MELANESIA BIO-CULTURAL NETWORK

“Conservation is not a new thing in Melanesia”

Conclusions from the International Congress on Conservation Biology
Brisbane Convention and Exhibition Centre
Australia

June 14-19, 2025

Funded by

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- **The University of Melbourne** (Oceania Institute, Melbourne Biodiversity Institute, and Indigenous Knowledge Institute), for funding 20 participants from across Melanesia, ensuring their unique perspectives on Indigenous-led conservation reached an international stage.
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We also recognise and honour the Indigenous communities whose Leadership, knowledge, and lived experiences shaped the *"Conservation Is Not a New Thing in Melanesia"* **symposium. Their stewardship of land, sea, and culture continues to redefine global conservation paradigms:**

- **Baru Conservation Alliance (East Kwaio, Malaita),** for demonstrating how kastom and tribal governance protect over 4,100 hectares of rainforest, blending ancestral practices with contemporary conservation.
- **Kunua Conservation Network**, for pioneering community-led biodiversity protection in the Kunua Plains and Mount Balbi Key Biodiversity Area.
- **The Kainake Project**, for promoting ecological resilience through Indigenous-led bio-economy initiatives.
- **Piku Biodiversity Network Inc.**, representing the ten tribes of the Kikori River Delta (Rumu, Kerewo, Kibiri, Porome, Gope, Urama, Pai'ia, Morigi, Kasere, and Foroba), for safeguarding critically endangered species and biocultural knowledge through clan-based governance.
- **Aneityum Island communities**, stewards of the **Nanauarehed Tabu Eria**, for modelling ridge-to-reef conservation under the guidance of customary chiefs.
- **Nindiah Tribe** (Bas Nindien customary district) and **Ajië-Arhö customary area**, for bridging Kanak knowledge and science in species protection, such as the dugong and flying fox.

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- James Cook University
- Monash University
- University of Queensland
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- University of Canberra

Cultural & Conservation Organisations

- Australian Museum
- Gardiens Des Îles
- Yelden Empowerment

Last but not least, the Melanesia community extends their appreciation to Mr. Kai Hang (Master's candidate, University of Melbourne and University of Sydney) for his support during the ICCB 2025 conference and his commitment in compiling this report.

Our Community Orgnaisations

Nanauarehed Tabu Eria

Nindiah Tribe

Ajië-Arhö Customary area

Table of Contents

Melanesia's rich biodiversity and diverse cultures are deeply intertwined, with indigenous knowledge and traditional practices playing a crucial role in both conserving the environment and shaping cultural identity. The region's various ethnic groups have long-standing relationships with their natural surroundings, influencing their traditions, arts, and livelihoods, while also contributing to the preservation of Melanesia's unique ecosystems.

Kagalo Conservation Area, Bougainville

Image by Jeffrey Noro

Conference Background

Hosted in Brisbane, Australia, from June 14 to 19, 2025, the International Congress for Conservation Biology (ICCB) represented the most significant conservation biology conference in the world, bringing together conservation professionals, scholars, Indigenous leaders, and community practitioners. Organised by the Society for Conservation Biology (SCB), ICCB 2025 marked a pivotal moment for advancing inclusive conservation in an era of rapid environmental, cultural, and political transformation.

Held on Turrbal and Yuggera land, the congress brought together over 1,800 delegates from 90 different countries, with a strong representation from the Pacific Islands, Southeast Asia, and Indigenous Australia. Under the congress theme *"Conservation through Collaboration: Science, Communities, and Policy in a Rapidly Changing World"*, the event fostered cross-sector dialogue across natural and social sciences, policy, youth movements, Indigenous knowledge systems, and on-the-ground conservation delivery.

As part of the official program, our Melanesian Symposia titled *"Conservation Is Not a New Thing in Melanesia"* featured country-led presentations from Papua New Guinea, the Autonomous Region of Bougainville, Solomon Islands, New Caledonia, and Vanuatu. The symposium showcased regionally grounded conservation models anchored in kastom (custom), tabu/tambu systems, clan governance, and traditional ecological knowledge. These sessions illuminated how customary forms of environmental stewardship remain central to the protection of some of the world's most biodiverse yet least formally protected ecosystems.

Supported by the Bio-Bridge Initiative, The University of Melbourne, the Australian Department of Foreign Affairs and Trade, and national, the French Government and sub-national governments, NGOs and communities across Melanesia, the symposium created a platform for country representatives to share case studies, policies, and community success stories that bridge traditional knowledge and science-based conservation. It also served as a preparatory dialogue ahead of the global biodiversity meetings, such as the 2026 Biodiversity COP-17 conference, where Indigenous-led models of conservation are expected to gain increased prominence.

This report serves to document the insights and lessons shared at ICCB 2025, informing regional, national, and subnational public policy, supporting future collaboration, and recognising the Leadership of Melanesian communities in shaping conservation futures.

Hosted By

Society for Conservation Biology – Oceania Section

International Congress for Conservation Biology (ICCB 2025)

Bio-Bridge Inititative - Secretariat of the Convention on Biological Diversity (CBD)

Foreword

Dr. Tyrone Lavery
School of Biosciences, The University of Melbourne

Like all good things in Melanesia, this initiative has grown organically and patiently—deeply rooted in the "wantok system" of person-to-person relationships that crisscross Papua New Guinea, Solomon Islands, New Caledonia, Vanuatu, and the Autonomous Region of Bougainville. The idea for this symposium emerged not from a single institution or project, but from many conversations, friendships, and shared ideas—gathered over years of working, listening, and learning together across the region.

Melanesia is home to some of the richest biodiversity on Earth, often within small areas of land that carry enormous environmental, cultural, and spiritual value. Yet more than 90% of terrestrial land in many parts of the region remains under customary tenure, stewarded by communities whose authority and ecological knowledge have long guided land and sea management.

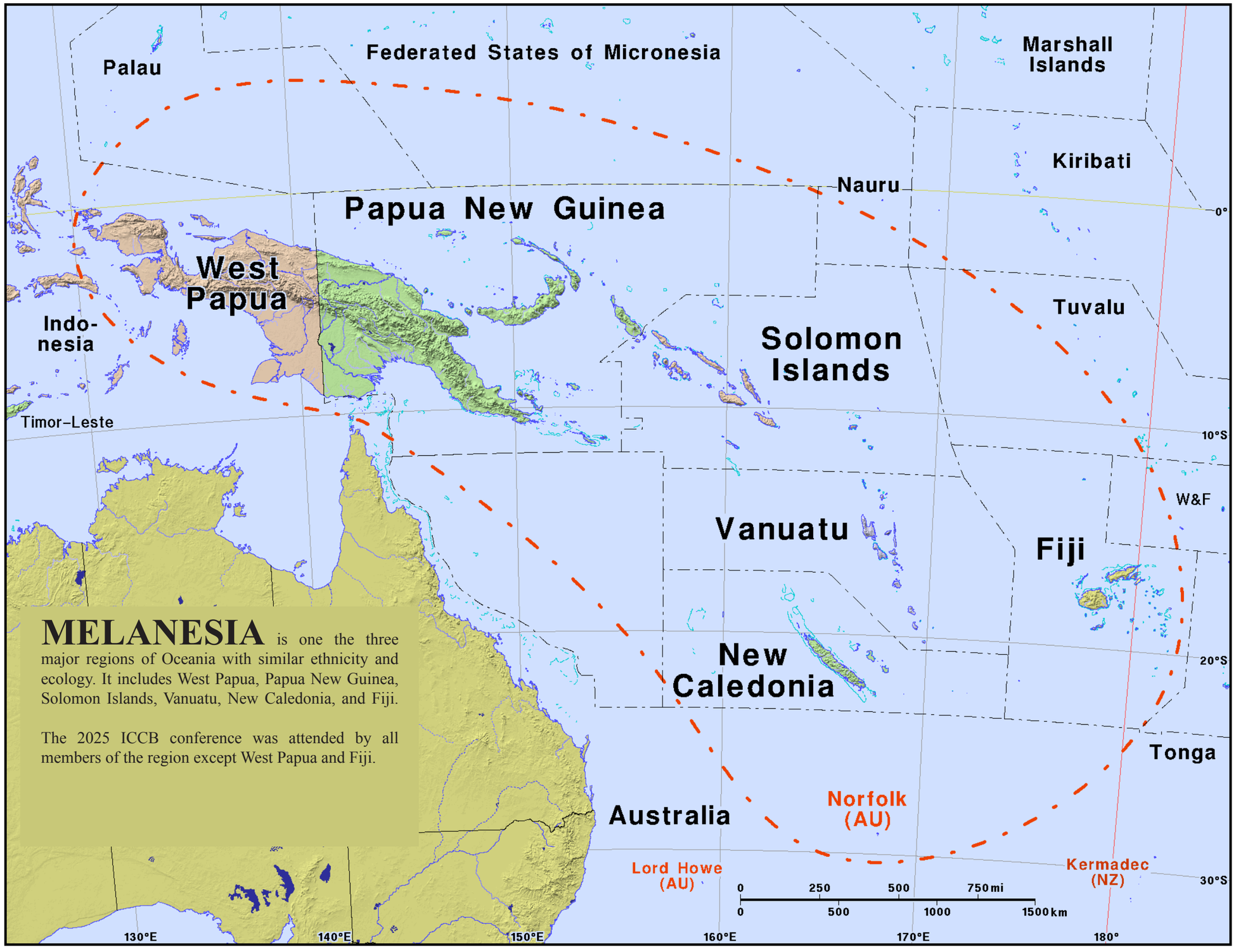
At the same time, we know that the formal protection of terrestrial areas is lagging in Melanesia—not for lack of commitment, but because conservation biology has tended to take its lead from other parts of the world, sometimes to the neglect of customary systems. Globally, there is a growing recognition that conventional conservation approaches alone are not enough—particularly in developing nations, where biodiversity is highest and state capacity can be limited. I firmly believe there remain significant, and globally unique, opportunities to conserve nature in Melanesia, in ways that are culturally grounded, and durable. Melanesians have big lessons to offer the rest of the world, I have seen them myself firsthand.

