



BLUE ECONOMY

2 Introduction +

4 Surfacing the Blue Economy +

8 Blue Economy accelerating the industrialising of our ocean? +

11 Reconciling Moana, Vanua, science and the Blue Economy +

14 Reflecting on the Blue Economy Framework for Pacific Island Countries +

18 Reading Blue Economy narratives in the Pacific: commitments, ambitions, challenges +

22 Preconditions for a Blue Economy +

26 Blue Economy: poem +

27 Intersecting interests in Deep-sea mining: Pacific SIDS, venture capital companies and institutional actors +

35 The legal risks of seabed mining:

what should be taken into account by decision-makers in Pacific Island States as they consider how to develop their Blue Economies? +

38 Navigating the BBNJ +

40 From the frontline of climate change to the forefront of climate action +

45 Fishing for an equitable development outcome: WTO, right to development and the controversial issue of fisheries subsidies +



About this DAWN Informs on Blue Economy

Introduction by Mereoni Chung

Over the past two years, in partnership with the Pacific Network on Globalisation (PANG), DAWN has been tracking and analysing Blue Economy discourses and related developments – including global and regional conferences, intergovernmental negotiations and corporate-state initiatives – on oceans and the exploitation of ocean resources in the Pacific region. To share initial concerns with other leading scholars and advocates

in the Pacific region, in February 2019 DAWN and PANG held a panel discussion at the University of the South Pacific on ‘Blue Economy: evolving development framework or smoke and mirrors?’ The panel discussion was videoed and can be watched [here](#).

Several of the contributors to this issue of **DAWN Informs** on Blue Economy were panellists at that event. Other contributors are

either from DAWN or PANG, or have engaged with DAWN in either research or panel events on the issues covered.

While this edition features at a time of an all-consuming global pandemic, spotlighting the Blue Economy (BE), Ocean issues and the Climate crisis remains important for DAWN's ongoing advocacy for gender, economic and ecological justice. Multilateral spaces where negotiations on ocean priorities and protections take place are being closed for face to face negotiations due to COVID-19 conditions, although the agendas of dominant interests often remain at play. This is especially so in spaces where good governance practices are institutionalised

as corporate interests may be able to take advantage of the unusual conditions to advance their agendas. This edition of **DAWN Informs** draws on BE discourses, regional priorities and research on new 'development' agendas in the Pacific region and probes a range of BE issues, including industrialisation of the ocean, Ocean industries fisheries and Deep-sea mining, the adequacy of regulatory frameworks for Deep-sea mining, the ocean/climate nexus, WTO fisheries negotiations under COVID-19 restrictions, the evolving Binding Treaty on Biodiversity Beyond National Jurisdiction (BBNJ), and the need for alternative thinking informed by indigenous Pacific knowledge and values. ■



Surfacing the Blue Economy

by Mereoni Chung, DAWN



This piece was originally delivered at the DAWN/PANG panel event held at the University of the South Pacific in February 2019 on 'The Blue Economy: evolving development framework or smoke and mirrors?' The panel event can be watched [here](#).

The tension between environmental sustainability and pursuit of economic development is evident within ocean discourses, with many contradictions, yet the Blue Economy momentum parades unabated. As we in Pacific Island Countries are being enticed back into our ocean, we need to become more aware of the undercurrents of development agendas and economic wish lists that float to our shores. With resources on land running scarce, oceans are the last frontiers of natural resources, now seemingly up for the taking. Could the Blue Economy development paradigm possibly drown us? This paper briefly looks at the development concept of the Blue Economy, and highlights some initial implications for the discourse.

The idea of a Blue Economy gained major traction during the UN Conference on Sustainable Development. In the build-up to Rio+20 in 2012, Pacific Small Island Developing States (PSIDS) led the momentum to acceptance of the idea of the Blue Economy (Silver, Gray, Campbell, Fairbanks & Gruby, 2015). They emphasised the economic sites of island states as ocean dependent communities. The concept coincides with the

subsequent framing of the Pacific as an area of Large Ocean States.

Following on from the Green Economy, the Blue Economy introduced oceans to the purview of Sustainable Development action (Silver et al., 2015). The Blue Economy agenda has lent a lot of attention to the importance of oceans to realising our economic, political, social and more importantly environmental aspirations. For Small Island Developing States (SIDS), it has called further attention to both the vulnerabilities of our island environments to climate change impacts and the importance of ocean health. This has been touted simultaneously with the economic potential of oceans as sites for new and more intensive and expansive economic activities.

As a result, since Rio+20 there has been a successful push for a stand-alone goal on Oceans in the SDGs. The span of the Blue Economy framework in fact extends beyond oceans to other bodies of water including lakes, rivers and seas. However, now that we have the world's attention on oceans, can we manage the ups and downs of divergent, if not conflicting, interests?

Do we all mean the same thing when we say Blue Economy?

Various definitions put forward by very different actors suggest some convergence in aspirations to ensure a balance between economic benefits and ocean health.

Interestingly, the World Bank, the FAO, Pacific regional bodies, governments, finance investors like Credit Suisse and Goldman Sachs, military tech giants Lockheed Martin, and environmental NGOs such as WWF and Conservation International, have all used very similar language to define Blue Economy – broadly combining ideas of economic benefits with sustainable long-term ocean health (Barbesgaard, 2018). Parts of the private, for-profit sector – tourism, fisheries, aquaculture, bio-prospectors – echo this also.

How is it that the World Bank, WWF, *The Economist* (2015) and governments are all saying the same things? Do we now have a perfect matching of interests, concerns and realities? Across the private sector, governments, conservation groups, academia? Is there no conflict of interests in Blue Growth? Or are there things that hide behind broad aspirational language that allow interested parties to pursue their own self-interests while apparently singing from the same song sheet? Rather than ‘seeing opposing interests and contradictory dynamics’, Blue Growth rhetoric ‘envision[s] triple-benefit solutions, where everybody supposedly wins: coastal communities, the environment and investors’ (Barbesgaard, 2018, pp 130).

In contrast to the ‘triple-benefit’ view, the World Forum of Fisher Peoples (WFFP) and scholar activists charge the Blue Economy with being a ‘global ocean grab’ (TNI Agrarian Justice Programme, Masifundise Development Trust, Afrika Kontakt & World



Mereoni Chung speaking at the DAWN/PANG event at USP, February 2019

Forum of Fisher Peoples, 2014). WFFP charges multinational corporations, environmental NGOs, speculative investors and many others as pushing a ‘power grab’ to gain control of aquatic – ‘blue’ – resources.

