aground on the 12<sup>th</sup> of July 2017 off the island of Maré, in New Caledonia and is causing damage to the reef. Dismantling operations have been carried out since ©Right Reserved.



Coral development at restoration site, GBR, Australia ©CSIRO/C. Doropoulos.

## IMPLEMENTING A NEW PARADIGM IN OCEANIA: CONSIDER MAN AS PART OF NATURE AND RECONCILE THEM

*New links between Man and Nature are essential for preserving biodiversity, relationships that recognize Man as a part of Nature are in accordance with many Oceanian visions of the world. It requires educational actions on the interconnection of all lives to understand and live within ecological limits. It also implies acknowledging the Rights of Nature and changing its legal status. National laws already protect some elements of Nature as legal entities. It is now necessary to take a new step forward and change the legal status of Nature, to recognize its rights as a distinct legal entity and no longer as possession of Man.*

### Key message 8 – Promoting the Rights of Nature as an instrument for the protection of biodiversity in Oceania

A paradigm shift in Western law, through the recognition of the Rights of Nature, is needed to rethink how human society interacts with, uses, and cares for the living world. A new paradigm could reconcile Man as part of Nature and not as its owner/operator.

Once considered unthinkable, the recognition of the Rights of Nature is nowadays not only a legal possibility but also a necessary step in the development of environmental protection laws, as existing legal frameworks do not deliver the expected results. It is demonstrated by the insistent demands worldwide from indigenous peoples, communities, and courts for the legal recognition of the Rights of Nature, the growing jurisprudence setting out what the Rights of Nature are and how they can be applied, and even the emergence of customary international law. Examples such as the Whanganui, Ganges, Yamuna, Narmada, and Amazon rivers, and the Nature laws in Ecuador and Bolivia, have paved the way for further promotion of the Rights of Nature. From Uganda to Lake Erie, examples of the recognition of the Rights of Nature are spreading around the world and are almost always based on holistic cosmovisions similar to those of the Oceanians.

To recognize Nature as having its own legal rights represents a new and stronger way to protect and restore the living world. This legal recognition will probably allow the introduction of the “crime of ecocide” to prevent and punish the large-scale destruction of natural systems.



Pentecost Island, Vanuatu © F. Cayrol/LabEx-CORAIL-UNC.

### Key message 9 – Recognizing the Pacific Ocean as a legal entity would meet the requirements and efforts of Oceanians to protect their vital, nurturing, and spiritual element

In line with Sustainable Development Goal 14 on the preservation and enhancement of oceans and seas, adopted in 2015 by the United Nations General Assembly, it seems clear that the Pacific Ocean has the full potential to benefit from this approach.

The Pacific Ocean is more than just water or a source of food for most Pacific Islanders. It is part of their lives, their families, their blood. The land, the sea, and people form a whole. Recognizing it as a legal entity is consistent with the cultural background of the Pacific Islands and the repeated efforts of their leaders to protect their “Blue Pacific.”

As part of a voluntary commitment to the United Nations Conference on the Ocean (#OceanAction 19759), the first step consists in exploring the possibility of recognizing the Pacific as a legal entity with rights, following existing international law. To this end, a regional treaty between the Pacific Small States and Territories (SISTerr) could improve existing national laws. It could propose new laws to treat and protect the ocean as a person, increase its resilience to climate change and to the overexploitation of its past and future marine biodiversity, and give it a full legal voice in the process.



The Pacific ocean, from a living entity to a legal entity (La Foa, New Caledonia) © Province Sud/M. Dosdane.