"Conservation Is Not a New Thing in Melanesia," was a powerful reflection of this reality, and it's a title that has its roots in my learnings from Chief Esau Kekeubata, East Kwaio, Malaita. Our symposium highlighted diverse ways in which kastom, tabu/tambu systems, clan leadership, and traditional knowledge can contribute to conservation. These stories were not just about preserving biodiversity—they were about governance, resilience, sovereignty, and continuity.

I want to offer my deepest thanks to those who traveled to Brisbane to share their experiences on a global stage, and to those who supported this gathering from near and far. This symposium was a collective effort—brought to life through partnerships between communities, NGOs, universities, national and subnational governments, and financial support from The University of Melbourne, Bio-Bridge Initiative, and the Department of Foreign Affairs and Trade.

This report is just one outcome—but we hope it will serve as a useful record of the discussions and lessons shared, and as a tool to support future collaboration. Most importantly, we hope it helps amplify the voices of Melanesian leaders who are showing the world that conservation can be rooted in tradition and driven by communities.

Let us continue to build from this momentum.



MELANESIA is one the three major regions of Oceania with similar ethnicity and ecology. It includes West Papua, Papua New Guinea, Solomon Islands, Vanuatu, New Caledonia, and Fiji.

The 2025 ICCB conference was attended by all members of the region except West Papua and Fiji.

Executive Summary

Situation and Context

Across Melanesia, Indigenous communities have practised conservation for centuries through systems of kastom (customary law), tabu/tambu zones (sacred no-take areas), and clan-based governance. These frameworks—rooted in ecological monitoring, adaptive management, and spiritual accountability—have long preserved biodiversity and cultural identity. With over 95% of land still under customary tenure, Melanesian communities remain among the world's most locally governed conservation stewards.

At the July 2025 International Congress for Conservation Biology (ICCB) in Brisbane, we brought together delegates from Papua New Guinea, Bougainville, Solomon Islands, New Caledonia, and Vanuatu for a symposium titled "*Conservation Is Not a New Thing in Melanesia*". The symposium shone light on Indigenous-led models that demonstrate how conservation is embedded in everyday life, grounded in worldview, law, and responsibility. These case studies bridged traditional knowledge with scientific approaches, calling for a paradigm shift: conservation must not merely include Indigenous voices—it must be led by them.

Challenges

Despite their Leadership in environmental stewardship, Melanesian communities face urgent threats:

- **Climate and Industry Pressures:** Logging, mining, industrial agriculture, and climate change are disrupting ecosystems that have been long maintained through customary governance. In PNG, for example, resource extraction has been linked to language loss and cultural erosion, where sacred species disappear, so too do the rituals and knowledge that once protected them.

- **Bridging Customary and Formal Systems:** Aligning Indigenous governance with national and international law remains a challenge. In Bougainville, the Upe tradition—a rigorous ecological initiation for young men—provides a cultural framework for conservation; however, integrating such systems into formal planning requires careful consideration and collaboration. Governments often lack legal jurisdiction over customary land, underscoring the need for co-governance.

- **Erosion of Biocultural Knowledge:** As younger generations migrate or adopt external lifestyles, traditional knowledge systems are fading. In many areas, climate impacts have altered seasonal cycles and disrupted traditional fishing and farming practices. Without investment in knowledge transmission, the foundations of Indigenous stewardship risk being lost alongside the ecosystems they protect.

- **Changing beliefs:** As Melanesian societies evolve and change, ancestral beliefs are not preserved everywhere and sometimes disappear. This also makes it more challenging to enforce customary rules and taboos, the penalties for which are spiritual punishments, because in some places, people no longer believe in them.

Summary Recommendations

The ICCB 2025 participants identified eight key priorities:

1. **Empower Indigenous-Led Conservation:** Legally recognise community authority over land and sea. Provide secure training, tenure and funding for locally led ranger programs and protected areas.

2. **Don't forget women and young people:** Enable young people and women to become conservation leaders, too.

3. **Integrate Traditional Ecological Knowledge (TEK):** Embed TEK in biodiversity strategies and foster co-design between scientists, elders, and policymakers.

4. **Strengthen Community Governance:** Decentralise conservation decisions to local bodies. Offer training and formally recognise customary laws (e.g., tabu zones) in national legal frameworks

5. **Expand Community-Led Protected Areas:** Scale up locally managed zones and connect them across Melanesia for shared learning and impact.

6. **Foster regional collaboration** by utilising platforms like the Melanesian Spearhead Group to coordinate policy, funding, and capacity-building efforts.

7. **Ensure Enabling Policies and Resources:** Align national laws with Indigenous rights and interests. Invest in grassroots Leadership, particularly among young people and women.

In Melanesia, young people are vital for conservation as they are the inheritors of traditional ecological knowledge (TEK), which is essential for sustainable practices. Being an oral society, TEK is primarily passed down through generations via storytelling, demonstrations, and participation in community activities.

Image by Yolarnie Amepou

VOICES FROM MELANESIA

We have shown you that Melanesia exists.

That our islands are not silent backwaters—but living worlds, shaped by knowledge older than science, and communities stronger than borders.

We have shown you that conservation is not new to us.

That we have guarded our these ecosystems for thousands of years—not through laws written in ink, but through law etched in lineage, in land, and in lifeways.

We have spoken not as separate islands, but as one region, one people, wantoks.

From Bougainville to Vanuatu, from the mountains of PNG to the reefs of New Caledonia, we are united by our shared guardianship of some of Earth's last great ecosystems.

We are not waiting to be included—we are already leading.

Now, we invite the world to walk beside us.

Not to speak for us, but to listen to our voices and support our initiatives.

Not to displace our models, but to invest in them.

Because in Melanesia, the future of conservation is already here.

Rooted in culture.

Guided by community.

And spoken with one voice.

A plenery session underway at the ICCB 2025

Image by Malik Oedin

Introduction

Conservation Biology and Melanesia's Perspective

Conservation biology has long been concerned with sustaining the Earth's biological diversity (Carroll and Fox, 2008). Specifically, as a discipline, it draws on ecology, genetics, policy, and a variety of other fields to develop effective strategies that address the accelerating loss of ecosystems. Yet in recent years, the field of conservation biology has also had to grapple with more profound questions: Whose knowledge shapes conservation? Whose governance systems are legitimised? And how can conservation respond not only to ecological crises, but to calls for justice, and local Leadership? (Ruiz-Mallén and Corbera, 2013).

These questions lie at the heart of this report, which emerges from the 2025 International Congress for Conservation Biology (ICCB) held on Turrbal and Yuggera land in Brisbane, Australia. Among the most impactful components of the congress was the Melanesia Symposia, titled *"Conservation Is Not a New Thing in Melanesia"*. For centuries, indigenous communities across Melanesia have practised forms of land and sea stewardship that reflect core conservation principles—adaptive management, intergenerational knowledge transfer, ecological monitoring, and spatial regulation—long before these concepts were formalised in the empirical field of environmental science. Systems of kastom, tabu, and clan governance have long maintained ecological balance while sustaining cultural identity and social cohesion within the Pacific region. In many parts of Melanesia, where over 95% of land remains under customary tenure, these systems are not historical artefacts; they are living, evolving institutions built over a millennium of indigenous stewardship (Jupiter, 2017).

However, traditional governance systems are increasingly challenged by external pressures. Activities such as logging, mining, industrial agriculture, and climate change are not only disrupting ecosystems that were in balance for thousands of years but also undermining the community-based frameworks that have sustained them (Jupiter, 2017, Furusawa, 2016). Conservation biology, if it is to remain relevant, must therefore expand beyond technocratic approaches and actively engage with existing, Indigenous systems of authority, practice, and epistemology.

The Melanesian delegations to ICCB 2025—representing Papua New Guinea, Bougainville, Solomon Islands, New Caledonia, and Vanuatu—did not merely attend to present isolated case studies. They came to articulate a collective message: one where customary landowners are not marginal participants, but leaders and architects of global conservation futures. Their contributions to the symposium challenged the field to think beyond protected areas, scientific baselines, and biodiversity indices—to consider governance, ethics, equity, and worldview.

The notion of a "BioBridge" is especially apt. Supported by the Bio-Bridge Initiative under the Secretariat of the Convention on Biological Diversity (CBD), the symposium sought to create tangible linkages between traditional ecological knowledge (TEK) and conservation biology. The goal was not to integrate TEK as a supplement to science, but to demonstrate co-produced approaches to conservation policy and practice. With CBD COP-17 on the horizon, the symposium also functioned as a strategic platform for highlighting Indigenous-led conservation as central to meeting global biodiversity targets.

This report documents the contributions of Melanesian delegates and provides a critical analysis of the models they presented. These include Bougainville's Green-Blue Economy Policy, which embeds customary knowledge in governance; PNG's TEK-informed legislation and species conservation work; New Caledonia's reconciliation of Kanak TEK with scientific monitoring in projects like Horizon Roussettes; the biocultural conservation model of the Baru Conservation Alliance in Solomon Islands; as well as the chiefly-led marine and forest protection zones in Vanuatu's Nanauarehed Tabu Eria. Each of these examples not only addresses ecological needs but also reconfigures the assumptions of conservation biology regarding legitimacy, Leadership, and knowledge. They point toward a discipline that is not only collaborative and interdisciplinary but also structurally inclusive and culturally accountable.

Ultimately, this report does not aim to romanticise Indigenous systems, nor to suggest that all customary practices are automatically sustainable. Instead, it argues that indigenous governance—particularly in Melanesia—offers the most durable, locally grounded frameworks for biodiversity protection in the region (Bambridge et al., 2021). These models should not be peripheral to conservation biology; they should be central to its evolution. "*Conservation Is Not a New Thing in Melanesia*" is more than a symposium title—it is a provocation to the global conservation field. It is an invitation to shift paradigms, re-centre community leadership, and expand conservation biology into a discipline that not only protects life on Earth but honours the lifeways that have long sustained it.