WFFP sees Blue Economy as ‘the capturing of control by powerful economic actors of crucial decision-making ... including the power to decide how and for what purposes marine resources are used, conserved and managed’ (TNI et al., 2014, pp 3). As a result these powerful actors whose main concern is making profits are steadily gaining control of both the aquatic resources and the benefits of their use (TNI et al., 2014; Barbesgaard, 2018, pp 131).

This critique makes it clear that the ambivalence of the Blue Economy framework reflects basic tensions in sustainable development between exploiting natural resources for profit and prioritising the integrity of ecosystems.

Surfacing agendas

An initial interrogation of the Blue Economy surfaced some early concerns about

the direction and implications that this new agenda poses for communities and sustainable development efforts.

Firstly, the language of ECONOMY attached to BLUE already highlights the economic over the social, marginalising the importance of culture, traditional systems and knowledge, environment and rights of nature. Perhaps, contained in the success of Pacific States in promoting our Ocean-scape, have been the seeds of its possible subversion and co-option by economic interests and dominant economic forces.

Secondly, submerged in the language of Blue Economy are a number of very different sectors – tourism, coastal and offshore fisheries, subsistence production, aquaculture, transportation, seabed mining, pharmaceuticals and energy. The economic

people are most heavily involved are tourism and fisheries, and women are heavily situated in these sites. Some 97% of fisher-folk are located in developing countries, with women playing a significant role in production, distribution and manufacturing (World Fish Centre). The issues of both livelihoods and food sovereignty is critical.

Finally, the concept of Blue Growth was taken, largely uncritically, from the idea of Green Growth. The Green Economy has been widely critiqued; particularly with regard to market-based environmentalism that price tags nature and suggests that the market will best protect the environment (Barbesgaard, 2018).

The commodification of ocean resources regurgitates the green growth approach of market-based environmentalism that determines the value of nature on the basis

“The output of the global ocean economy is estimated at 1.3 trillion euros today and this could more than double by 2030”

activities entailed in these different sectors do not have the same effects, either on ocean health or people's livelihoods. For instance, seabed mining is hiding in the midst of tourism and fisheries and has potential negative implications for the sustainable efforts of these two sectors. Seabed mining appears to be getting a free pass under the idea of Blue Growth. There is a need to distinguish sources and sites of livelihoods from sectors such as seabed mining and big states' interests.

The scope of the Blue Economy rhetoric must be challenged so that the environmental cost of proposed ocean-based activities in some sectors do not undermine the sustainability of other ocean sectors such as fisheries and tourism. The oceans-related sectors in which

of market interests. In 2015, WWF estimated the economic value of the oceans (based on fisheries, tourism and shipping) at more than US\$24 trillion, with an annual economic value of at least US\$2.5 trillion, making it the seventh largest economy in the world (Hoegh-Guldberg et al., 2015). WWF carried out a similar valuation in the Pacific, and price tagged our Melanesian Ocean and coastline economy at US\$548 billion (Hoegh-Guldberg et al., 2016).

The EU says the Blue Economy represents 5.4 million European jobs and generates a gross added value of 500 billion euros a year, making the ocean and its resources a formidable space to control (EU Commission report, 2017). The EU's Blue Growth Strategy Report 2017 states: 'The output of the global

ocean economy is estimated at 1.3 trillion euros today and this could more than double by 2030' (EU Commission report, 2017). The EU has made clear that it should not miss this opportunity.

Under the rubric of Blue Economy, there may be a great temptation to view the oceans as simply an economic resource base to be exploited. Pacific Island States may be tempted to forfeit ocean health for economic wealth, uncritically using Green Growth's market-based approaches to conservation. For instance, carving up ocean areas for mineral exploitation, and other areas for marine life protection to compensate.

Critically engaging oceans

Despite the Blue Economy's claims of win-win opportunities for all, there will be winners and losers at the local level, as well as at the planetary level. The claims of fisher peoples dependent on healthy stocks of fish for their livelihood, and of women in small island and coastal communities who bear the burden of feeding and caring for families and communities in the face of eroding resources, need to be investigated by critical independent researchers and action taken on results (Barbesgaard, 2018; Malan, Barrios & Yan, 2018).

SIDS, especially Pacific SIDS, whose peoples have longstanding historical and spiritual connections to and identification with the ocean as well as dependency on it for food security and livelihoods, have an enormous stake in protecting the oceans. They must be in the forefront of this critical view on the Blue Economy, to ensure that our oceans and islands do not become again a testing ground for private and dominant economic interests, under the guise of benefiting humankind. ■

Bibliography

Barbesgaard, M. (2018). 'Blue growth: saviour or ocean grabbing?' *The Journal of Peasant Studies*, 45(1), pp 130-149, DOI: 10.1080/03066150.2017.1377186

EU Commission. (2017). *Report on the Blue Growth Strategy Towards more sustainable growth and jobs in the blue economy*. [\[Online\]](#)

Hoegh-Guldberg, O. et al. (2015). 'Reviving the Ocean Economy: The case for action – 2015' WWF *International*. [\[Online\]](#)

Hoegh-Guldberg, O. et al. (2016). 'Reviving Melanesia's Ocean Economy: The Case for Action-2016' WWF *International*. [\[Online\]](#)

Malan, S., Barrios, P. & Yan, W. (eds) (2018). 'Sustainable Blue Economy Conference Bulletin' *The Sustainable Blue Economy Conference Bulletin*. Nairobi, Kenya 26 – 28 November. New York: ISSD. [\[Online\]](#)

Silver, J. J., Gray, N. J., Campbell, L. M., Fairbanks, L. W. & Gruby, R. L. (2015). 'Blue Economy and Competing Discourses in International Oceans Governance' *The Journal of Environment & Development*, 24(2), pp 135-160. DOI: 10.1177/1070496515580797

The Economist. (2015). 'The blue economy: Growth, opportunity and a sustainable ocean economy' *The Economist Intelligence Unit*. [\[Online\]](#)

TNI Agrarian Justice Programme, Masifundise Development Trust, Afrika Kontakt & World Forum of Fisher Peoples. (2014). *The Global Ocean Grab: A Primer*. [\[Online\]](#)

World Fish. (2017). *From local to global: how research enables resilient and sustainable small-scale fisheries*. [\[Online\]](#)



photo | Mereoni Chung | Soqulu

Blue Economy accelerating the industrialising of our ocean?

by Lice Cokanasiga

photo | Paul Szewczyk from Unsplash



Competition to carve up the ocean and its resources is intensifying as states and private investors look to the ocean as the next economic frontier as land based resources are rapidly being depleted. The industrialisation of the ocean is being pursued through investments in research and development in new frontier ocean industries, the rapid expansion of existing ocean-related industries and an acceleration of financing of ocean infrastructure. All of these are enabled by a multitude of competing Blue Economy Frameworks.