# TAKING ACTION

*For the experts, the Pacific Ocean and the countries of Oceania provide a unique platform for innovating in legal matters and creating new and truly effective tools for the protection of Nature. Traditional knowledge, customary rules, the unified relationship between Man and Nature as well as participatory projects, would be at the heart of a mixed and re-enchanted legal system.*

At the end of their work, the experts offered a series of recommendations for each of the themes explored above:

- To defend linguistic rights and diversity for the benefit of biodiversity conservation in particular.
- To develop regional collaboration between customary authorities through the creation of a network of indigenous knowledge and practices.
- To use the customary law system as the basis for environmental legislation where appropriate.
- To facilitate the acceptability of the legal rule by involving its target audiences.
- To involve customary people and the local population in drafting the law and enforcing sentences.
- To organize a procedure that enhances the chances of identifying offenders and characterizing environmental offenses.
- To anticipate offenses that can have irreversible effects and apply convincing and useful sanctions.
- To initiate discussions for enhancing the preventive dimension of environmental law, in particular on the introduction of new offenses.
- To promote regional cooperation for the monitoring and enforcement of environmental law.
- To acknowledge the Rights of Nature and promote the legal personality of Nature.



Workshop ©IRD/N. Petit.

**Coordination by** V. David and C. Peteru.  
**With the contribution of** S. Aupetit, S. Bouard, J.-L. Mahe, M. Maloney, E. Razafimandimbimanana, D. Robinson, S. Rouy, F. Wacalie, M. Wenehoua.  
**Editorial support by** V. Mézille.

## LIST OF ACRONYMES

<b>ABS</b>	Access and Benefit Sharing
<b>CBD</b>	Convention on Biological Diversity
<b>CePaCT</b>	Centre for Pacific Crops and Trees
<b>CNRS</b>	National Center for Scientific Research (Fr)
<b>CODIM</b>	Marquesas Islands Community of Municipalities
<b>COP</b>	Conference of the Parties
<b>CRESICA</b>	Consortium for Research, Higher Education, and Innovation in New Caledonia
<b>EEZ</b>	Exclusive Economic Zone
<b>FAIR science</b>	Findable, Accessible, Interoperable but also Re-usable science
<b>FRB</b>	French Foundation for Research on Biodiversity
<b>IAC</b>	New Caledonian Institute of Agronomy
<b>IPBES</b>	Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services
<b>IRD</b>	French National Research Institute for Sustainable Development
<b>IUCN</b>	International Union for Conservation of Nature
<b>CR</b>	Critically Endangered (extremely high risk of extinction in the wild)
<b>EN</b>	Endangered (high risk of extinction in the wild)
<b>LMMA</b>	Locally-Managed Marine Areas
<b>MAB</b>	Man & Biosphere
<b>MEAs</b>	Marine Educational Areas
<b>NGO</b>	Non-Governmental Organization
<b>PIPA</b>	Phoenix Islands Protected Area
<b>PIURN</b>	Pacific Islands Universities Research Network
<b>RESIPOL</b>	Consortium for Research, Higher Education, and Innovation in French Polynesia
<b>SDGs</b>	Sustainable Development Goals
<b>SIDS</b>	Small Island Developing States
<b>SISterrs</b>	Small Island States and Territories
<b>SPC</b>	Pacific Community
<b>SPREP</b>	Secretariat of the Pacific Regional Environment Program
<b>UNC</b>	University of New Caledonia
<b>UPF</b>	University of French Polynesia



Isabelle Staron-Tutugoro is an artist, painter, and engraver from New Caledonia. Isabelle was born in Saint-Symphorien-sur-Coise, a village near Lyon (France). At the age of 22, she travelled to New Caledonia, fell in love with the colors and lights of nature, and decided to settle there. Her artwork is very inspired by Kanak culture and often depicts petroglyphs, Kanak bamboos, and Lapita pottery.

The turtles engraving, chosen to illustrate the book, is inspired by a fact that marked the childhood of Isabelle's son. In Poindimié, at the end of the 1990s, turtles used to return to the same place each year to lay their eggs. Pre-schools and primary schools used to take children to feed baby turtles and educate them about the importance of protecting not only the species but also our lagoon. Then comes a series on the fishes of the lagoon and the geckos, which are symbolic animals (totems!) of New Caledonia.