Opportunities and Innovative Models

Amid these challenges, the ICCB symposium highlighted powerful opportunities that re-centre community authority and create pathways for sustainable conservation:

- **Policy Anchored in Custom:** Bougainville's Green-Blue Economy Policy explicitly integrates customary knowledge into development strategy. Similarly, Papua New Guinea's Protected Areas Act (2024) enables Indigenous landowners to voluntarily establish protected areas under national law, with legal and livelihood support. PNG has committed to protecting 30% of its territory by 2030, using culturally grounded mechanisms.

- **Community-Driven Conservation:** In the Solomon Islands, the Kwaio people's Baru Conservation Alliance protects over 4,100 hectares of rainforest by blending spiritual rituals with environmental action. Events feature traditional dress, music, and ancestral ceremonies, while local schools pass on ecological knowledge. In Vanuatu, the Nanauarehed Tabu Eria, 7886 hectares of marine and terrestrial ecosystems on Aneityum Island—is governed by the Aneityum Council of Chiefs and combines tabu restrictions with a formal five-year management plan.

- **Knowledge Co-Production:** The Horizon Roussettes program in New Caledonia unites Kanak elders, hunters, scientists, NGOs, and policymakers to identify solutions for sustainably managing hunted flying fox populations. For example, it is proposed that customary harvesting rules be combined with scientific monitoring in order to establish adaptive seasonal bans. In PNG's Kikori Delta, the Piku Biodiversity Network trains young people to document the impacts of climate change on species and cultural practices, utilising both Indigenous and scientific methods.

These models demonstrate the effectiveness of biocultural conservation approaches, which safeguard ecosystems while preserving cultural identity, governance, and community wellbeing.

Cultural Leadership, kastom, and storytelling platform

The design of the Melanesian Symposia at ICCB 2025 was intentional in reflecting Pacific ways of conducting meetings, rooted in reciprocity, collective dialogue, and the centrality of Indigenous Leadership. Unlike conventional conference formats, the symposium embraced a kastom (customary) approach to knowledge-sharing, emphasising oral storytelling, egalitarian participation, and the symbolic power of space (Sanga et al., 2018).

Key Features of the Symposia Arrangement

1. **Sitting on Mats: Weaving Knowledge and Relationships**

All Melanesian delegates sat on traditional woven mats on the floor, while attendees (scientists, policymakers, and observers) sat in chairs surrounding them. The mats symbolised the interconnectedness of people, knowledge, and ecosystems. In many Pacific cultures, mats represent lineage, unity, and the weaving together of stories across generations. By sitting on mats, the delegates physically embodied their role as custodians of land and culture, grounding the discussion in Indigenous sovereignty (Hazelgrove Planel, 2019).

2. **Circular Seating: Breaking Hierarchies**

The circle formation disrupted the typical "stage-audience" dynamic of conferences. There was no podium or hierarchy of speakers; instead, the arrangement mirrored the tribal consensus-building process, where every voice held equal weight. This reflected the Melanesian principle of horizontal Leadership, where chiefs and elders listen before responding, and decisions emerge from collective dialogue rather than top-down authority. In the traditionl setting, a kava bowl is placed at the centre of the circular seating arrangement and the kava drink would be shared during the meeintg or exchange.

3. **Storytelling Over Presentations**

Instead of PowerPoint slides or formal lectures, delegates shared oral narratives about their communities' relationships with land and sea. The stories highlighted lived experiences on how tabu zones are enforced, how initiation rites like the Upe teach ecological stewardship, and how women's roles in conservation are tied to matrilineal land ownership. This approach honoured Indigenous epistemologies, where knowledge is transmitted through spoken word, metaphor, and lived practice (Naupa, 2025).

4. **Political Leaders as Listeners, Not Keynotes**

The Solomon Islands Minister for Environment and Climate Change and the Autonomous Bougainville Government (ABG) Minister for Lands attended, but neither opened the session. Instead, they listened to community voices first, responding only after all the stories had been shared. This inverted the typical conference protocol, where politicians give a keynote. Here, it mirrored Melanesian chiefly governance, where leaders are stewards of community consensus. By deferring to grassroots voices, the symposium reinforced that policy must follow Indigenous Leadership, not precede it (Sanga et al., 2020).

Why This Matters

The symposium's design challenged Western academic norms by:

- ***Centring Indigenous authority:*** *Scientists and policymakers were positioned as learners, not experts.*
- ***Valuing oral tradition:*** *Stories were treated as valid knowledge equal to peer-reviewed data.*
- ***Modelling participatory governance:*** *The circular, mat-based format demonstrated how conservation decisions should be made with communities leading the way.*

Theme 1: Embedding Conservation in Culture and Customary Stewardship

Autonomous Region of Bougainville, Papua New Guinea

Jeffery Noro, Junior Novera, Annabelle Masiria, Junelyn Noro

Context

Historically, in the Autonomous Region of Bougainville, traditional customs, identity and culture are deeply intertwined with ecological stewardship. Central to this relationship is the Upe initiation process, a rite of passage for young men that instils values of discipline, respect, and environmental responsibility. The Upe, symbolised by a distinctive headdress, is not only a cultural emblem but also features prominently on Bougainville's flag and coat of arms, underscoring its significance in the region's overall identity (Peake, 2022).

Building upon these cultural foundations, the Autonomous Bougainville Government (ABG) has developed the Green-Blue Economy (GBE) Policy, aiming to harmonise traditional ecological knowledge with modern sustainable development practices. The GBE Policy is a pioneering initiative at both the national and regional levels, positioning Bougainville as a leader in integrating cultural imperatives into sustainable resource management within the Pacific region.

Challenges and Opportunities

One of the primary challenges in Bougainville is integrating customary practices with formal governance structures. At the same time, traditional systems like the Upe provide a robust framework for environmental stewardship. Aligning these frameworks with national and international conservation standards requires careful navigation and consideration. Additionally, external pressures such as resource extraction and climate change pose threats to both the environment and cultural practices.

However, these challenges also present opportunities. The GBE Policy serves as a pioneering approach to sustainable development, emphasising the importance of cultural identity in conservation efforts. By integrating and building upon traditional knowledge systems, Bougainville can develop resilient and adaptive strategies that address environmental concerns while preserving its cultural heritage. The policy's inclusive approach, involving community consultations and stakeholder engagement, ensures that development initiatives are culturally sensitive and locally relevant.

Case 1: The Upe Tradition

The Upe tradition of Bougainville stands as one of the world's most enduring and systematically structured forms of customary education, rooted in ecological responsibility and cultural law. As part of this sacred male initiation, young men retreat into isolated bush camps—sometimes for multiple months—under the guidance of community elders. During this period, they are not only taught the moral and social codes of their clans but also acquire an intimate understanding of their surrounding ecosystems. This includes practical instruction in forest navigation, sustainable harvesting, waterway protection, and species-specific hunting taboos—all of which are deeply embedded in oral law and spiritual belief (Spriggs, 1992).

The initiation space itself is bound by tabu, meaning that not only is it protected from intrusion, but its natural integrity is maintained by strict behavioural codes. These protected zones often function as de facto conservation areas, with regulated access that limits disturbance and overexploitation. The seclusion

of the Upe not only serves a pedagogical purpose but inadvertently creates ecological refuges (Spriggs, 1992).

Importantly, the transmission of ecological knowledge in Upe is interwoven with spiritual accountability, where misuse of resources is not just an error, but a violation of ancestral law. This worldview cultivates an ethic of restraint, emphasising interdependence between people and nature. In a contemporary context, the Upe tradition offers a living blueprint for land management that is both place-based and values-driven (Spriggs, 1992, Polomka et al., 1990).

While the GBE Policy provides the institutional mechanism to formalise such frameworks, the Upe continues to serve as a cultural institution that safeguards both biodiversity and Bougainvillean identity. Its survival in the face of modernisation pressures speaks to the resilience of customary systems, and its continued practice demonstrates the potential of cultural rites to inform broader conservation models across Melanesia.

Case 2: Kunua Conservation Network

The Kunua Conservation Network (KCN) is a community-led environmental initiative in the Kunua District of North Bougainville, Papua New Guinea. It aims to protect the Kunua Plains and Mount Balbi Key Biodiversity Area (KBA), a 1,200 km² region recognised for its rich biodiversity and ecological significance (Woxvold and Novera, 2021).

Established through collaborations among local communities, conservation biologist Dr. Junior Novera, and institutions like the University of Queensland, KCN focuses on biodiversity conservation, climate change adaptation, and sustainable development. The initiative integrates traditional ecological knowledge with scientific research to manage and protect the region's unique ecosystems (Novera and Kark, 2023).

The Kunua Conservation Network (KCN) implements a holistic approach to conservation through biodiversity surveys that document endemic and threatened species, community engagement programs that empower local participation in resource management, habitat restoration initiatives like native tree nurseries to combat climate change, and policy integration efforts to align conservation strategies with regional governance frameworks (Novera and Kark, 2023).

The Kunua Conservation Network exemplifies a successful model of integrating indigenous knowledge with scientific approaches to achieve sustainable conservation outcomes. Its efforts contribute to preserving biodiversity, enhancing community resilience, and informing policy development in the region.

Case 3: Women's Role in Conservation as Custodians of Land and Culture in Bougainville

Bougainville operates within a matrilineal social structure, where women are the traditional custodians of land and the natural resources above and beneath it. Within this cultural framework, women possess not only the legal and spiritual ownership of land but also the authority to determine how it is managed, preserved, and passed on to future generations. Men, in turn, hold a vital role in safeguarding these decisions, ensuring that resource use aligns with the principles of equity, sustainability, and collective community benefit (Page, 2012).