The ocean has life-giving functions, producing more than half of the oxygen we breathe and sequestering over one third of carbon dioxide, whilst its currents regulate planetary

functions, keeping us alive. It is home to an extraordinary wealth of species with only a tiny fraction of the 230,000 species documented. The race by global powers to secure access to ocean resources presents numerous challenges, including protection of oceans and life itself at the scale and pace of proposed economic activities, while complicated by the climate emergency.

History of Blue Economy Frameworks

The term Blue Economy was coined in 2010 by Gunter Pauli drawing attention to potential benefits of business models in confronting environmental issues in new ways. However, its use as a development frame was triggered

by the Pacific Small Island Developing States (PSIDS) at the preparatory process of the United Nations Conference on Sustainable Development (UNCSD) in 2011, which was to connect with the green economy theme of the Rio+20 in 2012. The PSIDS, in their statement in 2011 at the preparatory committee at the UNCSD second intersessional meeting, proposed the alternate idea of blue economy as their frame to emphasise the critical link between global economic prosperity, well-being, food security and oceans, in particular for Small Island Developing States (SIDS).

Since 2012, different actors have emerged with their own blue economy concepts which continue to unfortunately extend the neoliberal agenda by conceptualising the natural life-giving services and resources of oceans as commodities with significant economic development potential. According to WWF, the global Blue Economy has an asset base worth over \$24 trillion generating at least \$2.5 trillion each year from existing ocean related industries such as fisheries, aquaculture, shipping, tourism and other activities. WWF also valued the sub-region of Melanesia's Blue Economy to be worth US\$548 billion. Tuna fisheries, a critical economic lifeline for Pacific Island States, yields US\$2.6 billion for island economies.

Overlapping frameworks between governments, multilateral financial institutions and regional institutions

Amongst the plethora of Blue Economy frameworks, the European Union (EU) offers the most articulate concept that focuses on renewable energy, fisheries, aquaculture, tourism, shipping, the emerging industry of Deep-sea mining and genetic resource exploitation. According to its figures published in 2019 at the annual European Maritime Day, economic activities related to oceans, seas and

coastal areas recorded a gross profit of €74.3 billion in 2017 and employed more than four million people. These figures demonstrate the EU not only has an interest in ocean resources, but is also positioned to utilise its industries to enter new markets in other countries.

Also in 2019, the EU signed a Blue Economy Development Framework (BEDF) with the World Bank Group (WBG). The BEDF allows the EU and WBG to design a process quantifying blue natural resources (capital) of countries. Three countries have been selected to pilot the BEDF. Kiribati is one of them. Kiribati has an exclusive economic zone (EEZ) of 3.5 million square kilometres with the most productive tuna fishing grounds in the Pacific and potentially more blue natural resources that can be quantified and commodified.

Regionally, the Pacific Island Forum responded to the reframing of the Blue Economy with their articulation of the 'Blue Pacific'. Only time will tell how PIF member States will develop innovation and unique initiatives that demonstrate leadership toward strong ocean governance under the pressure of divergent ocean industrial actors, including some PIFS members that are competing to carve up the Pacific Ocean.

Accessing and exploiting ocean resources

The industrialisation of the Pacific Ocean is evident in the negotiations on the proposed Post-Cotonou Agreement between the EU and the Pacific-ACP group. The EU's negotiating mandate reveals blatant demands of undistorted access to natural resources including seabed minerals.

Seabed mining, an emerging industry, has been touted as a great new source of wealth and economic development for developing countries. In the contestation to define the Blue Economy, seabed mining has been central

to the discourse and promoted as ‘sustainable mining’ without the ongoing destruction associated with terrestrial mining. Despite its proclaimed economic potential, the dangers of mining this new frontier alarmed Pacific Island communities who are contesting and protesting the environmental degradation and negative social effects on the livelihoods of Pacific communities. This emerging industry also puts Pacific states in vulnerable situations economically, such in the case of Papua New Guinea and Nautilus Minerals. It is critical to note that seabed mining is not only focused within state boundaries but increasingly beyond national jurisdiction. EEZs make up 42% of total ocean space leaving a majority of ocean space as the high seas.

Meanwhile, human induced climate change is also impacting the health of our ocean. The United Nations Intergovernmental Panel on Climate Change report on Oceans and Cryosphere in a Changing Climate in 2019 revealed that the world’s oceans and glaciers are under such relentless pressure that the consequences could prove challenging for humans to control without severely lowering greenhouse gas emissions. The repercussions of warmer temperatures are brutal for low lying atolls and islands in the Pacific.

Sea level rise and climate mitigation is boosting financing of climate resilient infrastructure by international financial institutions such as WBG and the Asian Development Bank (ADB). ADB’s US\$5 billion oceans initiative launched in 2019 aims to accelerate Blue investments in Asia and the Pacific to alleviate poverty through bankable projects. Requirements for these bankable projects include ensuring ‘enabling environments’ to leverage financing on climate, but more importantly to be private sector friendly. It also requires governments to co-fund or apply for concessional financing from financial institutions. Pacific Island

governments are already struggling to keep their economies and islands afloat.

Another critical aspect of the Blue Economy is fisheries, an industry that has been a key source of revenue for Pacific Island Countries. While fish stocks have been overfished in other regions, the Pacific Ocean offers a valuable stock of tuna that distant water fishing nations (DWFNs) such as China, Japan, the EU, the United States of America and others are chasing. Regional management and governance of fisheries are now under scrutiny by actors such as the EU, the US and New Zealand within the World Trade Organisation (WTO). The proposals being negotiated are an attempt to weaken the ability of the Pacific Islands to manage their resources and to develop and govern their own fishing industry.

■ Conclusion

The inspiration of PSIDS’ Blue Economy for people-centred and ocean-centred development is now lost at sea amongst the competing actors that are racing to exert their power at sea. Deep-sea mining serves as a reminder of just how dangerous the Blue Economy agenda has turned.