*Cover photo credit : Pirogue, Pentecost Island, Vanuatu and Community garden, Pentecost Island, Vanuatu ©F. Cayrol/LabEx-CORAIL-UNC  
Rain forest, New Caledonia ©IAC/N. Petit.*

**Cipa pai picaapwi kârâ âboro mâ Göröpuu mâ Nâwië**

**Manaaki tangata, Manaaki whenua, Manaaki moana, kia kotahi whakahaere ki mua**

**Waa cèki céfé tö vèâ pâfâ Kâmö, Bwêêjè mâ Nérhèè mâi**

**Tausia lelei o tatou tagata, laueleele, ogasami, malaga fa'atasi I le agaga e tasi**

**Ta'ofi ke ma'u fakatasi le Tagata, le Kele mo le Moana**

**Icaasikeune la itre atr, hnadro me hnagejë**

**Co aodeneni Ngome ne Rawe ne Cele**

**Strengthening connections between people, islands and the ocean in the Pacific**

**E hakatahi'ia to te Enana i te Henua me te Tai**

**Me vakaqacotaki na veiwakani ni tamata vata kei na nodra vei yanuyanu kei na nodra vanua kei na wasa liwa kei na kedra yau bula vakavolivolita na Pasifika.**

**Kraon, solwota mo pipol emi wan oltime**

**Kia vai kôrari noa te Tagata, te Henua e te Moana**

**E natira'a mana tö te ta'ata i te moana 'e te fenua**

**Tâ'ofi ke ma'u fakatahi te Ha'atagata, te Fenua mo te Moana**

**Me vakaqacotaki na veiwakani ni tamata vata kei na nodra vei yanuyanu kei na nodra vanua kei na wasa liwa kei na kedra yau bula vakavolivolita na Pasifika.**

**Ntano ngo ntas epei Namouriana**

**Maintenir unis les Hommes, la Terre et l'Océan**

**Buildim wan yunion wetem ol pipol, ol aelan mo solwara mo ol plant mo anamol long Pasifik**

**Ke fakamaŋlohingŋi ange nŋae nŋanhi fehokotakingŋanga nŋo e kakai nŋo e nŋanhi nŋotu motu nŋo e Pasifiki pea mo honau nŋanhi fonuɔɔ, kae umanŋa nŋae moana, pea moe menŋa monŋui kotoa pe nŋoku iai.**

**Waa cèki céfé tö vèâ pâfâ Kâmö, Bwêêjè mâ Nérhèè mâi**

# BIODIVERSITY, A PRESSING NEED FOR ACTION IN OCEANIA

Noumea 2019

Edited by Claude E. Payri and Eric Vidal

The planet's biodiversity is in danger! This unprecedented crisis is severely affecting the islands of Oceania, which are particularly vulnerable to the consequences of global change (warming, flooding, invasions, etc.). While the region as a whole contributes little to the climatic issues or even mitigates them, the Oceanian territories are strongly impacted.

The mobilization around the 2019 7<sup>th</sup> IPBES Plenary in Paris was an opportunity to promote the value of biodiversity and associated services in Oceania. While the conclusions of the Asia-Pacific chapter are clear, it is not too late to take action in this region where Man and Nature have developed very strong ties. To better understand the situation in these thousands of islands scattered over several tens of millions of square kilometers of ocean, a workshop dedicated to biodiversity in Oceania was organized in Noumea, New Caledonia, on the 24<sup>th</sup> and 25<sup>th</sup> of June 2019. This was a unique opportunity for seventy participants to discuss, debate and try to find solutions to face the seriousness of the situation.

This publication summarizes the main highlights and key messages of these two intense days of work, discussion and debate. It stresses the specificities of the biodiversity crisis in Oceania. Intended for decision-makers, but also for a wider audience, this document has the ambition to make the voices of Oceanians better heard on the international scenes dedicated to biodiversity and ecosystem services.



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