In the Kunua Conservation Network, this cultural ethos is being translated into tangible conservation outcomes. Women are at the forefront of reforestation efforts, having established a tree nursery project focused on the propagation of rare and endemic species identified through recent botanical surveys in the region. This initiative is deeply rooted in Bougainville's cultural identity: the act of planting a tree parallels the matrilineal tradition of birthing and nurturing new life, as childrenbor in

Bougainville belong to their mother's clan. Tree planting thus becomes both a conservation activity and a spiritual act symbolising regeneration and continuity.

Beyond ecological stewardship, the women of Kunua are also engaging in the preservation and transmission of traditional knowledge through art. They are currently collaborating with an Australian researcher Dr. Kate Robertson from Swinburne University on a cross-cultural project that explores visual storytelling as a medium for cultural education and environmental awareness. Preliminary artworks developed by local women reflect rich narratives of place, lineage, and biodiversity, and the project is evolving as a powerful platform for intergenerational and intercultural dialogue.

Case 4: Reframing Conservation towards Community-Driven Bio-Economy

In Melanesia, the forest is far more than an ecological asset—it is the foundation of our survival and identity. It sustains our communities by providing food, shelter, traditional medicines, and spiritual wellbeing, unlike Western conservation models, which are primarily driven by government policy, fiscal investment, and regulatory enforcement, often exemplified through national parks and publicly funded sustainability programs. In contrast, Melanesia operates within a fundamentally different paradigm (Henning, 2019).

More than 90 per cent of the land in most Melanesian nations is under customary ownership, placing finer-scale decision-making authority squarely in the hands of local landowners. In such contexts, governments have limited jurisdiction to impose conservation legislation or enforce land-use regulations without the free, prior, and informed consent of traditional custodians. This presents both a challenge and an opportunity (Armitage, 2001).

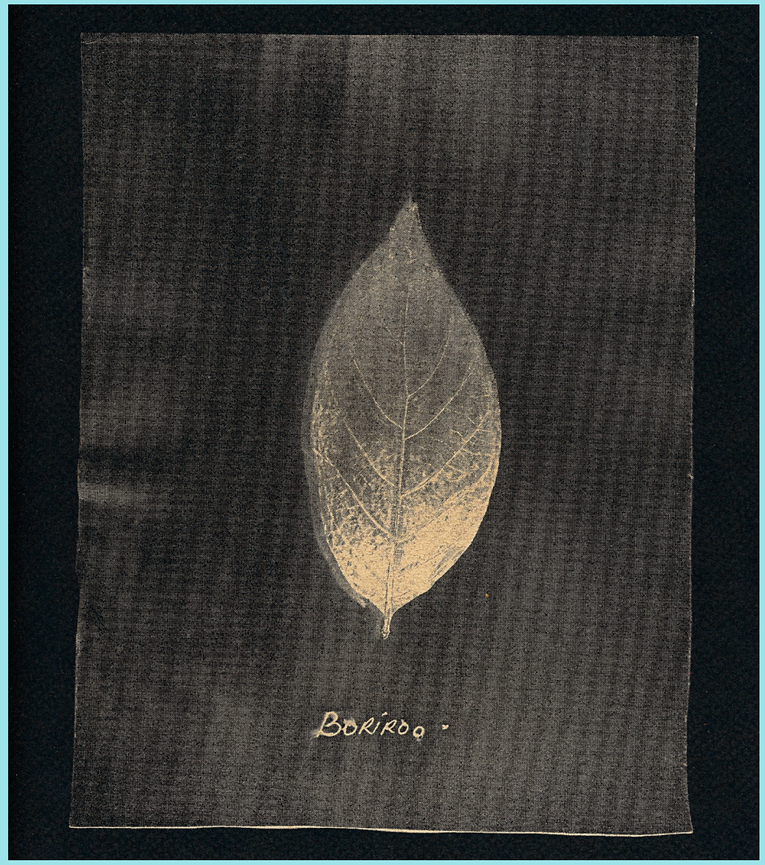
With increasing pressures from population growth, economic hardship, and external development interests, there is a growing urgency to design conservation strategies that are economically viable for local communities (Page, 2012). In Bougainville, we are advancing a nature-positive approach by exploring the potential of the bio-economy. This model leverages biodiversity and ecosystem services as catalysts for inclusive, sustainable development.

Through the integration of nature-based solutions, such as agroforestry, sustainable cocoa production, carbon offset markets, and ecotourism, we aim to generate alternative livelihoods that empower conservation communities economically while maintaining their cultural and environmental integrity. This approach not only respects customary land ownership but also redefines conservation as a pathway to prosperity, resilience, and self-determination (Page, 2012).

Project Spotlight

TITLE: *If only these plants could talk, imaging Melanesia's environmental conservation with photosynthesis*

The research weaves together various environmentally conscious image-making processes, including the plant-based image making process Anthotype and Risograph printing to create a visual archive of ecological and cultural knowledge and climate care. The aim is to explore how creative image-making can serve to highlight Indigenous-led conservation efforts on a global stage, while also meaningfully supporting the needs, values, and aspirations of the local community.



"The above image was created by working alongside the local women who chose the plants they wanted to be visually recorded. They also helped prepare the anthotype process by crushing up leaves to extract the pigment and laying down an actual leaf on pigmented paper for exposure to the sun over a few days. Prints were scanned in and printed in gold through an environmentally conscious image-making process called the Risograph process to challenge Western assumptions of wealth."

Dr. Kate Robertson, Swinburne University, Australia (2025)

"On Bougainville, women and girls serve as custodians of the land. They protect and cultivate it, generate wealth, acquire and transmit knowledge about it, and give birth to the next generation to steward the land.

Additionally, women are chiefs and peacemakers, promoting harmony and guarding decision-making within their communities. These unique qualities of women and girls greatly enhance conservation efforts and peacebuilding on Bougainville"

Dr. Junior Novera

Mothers in the Kunua Conservation Area have taken leadership in driving their community reforestation project. In this picture, some of the members are standing outside their community Nursery, where they have planted over 20 endemic and rare plants. The trees are regenrated and planted in degraded forests and along valleys prone to flooding as nature-based solutions to mitigate erosion and river sedimentation.

Image by Dr. Kate Robertson

Kikori River system in Papua New Guinea provides a critical habitat for the endangered pig-nosed turtle (*Carettochelys insculpta*), among other species. This river, known for its diverse ecosystems, is a key area for conservation efforts focused on protecting the pig-nosed turtle and its unique habitat.

Image by Yorlanie Amepou

Theme 2: Traditional Ecological Knowledge

Papua New Guinea

John Lamaris, Yolarine Amepou, Grace Nugi & Rebecca Ruga Gima

Context

Papua New Guinea (PNG), often referred to as the land of a thousand tribes, is one of the most linguistically and culturally diverse nations on the Planet. With more than 800 languages spoken by over 1,000 distinct Indigenous groups, PNG is home to a vast constellation of knowledge systems that have evolved in close relationship with the land, rivers, forests, and seas (Owens and Lean, 2017). Evidence of these thousands of Indigenous knowledge systems lies in PNG's remarkable linguistic and cultural diversity—each language and tribal identity reflecting unique cosmologies, ecological relationships, and stewardship practices shaped by their specific landscapes and histories (Foley, 2000).

These systems extend beyond what is commonly referred to as Traditional Ecological Knowledge (TEK). They form the foundation of bioculture—a worldview in which human identity, community cohesion, cultural practice, and environmental wellbeing are inseparable. In biocultural systems, land is not a commodity but kin; rivers are ancestors; and conservation is not a project but a way of life rooted in reciprocity, restraint, and spiritual accountability. Practices such as rotational agriculture, seasonal hunting, tambu/tabu zones, and the protection of sacred ecological sites all reflect sophisticated systems of environmental management grounded in place-based knowledge (Kik et al., 2025, Rai, 2013).

Understanding TEK within Broader Indigenous Knowledge Systems

While TEK is widely recognised in conservation discourse, it is essential to understand that it represents only one dimension of Indigenous knowledge. TEK refers primarily to ecological knowledge—observations of species, seasonal cycles, and sustainable harvesting techniques—that is passed down through generations and used to manage natural resources. It has been instrumental in shaping local conservation practices, including fallow systems, fishing taboos, and wildlife protection (Tiu, 2016, Tiu, 2007).

However, TEK is part of a much larger system of cultural governance, cosmology, and identity. These broader Indigenous knowledge systems encompass the rules and rituals of clan leadership, the spiritual and ancestral relationships between people and their place, oral law, intergenerational transmission through initiation rites, and the languages that encode ecological knowledge. Together, they form biocultural knowledge systems—holistic, place-based ways of knowing and living that bind people and nature in mutual care and respect (Tiu, 2007).

In this context, conservation cannot be separated from questions of cultural survival, land tenure, or community wellbeing. Recognising this distinction is essential to supporting Indigenous Leadership in conservation, not just as knowledge holders, but as governors of their territories and custodians of Earth's biodiversity.

Challenges and Opportunities

Despite the strength and resilience of Papua New Guinea's biocultural knowledge systems, several challenges hinder their full integration into formal conservation frameworks. (SALI et al., 2025). Formal education systems often overlook Indigenous languages and epistemologies, contributing to the erosion of cultural identity and ecological literacy (James et al., 2012). Furthermore, unsustainable practices such as illegal logging are putting p[ressure on the environemnt (Huettmann and Steiner, 2023, James et al.,

2012) .

However, significant opportunities exist to address these challenges. One of Papua New Guinea's greatest strengths is the constitutional recognition of customary land tenure and Indigenous knowledge systems, enshrined in the National Constitution under the principle of "Papua New Guinean ways." This foundational recognition provides a robust legal and cultural platform to demonstrate how biocultural systems can serve as primary mechanisms for biodiversity conservation (Tiu, 2016). Momentum is already building at the national level. In February 2024, PNG enacted the *Protected Areas Act*, committing to protect 30% of its territory by 2030 (Adams et al., 2021). The act enables Indigenous landowners to designate parts of their land as protected areas voluntarily and provides mechanisms for support in sustainable livelihoods, ecological monitoring, and capacity building. Crucially, it acknowledges the role of customary governance, creating legal space for Indigenous Leadership to shape conservation from within their systems of law and authority.