A global effort to protect the ocean and ocean ecosystems is needed. There needs to be an improvement in engagement mechanisms, which includes all relevant actors to ensure proper stewardship of the ocean. The Blue Economy discourse at the moment excludes the very people who depend on coastal areas and marine resources for their livelihoods – indigenous peoples and local communities. They who live close to and have long depended on the ocean have spiritual, cultural and traditional links to the ocean and their understanding and leadership must guide future ocean governance. ■

Reconciling Moana, Vanua, science and the Blue Economy

by Professor Elisabeth Holland

Science has been used to justify the exploitation of oceans in the quest for resources throughout human history. For more than 12,000 years, modern humans have used a variety of techniques to exploit ocean fisheries (Ono, 2016). In the Pacific and Oceania, fishing and ocean navigation expanded after Neolithic times. In 1519, Ferdinand Magellan became the first European to cross the Pacific. By 1768, Captain Cook's first voyage seeking territory, marine resources, and the opportunity to observe the transit of Venus from Tahiti followed centuries of ocean exploration and exploitation by Britain, France, Spain, Portugal and the Netherlands (Boissoneault, 2018).

Planet Earth's last frontier for exploitation, the ocean, is also our frontier for imagination and negotiation. Early in 2019, DAWN, in collaboration with the Pacific Network on Globalisation (PANG) organized a panel discussion. 'The Blue Economy: evolving development framework or smoke and mirrors?' The rest of 2019 was punctuated by United Nations negotiations focused on Marine Biodiversity of Areas Beyond National Jurisdiction (BBNJ) within the United Nations Convention on the Law of the Sea (UNCLOS), OceanVisions2019 - Climate to Ocean Obs2019, the release of the Intergovernmental Panel on Climate Change Special Report on Oceans and Cryosphere in a Changing Climate and the regional assessment on Biodiversity and Ecosystem Services for Asia and the Pacific.

'The ocean is so vast, it is simply too big to fail' has been the dominant narrative

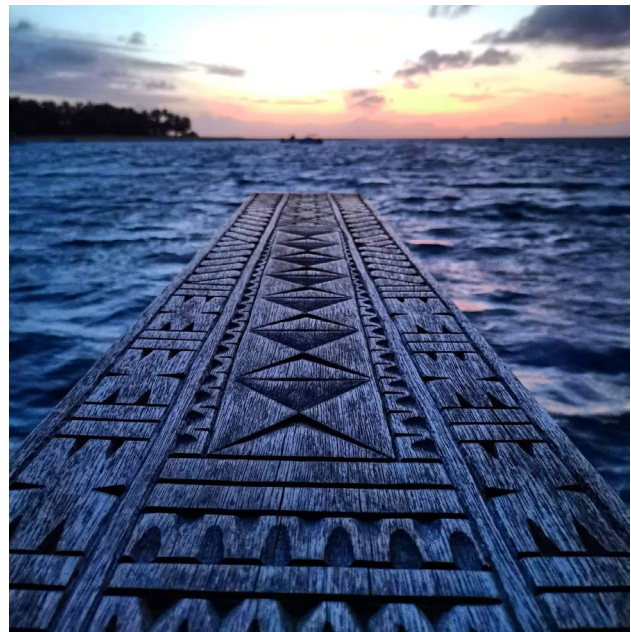


photo | Kiel Ah Sam

throughout human history (Lubchenco & Gaines, 2019). The many meetings described above and their outcomes documented an accumulating body of scientific evidence that underscores the ways our oceans are at risk from 'depletion, disruption and pollution.' Climate change, ocean acidification, habitat destruction, overfishing and pollution from nutrients, plastics and toxins are threatening to overwhelm our ocean and our planet.

The dissonance of the scientific evidence and 'an ocean is too big to fail' narrative calls for a new, more holistic, more multidimensional, more relational way of thinking – the 'Pacific way' as described by Upolu Lumā Vaai, Principal and Professor of Theology and Ethics at the Pacific Theological College. 'In healing the ocean, we can heal ourselves,' Lubchenco and Gaines wrote in their paper in *Science* magazine, a megaphone for the scientific community.

But is western science now beginning to recognise the power of indigenous research approaches? Can we as Pacific researchers capture the power of both indigenous research and western scientific approaches? Can the holistic, relational, multi-dimensional, and transdisciplinary indigenous Pacific approach now lead us towards healing the ocean?

I write as a research scientist who imagines that I can understand the fluid nature of the ocean and also of science described by data and equations. Yet I cannot. I am not yet a steward of the whole, multi-dimensional ocean: our moana, our vanua, our ocean, our science, our indigenous knowledge and our people are one in the Pacific way of doing research. I can be an instrument to empower Pacific people to stand tall to say we are the scientists, we are the researchers for the Pacific.

I cannot yet become that all-embracing, fluid Pacific researcher. I have not borne children of the ocean. My grandfather's skull does not sit beside the ocean to define the boundary of the land and ocean stewardship for my family. From my precarious perch as a Western researcher, I can see 'when Indigenous peoples become the researchers and not merely the researched, the activity of research is transformed. Questions are framed differently, priorities are ranked differently, problems are defined differently, and people participate on different terms' (Tuhiwai-Smith, 1999, pp 193). I see the need for us as women to become ocean healers. I can see that the power structure of the largely male scientific community often establishes hard to penetrate walls around disciplines that fail to embrace the transdisciplinary approach we now need to heal our oceans and our planet.

We thought that climate change was something far off in the future, off in 2100, a result of carefully bounding science into

disciplinary boxes. In 2012, when I started giving talks about sea level rise in the Pacific I used one paddle, a little more than one metre long, to show how high the sea level would rise in 2100. The Intergovernmental Panel on Climate Change Special Report on Oceans and Cryosphere (IPCC SROCC) emphasizes that we are now facing the possibility of 5.4 meters of sea level rise by 2300. Now, in 2020, six paddles of the six woman Va'a outrigger canoes are now required to describe sea level rise. Extreme sea level rise projections, with a ten percent chance of occurrence, suggest that it might require more than 50 paddles to show how high sea levels will rise (Deconto & Pollard, 2016).

Now global warming threatens our ecosystems. Warm water corals are already at high risk and will move to very high risk at 2°C of warming. Kelp, seagrasses, epipelagic zones all move to high risk at warming between 2 and 3°C. Salt marshes, estuaries, sandy beaches and mangrove forests all move to moderate risk and towards high risk at warming between 2 and 3 °C. Ocean oxygen content is declining and ocean acidity is increasing, primary production, total animal biomass and maximum fisheries catch potential are all projected to decline by as much as 30% by 2100. The IPCC SROCC is the first to highlight the importance of indigenous and local knowledge as part of the collective wisdom needed to document and address climate change. Our oceans protect the planet by absorbing the majority of CO₂, energy and heat that sit at the root of climate change.

As stewards of the world's largest ocean, our Pacific leaders understand the importance of the ocean-climate nexus. Building on Fiji's 2017 Presidency of the UN and co-hosting the first UN Ocean Conference, 'Our Ocean, Our Future' and Fiji's 2017 of the UN Presidency of the UN Framework Convention on Climate Change (UNFCCC) for COP23, the Pacific has joined forces with Indonesia, Monaco



and many others to bring the oceans into the UNFCCC. The diplomatic and science foundations were laid during COP23 in Bonn, Germany. COP25, Chile's Blue COP held in Madrid was disappointing in its inability to welcome the SROCC, increase ambition on reducing emissions, progress loss and damage and the Paris Rule book. One of the few bright spots was in deciding to convene a Dialogue on Ocean and Climate Change at the 52nd session of the UNFCCC's Subsidiary Body for Technical Advice. Now is a good time to define and refine the key messages to be taken forward.

Now more than ever, we need to come together, science with theology, with indigenous and human rights, to create a Pacific way to decolonise research to support indigenous researchers to use their abundant storytelling skills to frame a new narrative. The Blue Economy requires ocean stewardship to follow a holistic cosmology embracing all life, to define a geologic epoch beyond our current Anthropocene. Our crisis of contradictions requires research to provide an evidence basis for our decisions, but it also requires that we move beyond the small box approach of western science to embrace a more holistic, transdisciplinary and relational approach. We are all paddling in the same canoe, and that canoe needs to be steered in the Pacific way, by Pacific research, and by Pacific people.

Vinaka vakalevu (🇫🇯 Fiji); *Fa'afetai tele lava* (🇸🇲 Samoa); *Malo 'aupito* (🇹🇴 Tonga); *Tank iu* (🇸🇯 Solomon Islands); *Meral ma Sulang*

(🇵🇼 Palau); *Ko rab'a* (🇰🇮 Kiribati); *Obrigado* (🇹🇱 Timor Leste); *Tank yiu tumas* (🇻🇺 Vanuatu); *Tenkyu tru* (🇵🇬 Papua New Guinea); *Fakafetai lasi* (🇹🇻 Tuvalu); *Kommol tata* (🇲🇻 Republic of the Marshall Islands); *Meitaki Ma'ata* (🇰🇮 Cook Islands); *Tubwa Kor* (🇳🇷 Nauru); *Fakaaue lahi* (🇳🇺 Niue); *Kalahngan* (🇲🇫 Federated States of Micronesia). ■

Bibliography

- Boissoneault, L. (2018). 'Captain Cook's 1768 Voyage to the South Pacific Included a Secret Mission' *Smithsonian Magazine*. [\[Online\]](#)
- DeConto, R., Pollard, D. (2016) 'Contribution of Antarctica to past and future sea-level rise', *Nature* 531, pp 591–597 [\[Online\]](#)
- IPCC. (2019). 'Summary for Policymakers' In *IPCC Special Report on the Ocean and Cryosphere in a Changing Climate*, H.-O. Pörtner, D.C. Roberts, V. Masson-Delmotte, P. Zhai, M. Tignor, E. Poloczanska, K. Mintenbeck, A. Alegría, M. Nicolai, A. Okem, J. Petzold, B. Rama, N.M. Weyer (eds). In press.
- Lubchenco, J. & Gaines, S. D. (2019). 'A new narrative for the ocean' *Science*, 364 (6444), pp 911. DOI: 10.1126/science.aay2241
- Ono, R. (2016). 'Human History of Maritime Exploitation and Adaptation Process to Coastal and Marine Environments – A View from the Case of Wallacea and the Pacific' In Marghany, M. (eds) *Applied Studies of the Coastal and Marine Environment*. Croatia: Intech, pp 389-462
- Stromberg, J. (2013). 'What is the Anthropocene and are we in it? Efforts to label the human epoch have ignited a scientific debate between geologists and environmentalists' *Smithsonian Magazine* [\[Online\]](#)
- Tuhiwai-Smith, L. (1999). *Decolonizing methodologies: Research and Indigenous Peoples*. Dunedin: University of Otago Press.

Reflecting on the Blue Economy Framework for Pacific Island Countries

by Vina Ram Bidesi

photo | Mereoni Chung



With increasing concerns about the deteriorating state of the environment in the face of the climate crisis, population growth, rising material consumption and growing demands for food production and natural resources, there is renewed interest in accelerating exploration and expansion of the use of ocean resources. Following Rio+20, increased global attention to the Blue Economy concept appeared to offer hope and new opportunities for sustainable development and growth because of the sheer size of the world's oceans compared to terrestrial environments. While there is still debate on definitional issues, the Blue Economy is nothing new, simply a re-emphasis of the principles of 'green growth' to achieve the UN sustainable development goals, but with the central focus placed on oceans and coastal areas. One can argue that like the concept of sustainable development, the Blue Economy is open to many

interpretations. It is also context specific, so no single definition captures all that it should entail.

According to a World Bank report, there are three related but distinct meanings of Blue Economy. There is firstly an overall focus on better understanding of the contribution of oceans to economies; secondly, there is a need to address environmental and ecological sustainability concerns; and thirdly, there is a potential to provide opportunities for economic development (World Bank & United Nations Department of Economic and Social Affairs, 2017). All three meanings are clearly linked to economic considerations. A healthy ocean is seen as necessary for realising long-term *economic* benefits – thus the focus on three key components of resource policy decisions – conservation, management and sustainable use as essentially instrumental to achieving the economic objectives.

The challenge for Pacific Island States

As 'large ocean states', Pacific Island States see themselves in relatively powerful positions with this new development focus. There is a lot of interest being shown by new and traditional global partners and international and regional institutions, with new alliances being forged from local to international level to move forward with this agenda. Pacific Island States also assert themselves as Oceanic people and custodians of their ocean. The Pacific Islands Forum Secretariat (PIFS), representing regional governments, adopted the Blue Pacific framework. As explained by PIFS Secretary General, Dame Meg Taylor: 'Blue Pacific seeks to recapture the collective potential of the region's shared stewardship of the Pacific Ocean but with an explicit recognition of its shared 'ocean identity', 'ocean geography' and 'ocean resources'. Through the Blue Pacific, Forum Leaders seek to re-affirm the connectedness of Pacific people with their natural resource, environment, culture and livelihoods' (Malielegaoi, 2017).

The above sentiments underpin Pacific Island Leaders' expressed aim to design their own development agenda based on the Pacific's collective needs and aspirations for a decent quality of life for their people. This puts the Pacific Island States in the driver's seat to determine the process and pace of growth from this new ocean management and development agenda.