Empowering local communities to lead conservation efforts ensures that strategies are grounded not just in TEK but in entire biocultural systems. Investing in education and youth engagement programs that revitalise Indigenous languages, customary practices, and land-based learning can restore the intergenerational transfer of knowledge and strengthen cultural continuity. Community-led models—from tambu areas in Manus to youth-driven turtle conservation in Kikori—demonstrate that when Indigenous knowledge systems are respected and resourced, conservation becomes more equitable, enduring, and locally owned (Leary et al., 1996, Leary and Mamu, 2004).

Papua New Guinea stands at a pivotal moment. The challenge is not whether Indigenous knowledge should inform conservation, but how to ensure that Indigenous systems, rooted in culture, land, and law, lead the way. In doing so, PNG can offer the world a compelling model of conservation that unites biodiversity, cultural identity, and self-determination.

Case 1: Manus Island – Tambu Areas and the Great Central Forest

Several community-led initiatives in Papua New Guinea exemplify the integration of Traditional Ecological Knowledge (TEK) into contemporary conservation strategies. On Manus Island, local clans have long practised the use of *tambu* areas—seasonal or periodic closures of land or sea spaces to allow for natural regeneration. These traditional systems have proven effective in protecting both terrestrial and marine biodiversity. Notably, the tambu approach has been instrumental in conserving species such as the Admiralty Island cuscus (*Spilocuscus kraemeri*), an endemic marsupial of high ecological and cultural importance (Whitmore et al., 2016, Lamaris and Whitmore, 2018).

The Great Central Forest of Manus, now designated as a Key Biodiversity Area (KBA), is home to numerous endemic and rare species, including the Manus green tree snail (*Papustyla pulcherrima),* the Superb pitta (*Pitta superba*) and the bumble gecko (*Nactus kunan*) (Whitmore, 2016, Whitmore et al., 2015, Dutson and Newman, 1991). These ecosystems are not only biologically rich but are also deeply connected to clan territories and cultural obligations. As scientific interest in these practices grows, researchers and conservationists are increasingly exploring how tambu systems could be formally integrated into regional or national conservation planning frameworks .

Case 2: Sepik Wetlands Management Initiative – Community-Driven Wetland Stewardship

In the Sepik River Basin, the Sepik Wetlands Management Initiative represents another powerful example of TEK-driven conservation. This initiative works with Indigenous communities to promote sustainable and culturally grounded environmental practices. One notable activity includes the sustainable harvesting of crocodile eggs—a crucial income-generating practice for local communities that also serves conservation goals by reducing adult hunting pressure and incentivising habitat protection (Cox and Solmu, 2002, Ellison, 2009).

The program also supports the development of community-driven wetland management plans, where local ecological knowledge guides zoning decisions, usage limits, and monitoring protocols. These plans reflect a broader recognition of TEK as an essential knowledge system for managing wetland ecosystems. The initiative has helped bridge local practices with national policy frameworks, while reinforcing cultural values tied to land, water, and biodiversity (SINE).

Case 3: Piku Biodiversity Network – Biocultural Stewardship and Youth Leadership in the Kikori River Delta

In the southern reaches of Papua New Guinea, where the Kikori River flows through vast wetlands, forests, and clan-governed territories, the Piku Biodiversity Network (PBN) is advancing a community-led model of conservation rooted in bioculture—the inextricable relationship between biodiversity, culture, and place (Network, 2022).

PBN's early work began with the conservation of the pig-nosed turtle (*Carettochelys insculpta*), a culturally significant and globally threatened species. Since then, the organisation has broadened its focus to support the protection of entire ecosystems and species of cultural, ecological, and spiritual importance (Eisemberg et al., 2015, de Alvarenga, 2010). Today, PBN works alongside communities to monitor and protect four freshwater turtles, including the pig-nosed turtle, as well as two marine turtles (Network, 2022). Additionally, PBN monitors over 45 species of elasmobranchs, of which 30 are listed on the IUCN Red List, including the critically endangered sawfish and rhinorays (Grant et al., 2021). This work takes place within a globally designated Important Marine Mammal Area (IMMA) and the Gulf of Papua Mangrove Delta Important Shark and Ray Area (ISRA).

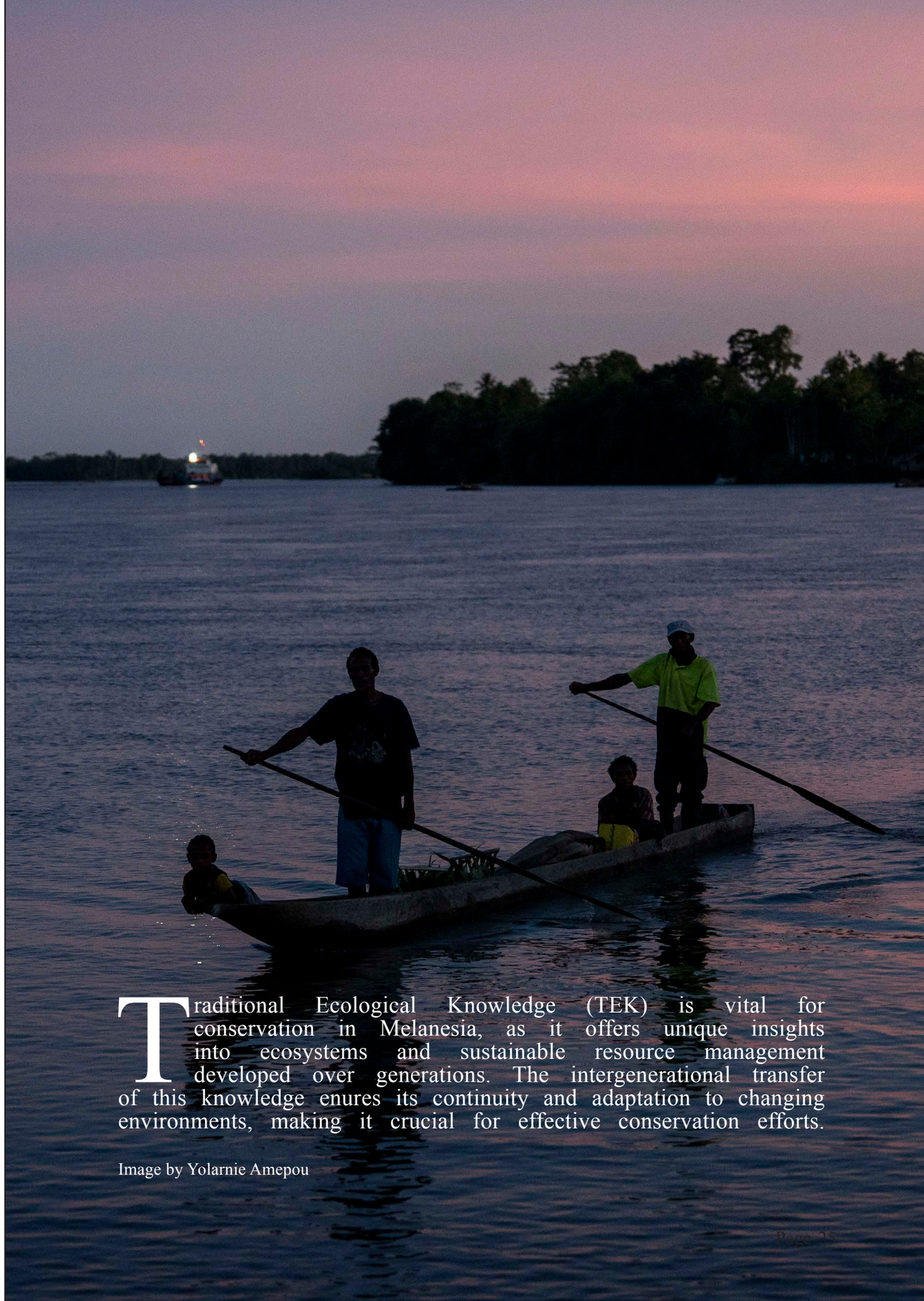
Crucially, PBN's conservation efforts extend beyond scientific monitoring. They are embedded in customary governance and ancestral knowledge systems. Through close collaboration with clan leaders, elders, and youth, the organisation ensures that conservation strategies reflect local values, responsibilities, and cultural rules governing land and sea. Voluntary no-harvest zones, sacred site protection, and seasonal closures are tools used by communities not just to manage biodiversity, but to uphold law and identity (Aini et al., 2023, Petriello et al., 2024).

A central pillar of PBN's work is intergenerational learning and youth leadership. In what is Papua New Guinea's first youth-led biocultural assessment, PBN is training young people from the Kikori region to document and track cultural and ecological indicators threatened by climate change and industrial development. These include language shifts, changes in traditional fishing knowledge, declines in sacred species, and altered seasonal patterns—all of which are interpreted through both scientific and customary lenses (Network, 2022).

As part of this process, PBN is learning from the diverse cultural knowledge systems of the Kikori region, recognising that different tribes and villages hold distinct ecological relationships, governance structures, and ancestral laws. By following local cultural protocols, the organisation supports young people to assess their own villages and tribal landscapes, setting meaningful biocultural baselines that reflect the lived realities and worldviews of each community (Petriello et al., 2024).

At the heart of this work is a fundamental truth: every Papua New Guinean is born into a land and a clan, born with a responsibility to the people and the place. The role of guardian is not assigned; it is inherited (Allen, 1983). Through its bioculture projects, PBN helps facilitate young people into the realisation of their purpose and guardianship, not as a new idea, but as a living part of a millennia-old cultural knowledge system. With the guidance of clan elders, youth are supported in reconnecting with their responsibilities, culture, and landscape through a structured process that affirms their identity and deepens their ecological and social awareness (Petriello et al., 2024).