On the other hand, it is apparent from the Law of the Sea that having greater control of the rights of extended jurisdiction over the oceans comes with responsibilities. While the focus on Blue Economy provides Pacific Island States with strong negotiating positions, it however does not assure anything above and beyond a re-statement of a framework grounded in the principles and practices of integrated coastal and ocean management, which is a dynamic

and evolving process. This can be seen through the various efforts in marine spatial planning such as the development of the Pacific Island Regional Ocean Policy, the Pacific Regional Oceanscape Programme, and now the Blue Economy Framework. Integration and coordination between and among sectors, land and sea, science and policy, environment protection and right to development; and the application of principles such as polluter pays or user pays, the precautionary approach and inter and intra generational equity, among others, provide guidance in this regard. The aim is to reduce inter-agency conflicts, strengthen collaboration and linkages, streamline functions and reduce duplication, in order to achieve desired development outcomes. There is no one approach or theory, but it is seen as a long-term evolving process based on needs, urgency, priority, budgets, capacity and availability of necessary resources.

Valuing the ocean in economic decision making

The ocean is a common resource because it supports all life on earth. Thus Pacific Island States can play a strategic role in shaping the changes that could be brought about by the development pathway they choose for the Blue Pacific while discharging their stewardship function in support of a better quality of life for humankind. An example of this is maintaining the biodiversity of marine ecosystems such as coral reefs, mangrove forests and sea grass bed areas that allow for absorption of CO₂ to reduce greenhouse gas emissions and provide support for provisioning services such as sustainable food supplies. In articulating the opportunities arising from moving forward with the Blue Economy agenda, it is important to keep in mind all three areas of focus referred to earlier: to gain a better understanding of the contribution of oceans to the economy, maintain ecological and environmental health

of the oceans, while exploring its economic potential.

In relation to better understanding the contribution of the ocean to the economy, the dilemma with ocean resources is that much of its environmental value is intrinsic and non-monetary. Understanding the relative value of the various goods and services it provides should involve a process of policy decision making that is informed not only by considerations of its economic value, but also by understanding its immense social, cultural and environmental value.

To gain a deeper understanding of this, the Pacific region needs to set a research agenda that can more closely and accurately reflect the values and sentiments of Pacific people whose lives and livelihoods are directly dependent on the oceans, as well as the intentions or motivations of those who directly and indirectly impact the use of the ocean resources. Understanding their respective values and internalising positive and negative externalities can in turn improve our decisions on real costs and benefits and reduce free-riders and conflicts. This in turn can allow greater transparency and new opportunities to be forged through mutually beneficial partnerships and alliances that ensure sustainable resource use and management.

Realising opportunities, however, is hindered by several constraints. For example, effective resource use and management requires comprehensive recognition of both the value of goods and services provided by the ocean and of the costs when making decisions on their use. The common tool used by economic policy makers is the cost and benefit analysis. Methods of valuing, the purpose and the processes associated with imputing values to non-monetary goods and services are normative in nature and therefore present new challenges as

each method will give a different result. For example, how to fairly reflect the real value of subsistence production and self-reliant systems of livelihoods, or the costs associated with threats to such systems? Furthermore, how will such information be interpreted to inform policy decisions? A good example of this is the women's fisheries sector that is largely informal in nature. Studies already show its critical role in supporting household food and nutritional security in many coastal communities of the Pacific Islands.¹

By the same token, given that a large part of the Pacific Ocean's natural resources such as those in the deep ocean, sea bed areas and the water column, which present as new scientific frontiers, will have a much higher value as 'options' to use in the future; or alternatively have higher intrinsic value, relative to more immediate use value. The commodification of values can easily result in underestimating the intrinsic value of the ocean in its natural state, given the often limited knowledge and access to scientific evidence and understanding among policymakers.

Secondly, many decisions regarding resource use and management or environmental problems have very long time horizons and pose intergenerational problems. For example, the compensatory 'benefits' of storing toxic waste may be enjoyed by the present generation, but costs are borne by future generations. Costs and benefits occur at different points in time. For example, spending money to reduce CO₂ emissions today would see benefits flow from the action only decades or centuries in the future. How will we evaluate inter-temporal mixtures of costs and benefits? Economic policy makers often write a future cost or benefit as an equivalent current cost or benefit using a discount factor. Using a social discount rate on public projects itself is subject to debate and value judgments that involve ethical considerations. People view the distant future

differently than the near future. Given that the value of many environmental goods and services are intangible in nature and therefore difficult to quantify, long term benefits are more likely to be omitted from an analysis than the cost of projects. For example, the destruction of mangrove habitats which are prime fishing grounds for women who supply the majority of invertebrate fisheries for domestic consumption and which provide coastal protection from storm surges, must give way to coastal development projects. Likewise, environmental damage such as accumulation of pollution and loss of biodiversity are difficult to include in a cost/benefit analysis. Therefore, loss of livelihoods is either poorly reflected or not even considered in any compensation claims by fisherwomen and households.

■ Concluding comments

The Pacific Ocean is today being seen by developed and industrialising countries as a geographical area of extreme interest, both economically and strategically. The Blue Economy narrative has been useful in accelerating ocean industrial activities and advancing new agendas. Given the dominance of the sectoral approach, outdated environmental legislation and safeguards and limited structural and institutional support, there is a danger of exploitative forms of industrial development being undertaken with irreversible consequences.

With pressure from international corporations, foreign agencies and institutions, the Blue Economy concept has triggered a new research agenda that requires good leadership, institutional support and innovative ideas. The challenge is for Pacific Island Countries to set this agenda on how they value their future and that of others. Two facts to keep in mind are that policy decisions often are a matter of trade-offs. Finding the balance is key to where no one is made worse off from an intra and intergenerational equity

perspective. Secondly, economic arguments such as those supported by advocates of slow climate change action suggest that with technological advancement and economic growth, future generations will be better off than the current generation to take accelerated action.² However, such classical arguments do not hold in the case of natural resources which can easily be endangered or become exhausted. A precautionary approach should be applied in any rush to cash in early, as this may be at the expense of future generations not only in Pacific Island Countries but the entire global community. Given their vulnerability as small island economies, there will be limited, if any, fall back or alternative growth paths for Pacific Island people who thus far have survived the many global pressures through being modest and resilient. ■

■ Bibliography

Malielegaoi, T. L. S. (2017). 'Our Values and Identity as Stewards of the World's largest Ocean Continent' *The Blue Pacific' High Level Pacific Regional Side Event by PIFS*, United Nations Ocean Conference, New York: U.N Headquarters. [\[Online\]](#)

World Bank & United Nations Department of Economic and Social Affairs. (2017). *The Potential of the Blue Economy: increasing long term benefits of the sustainable use of marine resources for small island developing states and coastal least developed countries*, Washington D.C: World Bank.