Operating in a region increasingly affected by resource extraction and climate change impacts, PBN plays a dual role: contributing to global conservation goals while ensuring that outcomes are grounded in lived experience and respectful of biocultural values. Its work demonstrates that effective conservation in Papua New Guinea must go beyond biological protection to include the continuity of Indigenous governance, cultural values, and community resilience (Network, 2022, Petriello et al., 2024).



Traditional Ecological Knowledge (TEK) is vital for conservation in Melanesia, as it offers unique insights into ecosystems and sustainable resource management developed over generations. The intergenerational transfer of this knowledge enures its continuity and adaptation to changing environments, making it crucial for effective conservation efforts.

Image by Yolarnie Amepou

Theme 3: Navigating Cultural Heritage vs Modernity in Customary and Community Conservation

New Caledonia

Dr. Malik Oedin & Elvys Gourou

Context

New Caledonia, a French territory in Melanesia, is renowned for its exceptional biodiversity and rich cultural heritage. The archipelago nation hosts numerous endemic and rare species, including the Ornate flying fox (*Pteropus ornatus*) (Batterbury and Kowasch, 2024) and the dugong (*1*), both of which hold significant cultural value for the Indigenous Kanak communities (Oedin et al., 2019, Hamel et al., 2022). TEK and customary practices have long played a pivotal role in the sustainable management of natural resources, as indigenous communities have developed and practiced intricate systems of resource use, spiritual beliefs, and social norms for thousands of years (Brisset et al., 2022, Cleguer, 2015).

However, integrating these customary practices with modern conservation strategies presents both opportunities and challenges. As New Caledonia navigates the complexities of environmental conservation, understanding the interplay between tradition and modernity becomes essential.

Since May 2024, New Caledonia has been experiencing a major social crisis that has weakened environmental management and intensified pressure on biodiversity, particularly through hunting, illegal fishing, logging, and fires. This territory, recognized worldwide for its unique biological richness, now sees its most fragile ecosystems—dry forests, coral reefs, mangroves—critically threatened. A socio-ecological resilience strategy combining traditional knowledge, community involvement, sustainable economic recovery, and international support must be found to ensure the resilience of communities and biodiversity (Oedin et. al, 2025). Efforts must be made to develop an ecology of peace based on local cultural practices such as tambu, as an alternative to Western conservation models that are being questioned in some areas.

Challenges and Opportunities

One of the primary challenges in New Caledonia is striking a balance between traditional practices and contemporary conservation needs. Due to its unique history and rapid development, traditional natural resource management has suffered and eroded, as have the associated knowledge and practices. A solution must now be found to recover these ancestral gifts and revitalize them. Due to the socio-cultural proximity between Melanesian peoples, one possibility for reconstruction would be to draw inspiration from practices that are still alive in Melanesia. Belonging to the Melanesia Biocultural Network and having been able to participate in ICCB 2025 is therefore a great opportunity. This first step, which has enabled to connect with other stakeholders in traditional conservation in the region, is a promising opportunity.

The decline of species like the Ornate flying fox, underscores the need for effective conservation measures. The flying fox, beyond its ecological role as a pollinator and seed disperser, is deeply embedded in local Kanak culture. Historically, its fur was used as a form of currency, and it features prominently in traditional ceremonies as the annual new yam celebrations. In addition, flying foxes are emblematic species with strong symbolic value for all communities in the country. The species' decline threatens not only ecological balance but also cultural heritage (Oedin, 2021).

Opportunities lie in collaborative efforts between indigenous communities and conservation organisations.

Initiatives that integrate TEK with scientific research have shown promise in enhancing biodiversity conservation while respecting cultural values (Oedin et al., 2019). For instance, the "Horizon Roussettes" program in the Northern Province aims to enhance the management and conservation of flying fox populations by taking into account the socio-cultural aspects associated with these species. The program aims first to improve the current management of flying foxes—by strengthening scientific and cultural knowledge of these species, integrating local knowledge, and mobilizing residents through a collective consultation process—in order to sustainably preserve these emblematic populations of New Caledonia, which are particularly threatened. Secondly, it seeks to develop and propose a sustainable public policy, based on a shared vision and jointly developed recommendations, to inform decision-makers and guide management measures that are accepted by all (Province NORD, 2025).

Education and community engagement are also crucial. Programs that raise awareness about the importance of species like the dugong and their habitats have been implemented to foster a sense of stewardship among local populations. The dugong holds profound spiritual significance in Kanak culture, traditionally considered sacred and associated with chieftaincy. The challenge for the conservation of this species is now to find a solution to change consumption customs in order to ensure the survival of this iconic species and, at the same time, fight against poaching, as hunting it is completely prohibited.

Case 1: Flying Foxes (*Pteropus* spp.)

New Caledonia's flying foxes, including the ornate (*P. ornatus*) and the Pacific flying fox (*P. tonganus*), are keystone species, essential for pollination and seed dispersal across subtropical forests (Pierson and Rainey, 1992, Oedin, 2021). Their populations have experienced significant declines over recent decades, with studies citing habitat fragmentation, hunting pressures, and roost-site fidelity as contributing factors to population losses (Oedin, 2021). Approximately one-third of monitored sites were abandoned within 40 years (Oedin et al., 2019), and an 80% disappearance of the population by 2050 is predicted if conservation efforts fail (Oedin et al., 2022).

In response, the Horizon Roussettes project, spearheaded in the North Province, brings together community leaders, scientists, and government representatives to co-develop conservation strategies. Through inclusive consultations, the project documents traditional hunting practices, identifies significant roost sites, and establishes harvest-management measures such as seasonal limits and protective zones. Participatory scientific monitoring of roost populations with communities informs adaptive regulation, with data indicating that, without action, current harvesting rates (estimated at 5–9% annually) threaten long-term viability. This collaborative governance model reflects a pragmatic blending of TEK and Western science. It respects customary rights while addressing ecological urgency, demonstrating how communities culturally anchored stewardship practices into formal management frameworks to support both species conservation and community resilience (Oedin et al., 2021).

Case 2: Kanak Culture and the Dugong

Among the Kanak people, the dugong—or "vache marine cow"—holds deep cultural significance. Historically regarded as sacred, dugongs played a prominent role in the ceremonies and spiritual life of the chiefly community (Brisset et al., 2022, Cleguer, 2015). Today, New Caledonia's isolated population (without exchanges with other neighbour countries) of around 400 individuals is facing a rapid decline due to poaching, boat collisions, and coastal degradation. Ongoing threats to seagrass habitats increase the species' vulnerability (Hamel et al., 2022, Brisset et al., 2022).

The RESAC-Dugong initiative (launched in April 2022 under the Plan d'Actions Dugong) led by the New Caledonian Agency of Biodiversity, involving the Agency for the Development of Kanak Culture (ADCK), and local communities (Hamel et al., 2022). It aims to document and revitalise customary

Gardiens Des Îles is a New Caledonian association run by young people for young people, committed to biodiversity conservation, ecosystem restoration, and climate change adaptation. It acts as a center for research and action on biodiversity, ecology, and society, combining scientific knowledge and local expertise. The association trains and supports young New Caledonians, particularly those from rural areas, to become future leaders in conservation. It is also working to create a Center for Nature-Based Solutions and Local Knowledge. Its actions focus on coastal, marine, and island environments, with particular attention to emblematic species, fragile habitats, and the fight against invasive species. It has also recently begun working on terrestrial environments, particularly for the conservation of bats.

Image by Malik Oedin

knowledge—taboos, oral histories, and sacred uses—and inform contemporary conservation policy. Integrating TEK with scientific research, the initiative supports the creation of marine protected areas governed by customary law and promotes culturally grounded communication campaigns (Hamel et al., 2022).

By elevating cultural narratives as a core component of conservation strategies, RESAC-Dugong positions dugong protection as both an ecological imperative and cultural revival. This holistic, place-based

Spotlight: YELDEN EMPOWERMENT

Yelden Empowerment is a small Kanak company that acts as a cultural mediator throughout New Caledonia by forging links and building bridges between local communities, particularly the indigenous Kanak community, and stakeholders in the economy, development, culture, tourism, and institutions. This company also works to connect local communities to the region and beyond.

As a local management and advisory consultancy specializing in support for projects, it is focused on environmental adaptation, stakeholder engagement, and concept development for funding proposals. It also plays a role in the region's broader innovation and mediation landscape, connecting with initiatives that span entrepreneurship, social impact, and environmental resilience.

Activities and Partnerships

1. The company was referenced as a partner in a regional environmental project (PEBACC+), where it provided consultancy and workshop services. Alongside a firm named Seve, Yelden Empowerment offered 50 days of expertise—including project structuring, community engagement.

2. Additionally, Yelden Empowerment was featured in an innovation mission organized by Vanuatu's IDEA association and the New Caledonian government. The firm's involvement was highlighted as part of New Caledonia's ecosystem of social and environmental innovators, particularly in mediation.

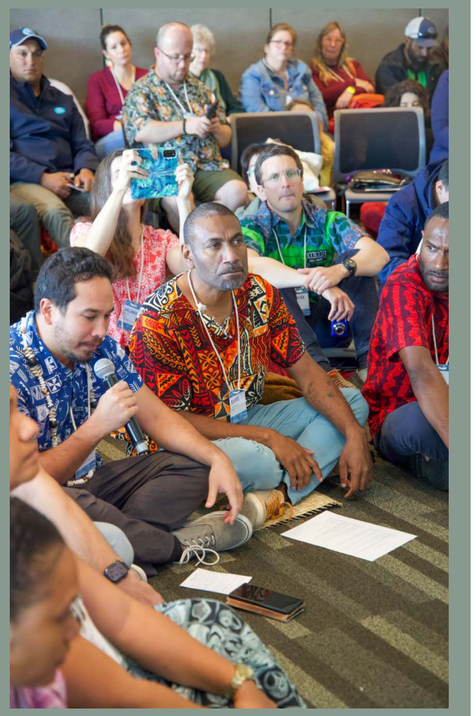


Image on right shows the team from New Caledonia discussing the entrepreneurial approach tundertaken by Yelden Empowerment to support sustainable development especially for the indigenous Kanak people.