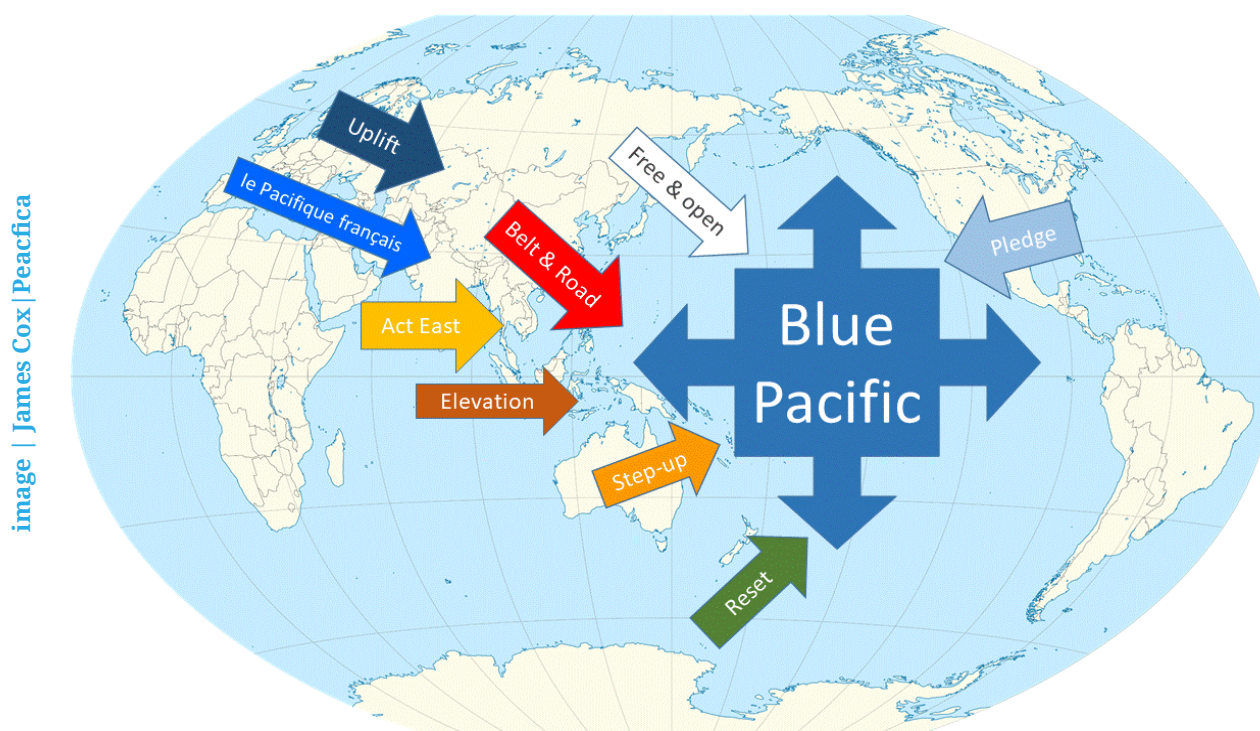
■ Notes

1- For example, see studies cited in: Ram-Bidesi, V. 2015. *Recognising the role of women in supporting marine stewardship in the Pacific Islands*, *Marine Policy*, 59 (1-8) and Barclay, K., Leduc, B., Mangubhai, S. & Donato-Hunt, C. (eds.). *Pacific Handbook for gender equity and social inclusion in coastal fisheries and aquaculture*, Pacific Community, SPC, Noumea, N.C.

2- For example, see Nordhaus, W. 2007. *A Review of the Stern Review on the Economics of Climate Change*. *Journal of Economic Literature*, 45:686-702; for arguments on using a higher discount rate. In addition, basic economic theory of technological progress suggests that as technology improves, cost of production goes down and economic growth improves over time, thus cost of climate action could be relatively less compared to ramped up action now.

Reading Blue Economy narratives in the Pacific: commitments, ambitions, challenges

by Samantha Magick



The Blue Economy and its twin descriptor, the Blue Pacific identity, are increasingly frequent, if inconsistently applied and understood, features of the narratives being created and reinforced in Pacific Island regional negotiations, speeches and communiques.

Silver et al. (2015) highlighted the four ocean-centred conceptualisations of Blue Economy that emerged at the Rio+20 Earth Summit: oceans as natural capital; oceans as good business; oceans as integral to Pacific Small Island Developing States (SIDS); and oceans as small-scale fisheries, i.e. a means to poverty alleviation and food security.

Pacific commitments and ambitions

The Pacific region is now grappling with questions as to how, indeed if, these varying Blue Economy descriptions can be reconciled for the good of Pacific peoples, as they are broad enough to create space for the inclusion of often under or unrepresented communities and individuals, but also confusion, conflict and a danger of 'blue-washing'.

Pacific Island delegates amongst the reported 18,000 attendees at the Sustainable Blue Economy Conference in Kenya in November 2018 made several commitments under the

Blue Economy banner. Cook Islands pledged to have 100% renewable energy by 2020, Palau to protect 80% of its Exclusive Economic Zone from fishing (allowing only local fishing operations), Tuvalu to improve its ocean fisheries certification system, and Solomon Islands to improve product storage and sanitation conditions in fish markets.

For the Pacific Islands Forum (PIF), the political organisation of independent Pacific Island States, the Blue Economy is inextricably bound to the Blue Pacific identity it has championed since 2017; that is, Pacific island peoples working together at all levels to determine their own development agenda.

As PIF Secretary-General, Dame Meg Taylor (2018), put it:

“The Blue Pacific narrative helps us to understand, in and on our own terms, based on our unique customary values and principles, the strategic value of our region. It guides our political conversations towards ensuring we have a strong and collective voice, a regional position and action, on issues vital to our development as a region and as the Blue Pacific continent,”

For the Forum Secretariat, the most urgent precondition for realising the Blue Pacific continent – and by extension the benefits of the Blue Economy – is to secure maritime boundaries in the face of sea-level rise as a consequence of climate change and the competing strategic and political interests of outside powers.