Chief Esau Kekeubata, elder and representative of the BARU Conservation Alliance in Malaita Province, Solomon Islands, occupies a position of significant cultural authority. Within the Melanesian context, where customary leadership and ancestral knowledge are highly valued, he is highly respected by our conservation communities across the region. In recognition of this standing, Chief Kekeubata is acknowledged as the cultural and spiritual leader of the Melanesia Bio-Cultural Network.

Image by Jeffrey Noro

Theme 4: Conservation is Culture

Solomon Islands

Chief Foofafimae, Esau Kekeubata, Dorthy Esau, Godfery Wilikai, Maasafi Alabai, Emmy Foroasi, Wilson Langa, Lenty Wanebeni, Alabai Bukele, Fiaringi Made'e, Ileen Ifibata, Salelaifi, Alick Kwaikwala, Jimmy Telebae, David Maclaren, Sue Devlin, Tyrone Lavery

Context

In the remote highlands of East Kwaio, Malaita Province, Solomon Islands, the Kwaio people have long maintained a deep connection between their cultural practices and the natural environment. This bond is exemplified by the establishment of the Baru Conservation Alliance (BCA) in 2019, a tribal-led initiative aimed at preserving both biodiversity and cultural heritage on customary tribal land. The BCA integrates traditional knowledge systems with contemporary conservation strategies, fostering a holistic approach to environmental stewardship (Chowdhury et al., 2024).

Challenges and Opportunities

The people of Kwaio, Malaita Province, face several challenges in their conservation efforts on customary tribal land. One significant issue is the threat posed by external pressures such as logging and mining activities, which jeopardise the ecological integrity of the region (Katovai et al., 2015, Chowdhury et al., 2024). These activities not only threaten biodiversity but also undermine the traditional land management practices that have sustained the Kwaio people for generations. Additionally, Kwaio people grapple with cultural erosion, as modern influences and external interventions risk diluting traditional practices and knowledge systems. This erosion is exacerbated by limited resources, with constrained access to funding and technical support hindering the implementation and expansion of conservation initiatives.

Despite these challenges, many Kwaio tribal leaders have identified and leveraged significant opportunities to bolster their conservation efforts. Strong local Leadership and active engagement with tribal people living on customary tribal lands have been instrumental in driving conservation initiatives forward. Collaborations with international partners, including the Australian Museum and James Cook University, have provided technical support and capacity building, enhancing the Kwaio tribal leaders' ability to manage and protect their natural resources effectively (Chowdhury et al., 2024, Esau et al., 2023, Alabai et al., 2020). These partnerships have facilitated the documentation of traditional knowledge and the development of conservation strategies on customary tribal land. Moreover, conservation efforts have served as a platform for cultural revitalisation, reinforcing cultural identity and practices among the Kwaio people. Through the integration of traditional knowledge and modern conservation practices, the Kwaio people continue to demonstrate resilience and commitment to preserving their cultural heritage and natural environment

Case 1: Baru Conservation Alliance

The BCA's approach to conservation is deeply rooted in the Kwaio's cultural framework. The alliance operates through the 'Kwaio Tribal Model,' which emphasises the integration of traditional customs, rituals, and governance structures in environmental management. This model has led to the preservation of over 4,124 hectares of ecologically significant rainforest, with efforts underway to designate these areas as protected under national legislation (Keesing).

Cultural practices play a central role in the BCA's activities. For instance, during conservation events, people don traditional attire and perform rituals to honour their ancestors, reinforcing the spiritual significance of their environmental stewardship. Music and dance, such as the Binu Binu bamboo flute and Gigilo bamboo stamping, are integral to these ceremonies, highlighting the inseparable link between culture and conservation (Lavery et al., 2020).

Education and capacity building are also key components of the BCA's strategy. The alliance has established cultural centres and schools to facilitate the transmission of traditional knowledge to younger generations. Additionally, ranger training programs equip tribespeople with skills in biodiversity monitoring and sustainable resource management (Sanga et al., 2021).

The BCA's efforts have garnered international recognition and support. A notable example is the three-year partnership program launched by the Australian High Commissioner to enhance the alliance's initiatives in reforestation, cultural education, and scientific research.

Through the integration of cultural heritage and modern conservation practices, the Kwaio people of East Kwaio demonstrate a successful model of tribal-led environmental stewardship. Their work underscores the importance of cultural identity in achieving sustainable conservation outcomes (Kelly-Hanku et al., 2023).

Culture, relationships, and genealogy are central to the custom based conservation modelledby the BARU Conservation Alliance in Malaita Province of the Solomon Islands. Thiscommunity and custom based structure has been effective in driving conservation, and as a partnership framework for the development initiatives, including public health research.

Image by Jeffrey Noro (2025 ICCB Conference)

Theme 5: Establishing the Nanauarehed Tabu Eria, a Model for Community-Driven Conservation in Vanuatu

Vanuatu

Willy Missack, Martika Tahi & Stephanie Stephens

Context

Aneityum, the southernmost inhabited island of Vanuatu, is distinguished by its rich biodiversity and deep-rooted cultural heritage. In March 2024, the island's traditional chiefs and community members inaugurated the "Nanauarehed Tabu Eria," a conservation area spanning 7886 hectares of untouched rainforests, coastal ecosystems, and marine habitats. This initiative underscores the integration of traditional ecological knowledge with modern conservation practices, highlighting the pivotal role of community leadership in environmental stewardship (Bradacs, 2008).

Challenges and Opportunities

The establishment of the Nanauarehed Tabu Eria addresses several pressing challenges. Biodiversity loss poses a significant threat, as the area is home to endangered species, including the Vanuatu flying fox and the green turtle. Protecting these species requires concerted conservation efforts. Cultural preservation is another critical concern; the conservation area safeguards sites of cultural and spiritual significance, ensuring the continuation of traditional practices and beliefs. Furthermore, by preserving diverse ecosystems, the Tabu Area enhances the island's resilience to the impacts of climate change.

Opportunities arising from this initiative are manifold. The management plan, developed collaboratively by the chiefs and local communities, empowers residents to take ownership of their natural resources. This community-driven approach fosters a sense of responsibility and stewardship among residents, reinforcing the cultural significance of conservation efforts. The Tabu Area aligns with Vanuatu's Environmental Protection and Conservation Act CAP 283, facilitating potential registration as a Community Conservation Area (CCA). Moreover, the initiative contributes to global biodiversity targets, such as the Convention on Biological Diversity's goal of conserving 30% of Earth's land and sea areas by 2030.

Case 1: Vanuatu Community Conservation

The Nanauarehed Tabu Eria represents a harmonious blend of traditional governance and modern conservation strategies. Managed under the customary authority of Aneityum's Council of Chiefs, the area operates according to conventional resource management systems, prohibiting activities such as hunting, fishing, and logging within its boundaries. The management plan, spanning from 2024 to 2029, outlines regulations, monitoring protocols, and enforcement mechanisms to ensure the area's ecological integrity.

This initiative is not only a testament to the community's commitment to environmental stewardship but also serves as a model for other communities in Vanuatu and the broader Pacific region. By integrating traditional knowledge with contemporary conservation practices, the Nanauarehed Tabu Eria demonstrates the effectiveness of community-led initiatives in achieving sustainable environmental outcomes while preserving cultural heritage.

Traditional customary governance structures are crucial for successful community-led conservation in Melanesia. These systems, deeply rooted in local knowledge and social structures, provide a framework for resource management and decision-making that is often more effective and sustainable than imposed, Western-style approaches. Ignoring or undermining these systems can lead to conflict, decreased community participation, and ultimately, failure of conservation efforts.

Seen here in this image is Mr. Willy Missack from Vanuatu discussing how customary laws and structures have been instrumental in initiating the community led Nanauarehed Tabu Eria project on the island of Aneityum.

Mr. Missack is also a PhD candidate. His ongoing engagement with customary conservation affirms that modern scientific knowledge must be integrated with Melanesia's cultural values for conservation efforts to be meaningful and engaging.

Overview of Recommendations

The eight recommendations and ideas for specific action below form a synthesis of the conference's thematic discussions on community-led conservation and green-blue growth in Melanesia. They provide strategic directions that can inspire action by governments, Indigenous communities, regional bodies, and international partners to advance sustainable development and biodiversity conservation in the region.

Empower Indigenous-led conservation and research

- Recognise and formally support Indigenous governance of lands and waters, ensuring communities (e.g., in Bougainville) lead the design and management of conservation areas.
- Provide secure land and sea tenure rights to Indigenous groups, enabling long-term stewardship rooted in customary law.
- Directly fund and resource Indigenous-led initiatives (such as community ranger programs and traditional sanctuary management) to increase their scale and impact.
- Facilitate exchanges among Indigenous leaders across Melanesia to share successful practices and amplify their voices in regional decision-making forums.

Don't Overlook Women and Youth

- Establish dedicated community ranger units, led by women and youth, to monitor ecosystems, document traditional practices, and enforce customary management. Ensure these rangers receive technical training, stipends, and recognition as formal conservation actors.
- Appoint Youth and Women's Representatives to Conservation Committees. Require that all community conservation councils, regional working groups, and policy dialogues include elected youth and women's voices with voting rights, not just observers.
- Set up cultural-ecological learning spaces where elders teach youth land-based skills, traditional medicine, and spiritual ecology. Include digital tools (e.g., audio recorders, mapping apps) so youth can document and preserve teachings while learning how to communicate them in modern formats.
- Support women-led income-generating conservation projects (e.g., native seed nurseries, traditional herbal gardens, eco-crafts from sustainably sourced materials). These projects should align with both conservation and cultural preservation, and be scaled via microgrants and business training.

Integrate Traditional Ecological Knowledge into conservation strategies

- Incorporate Traditional Ecological Knowledge (for example, the deep ecological insights of Papua New Guinea's communities) into national biodiversity strategies, action plans, and ecosystem management guidelines.
- Create forums for dialogue between scientists, policymakers, and Indigenous knowledge holders to co-design research and conservation initiatives that blend scientific and traditional approaches.
- Support inter-generational transmission of Traditional Knowledge through community education programs, so that younger Melanesians carry forward this wisdom in future conservation efforts.

- Document and map customary resource use and ecological knowledge (with community consent) to inform policy decisions and strengthen recognition of traditional management practices.

Strengthen community governance for biodiversity conservation

- Decentralise conservation decision-making by empowering local community councils and customary authorities (such as village elders) to manage protected areas and wildlife.
- Enhance the capacity of community conservation groups in governance and project management through targeted training, mentoring, and resources, empowering them to plan and lead initiatives effectively.
- Establish co-management agreements that legally share authority and responsibility between communities and government agencies for managing parks, wildlife reserves, and marine sanctuaries.
- Formally recognise community-conserved areas and customary rules (e.g., traditional taboos or seasonal bans) within national legal frameworks, giving local regulations the force of law.

Promote biocultural stewardship of ecosystems

- Encourage the revival and maintenance of cultural traditions that protect nature (for example, Solomon Islands' tambu areas where customary bans safeguard forests or reefs).
- Integrate cultural values and Indigenous knowledge into conservation education and outreach, highlighting the inseparable link between healthy ecosystems and cultural heritage.
- Involve elders and cultural leaders in conservation planning and policymaking, ensuring decisions honour traditional values and knowledge alongside scientific perspectives.

Expand community-led marine and terrestrial protected areas

- Document and share customary management practices so that communities that have lost certain customary management processes can rebuild them.
- Support the creation and expansion of community-managed conservation zones and Locally Managed Marine Areas in islands like Vanuatu, connecting mountain forests to coral reefs through "ridge-to-reef" initiatives.
- Provide communities with training, tools, and scientific support to monitor ecosystem health across land and sea; blend modern techniques with traditional practices (such as pairing reef surveys with customary fishing taboos) to inform adaptive management.
- Link local protected areas into wider networks or coalitions (e.g., a Melanesian network of community conservation areas) for peer learning, mutual support, and stronger advocacy at national and regional levels.

Foster regional collaboration and knowledge exchange

- Strengthen regional alliances and forums, such as the Melanesian Spearhead Group or Pacific conservation roundtables, to coordinate planning and resource sharing among Melanesian countries.
- Hold regular knowledge-sharing exchanges (both in-person and virtual) where community

representatives and practitioners from different islands discuss successes, challenges, and lessons learned.

- Collaborate with international partners and neighbouring Pacific nations to leverage technical expertise, funding, and advocacy platforms that amplify Melanesian community conservation successes.

Ensure enabling policies and resources for community-based conservation

- Align national policies and laws with community-based conservation principles and Indigenous rights, embedding support for local stewardship in national biodiversity strategies and protected area legislation.

- Enhance financial and technical support for grassroots initiatives through mechanisms such as small-grants funds, conservation trust funds, and co-management agreements, which channel resources directly to communities.

- Invest in training and leadership programs for Indigenous and local conservation champions (especially youth and women), so that communities can manage projects, engage in policy dialogue, and adapt to emerging challenges.

Next Steps: Strengthening the Melanesian Partnership

The ICCB 2025 *"Conservation Is Not a New Thing in Melanesia"* session was a pivotal step in forging a regional partnership for community-led conservation. It brought together Melanesian Indigenous leaders, government representatives, researchers, and NGOs, resulting in a firm commitment from participants to continue collaborating beyond the conference. As part of this effort, a coordinating group is being established with representatives from local communities, national agencies, regional bodies, and supporting organisations to guide follow-up actions.

Moving forward, the working group recommends concluding this initiative with a high-profile side event at the upcoming CBD COP17 summit, where the respective communities and new commitments announced can present outcomes from the Melanesia conference. Before COP17, several activities will ensure continued progress and a stronger collaboration within the partnership:

- **Establish a coordination mechanism** (e.g., a Melanesian Bio-cultural Working Group) with clear terms of reference to drive the implementation of the recommendations and track progress.

- **Convene regular follow-up dialogues** – for instance, quarterly virtual meetings and annual in-person workshops – so that stakeholders can share updates, refine strategies, and maintain momentum.

- **Expand knowledge-sharing platforms** to facilitate information exchange and learning, for example, by enhancing existing Pacific portals or creating a dedicated Melanesia hub to share case studies, best practices, and Traditional Knowledge resources.

- **Launch an Indigenous community capacity-building program** offering targeted training, mentorship, and exchanges to strengthen local conservation leadership and project management skills across the islands.

- **Organise outreach events at key forums** to raise awareness and maintain momentum – for instance, hosting side sessions highlighting Melanesian initiatives at Pacific regional meetings and international conferences in the lead-up to 2026.

Towards CBD COP17 and Beyond

Following the ICCB 2025 conference, the Melanesian partnership requires a primary focus, and a natural next step is to elevate these efforts onto the global stage at the Convention on Biological Diversity's COP17. Whereas the ICCB discussions highlighted local action and the integration of Traditional Knowledge, the working group has identified strengthening supportive policy frameworks and mobilising resources as top priorities for the next phase of collaboration.

Leading up to COP-17 and following it, we may find it helpful to host a suite of smaller side events, training sessions, and community exchanges in conjunction with other forums to raise awareness, maintain momentum, and continue to develop the partnership. Relevant events identified for engagement include:

- **IUCN World Conservation Congress, October 2025 (Abu Dhabi)** – a gathering of the global conservation community, offering an opportunity to share Melanesia's green-blue growth approach, build partnerships, and attract support for on-the-ground initiatives.
- **11th Pacific Islands Conference on Nature Conservation and Protected Areas, 2026 (Noumea, New Caledonia)** – the major regional summit where Melanesian countries can showcase community-based successes and reinforce regional commitments. This meeting is currently scheduled for mid-2026
- **CBD COP17 (Convention on Biological Diversity Conference of Parties), 2026 (Armenia)** – the global biodiversity conference where a united Melanesian voice can influence international targets and announce new Indigenous-led conservation pledges.

Moreover, the relationships and networks established through this partnership, particularly among the participating communities, governments, and organisations, should lead to further collaborative initiatives in conservation and sustainable development. These efforts should build on the recommendations and ideas for action presented in this report, ensuring that the vision of green-blue growth in Melanesia continues to advance in the years to come.

Image (right):

The Melanesia Symposia was attended by Honourable Trevor Mahaga, Minister for Environment, Climate Change, Disaster Management, and Meteorology in the Solomon Islands National Parliament (holding the microphone). Seated to his left is Honourable Junior Tumare, Minister for Lands, Physical Planning, Environment, Conservation, and Climate Change. Unlike conventional symposia, where political leaders are typically accorded the honour of delivering keynote addresses, the Melanesia Symposia placed community voices at the centre. The two Ministers participated primarily as listeners, offering their responses only after the community presentations had concluded.

Participants of the Conference

	Name	Country/Region	Organisation	Position
1	Dr. Jeffrey Noro	Papua New Guinea/ Autonomous Region of Bougainville	University of Melbourne	Honorary Fellow
2	Grace Nugi	Papua New Guinea	WWF Pacific	Conservation Program Manager, PNG Country Office
3	Rebecca Gima	Papua New Guinea	Project Sepik Inc.	Coordinator for Conservation and Climate Change
4	Yolarnie Amepou	Papua New Guinea/ Kikori River Delta, Gulf Province	Piku Biodiversity Network Inc.	Director and Co founder
5	John Lamaris	Papua New Guinea	Monash University	Research (PhD) Student
6	Martika Tahi	Vanuatu	Adaptation to Climate Change in Coastal Zones of Vanuatu Phase II	Protected Area and Environment Coordinator
7	Willy Missack	Vanuatu	Victoria University of Wellington	PhD Student
8	D., Tyrone Lavery	Australia	University of Melbourne	Lecturer in Native Vertebrate Biology
9	Honorable Junior Tumare	Autonomous Region of Bougainville, Papua New Guinea	Bougainville House of Representatives	Minister for Lands, Physical Planning, Environment, Conservation, and Climate Change
10	Dr. Junior Novera	Autonomous Region of Bougainville, Papua New Guinea	Kunua Conservation Nework	Lead Scientist
11	Annabelle Masiri	Autonomous Region of Bougainville, Papua New Guinea	Kunua Conservation Network	Community Leader
12	Junelyn Noro	Autonomous Region of Bougainville, Papua New Guinea	The Kainake Project	Community Leader
13	Dr. Rick Hamilton	Australia	The Nature Conservancy	Manager
14	Chief Esau Kekeubata	Solomon Islands	Baru Conservation Alliance	Chief and Founder
15	Dorothy Esau	Solomon Islands	Baru Conservation Alliance	Managing Director
16	Elvis Gourou	New Caledonia	Yelden Empowerment	Director and founder
17	Dr. Malik Oedin	New Caledonia	Gardiens Des Iles	President
18	Beatrix Oni	Autonomous Region of Bougainville, Papua New Guinea	Directorate of Environment, Conservation and Climate Change	Acting Director
19	Kai Hang	Australia	Collective Empowerment Foundation	COO
20	Dr. David MacLaren	Australia	James Cook University	Associate Professor
21	Dr. Sue Delvin	Australia	James Cook University	Senior Research Fellow
22	Maasafi Alabai	Solomon Islands	Baru Conservation Alliance	Fieldwork Coordinator
23	Godfrey Wilikai	Solomon Islands	Baru Conservation Alliance	Office Manager & Protected Areas
24	Wilson Langa	Solomon Islands	Baru Conservation Alliance	Agriculture program manager
25	Emmy Foroasi	Solomon Islands	Baru Conservation Alliance	Health Program Manager
26	Julie Esau	Solomon Islands	Baru Conservation Alliance	Sustainable Food Production & Gender
27	Honorable Trevor Mahaga	Solomon Islands	National Parliament of Solomon Islands	Minister for Environment, Climate Change, Disaster Management and Meteorology

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