When Dame Meg Taylor presented at the Griffith University Asia Lecture in Brisbane in 2019, she shared a graphic developed by Peacifica, a peacebuilding NGO, which showed an array of arrows all pointed at the Pacific and bearing monikers such as Step-up (from Australia), Belt and Road (China), Uplift (UK), Elevation (Indonesia), Pledge (U.S.) and Reset (New Zealand). She said while these initiatives may benefit individual Forum members, those

members need to work together to ensure regional solidarity is not undermined.

Other regional organisations also draw connections between the Blue Economy, the Blue Pacific Identity and the issue of addressing climate change. The Pacific Community (Driver, 2018) has said in order to ensure the Blue Economy is not merely a slogan ‘from the page and the conference hall’ it must prompt action on climate change, oceans and biodiversity to guarantee sustainability.

A revised version of the Peacifica map showing international interest in the region could include other ocean currents exerting pressures, or offering opportunities, to Pacific island nations: International Finance Institutions (IFIs), international organisations such as the Food and Agriculture Organisation and global conservation and environmental groups.

IFIs have played a critical role in driving the Blue Economy agenda. For example, the Asian Development Bank’s Action Plan for Healthy Oceans and Sustainable Blue Economies focuses on sustainable fisheries and tourism, supporting coastal and marine ecosystems and rivers, reducing land-based sources of marine pollution and improving sustainability in coastal and port infrastructure development. The ADB will also pilot (in southeast Asia) an Oceans Financing Initiative to leverage public sector funds to attract financing and promote the use of credit-enhanced blue bonds and other financial mechanisms.

Oceans financing is immensely attractive to Pacific island governments and countries are building their negotiating muscle in this area through their experiences in accessing climate finance. Fiji’s government has signalled it will look into the issuance of blue bonds to tap into capital markets to fund ocean-related development projects. Meanwhile

Fiji, Marshall Islands, Samoa, Vanuatu, the Solomon Islands and Tuvalu have announced a Pacific Blue Shipping Partnership to raise \$500 million to make shipping in the Pacific Ocean fully de-carbonised by 2050. The partnership will look to raise funds through multinational institutions, concessional loans, direct private sector investment and the issuance of blue bonds.

While Pacific Island nations and the organisations that represent them see the Blue Economy as a means to more equitable development, the sheer diversity of economic activities it could entail, and how they enhance or undermine the ocean as natural capital and a source of livelihoods could equally become sources of competition and conflict.

The South Pacific Regional Environment Programme (SPREP) notes that ‘activities that erode natural capital through degradation of ecosystem services are inherently not sustainable and not ‘blue’ (SPREP, 2017). It says Deep-sea mining (DSM) is ‘on the horizon’, and that DSM investors have an opportunity to create a socially responsible extractive industry, while minimising its environmental impact to the greatest extent possible. Membership organisations like SPREP are mandated to reflect the views of their members, and on issues such as Deep-sea mining, those views diverge considerably.

Similarly the Pacific Islands Development Forum (PIDF) says of Deep-sea mining: ‘additional research is needed to better understand the economic, social and environmental costs and the benefits and their distribution. Participatory marine spatial planning and the full engagement of affected communities in the decision-making process are required’.

One example of the murkiness of competing perceptions, definitions and interests in the conceptualisation of the Blue Economy can

be seen in the Phoenix Islands Protected Area (PIPA). First established in 2006, it is cited as the ‘world’s first large, truly deep water, mid-ocean marine protected area’. Covering 408,250 square kilometres, it has been positioned as a source of tourism and fisheries (e.g. catch and release) development and employment. The Kiribati government (2009) has also specifically stated that it wants to ‘keep the option of ocean mining operations open’ in the PIPA.

Long positioned as a world leader on climate change, former Kiribati President Anote Tong described PIPA as ‘our gift to humanity and contribution to international efforts to significantly reduce biodiversity loss by 2010. It is a very loud statement at the height of the climate change debate to say that indeed sacrifices can be made if there is will and commitment’ (IUCN, 2010).

Marine scientist Greg Stone was another instrumental figure in the establishment of the PIPA. Stone joined forces with Tong after his first trip to the Phoenix Islands as leader of a scientific expedition on behalf of the National Geographic Society, describing what he saw there as the ‘holy grail of the ocean’, ‘the last coral wilderness on earth’ and an ‘underwater Eden’ (Stone & Obura, 2012).

Stone’s roles have included Executive Vice President and Chief Ocean Scientist at Conservation International and senior vice president at the New England Aquarium. While still at Conservation International he stated ‘the next frontier for mining is going to be in the ocean’ (The Economist, 2017).

He is now Chief Ocean Scientist and Board member of DeepGreen, a Canadian company “on track to become a leading producer of base and strategic metals obtained from vast high-grade seafloor polymetallic nodule deposits containing nickel, manganese, copper and cobalt” (DeepGreen, 2018).

In September 2018 DeepGreen announced its participation in The Ocean Cleanup to remove plastics from the Great Pacific Garbage Patch using the Maersk Launcher to ‘launch the plastics clean-up project’ in San Francisco Bay. In the longer term, DeepGreen says this vessel will be used for ‘survey and scientific work on the deep-ocean floor to recover polymetallic nodules that contain a rich supply of cobalt, copper, nickel and manganese’ (DeepGreen Metals Inc., 2018). This work will occur through DeepGreen subsidiary Nauru Ocean Resource Inc (NORI), which is incorporated in another Pacific island nation, Nauru.

■ Conclusion

Adherents to the Blue Economy framing of development opportunities posit that blue growth can create ‘triple-benefit’ solutions, where coastal communities, the environment and investors all benefit.

While the legal and other intricacies of Deep-sea mining exploration in the Pacific are covered elsewhere in this issue of **DAWN Informs**, in a political, strategic and economic environment where there is so much at stake for Pacific peoples there must be opportunities for them to have a genuine say in what shape the Blue Economy will take, to ensure the survival/thriving of their communities and livelihoods and the health

of the ocean which has historically sustained and defined them. ■

■ Bibliography

- DeepGreen. (2018). *Mines & Money Conference: DeepGreen CEO Outlines Future of Deep Ocean Metals* [Online]
- DeepGreen Metals Inc. (2018). *DeepGreen Lends Vessel To Support Historic Ocean Plastic Cleanup* [Online]
- Driver, C. (2018). ‘The Blue Economy for the Blue Planet’ *Inter Press Service News Agency* [Online]
- IUCN. (2010). *Kiribati Celebrates World Heritage Listing* [Online]
- Republic of Kiribati. (2009). *Phoenix Islands Protected Area Management Plan, 2010-2014* [Online]
- Silver, J., Gray, N., Campbell, L., Fairbanks, L. & Gruby, R. (2015). ‘Blue Economy and Competing Discourses in International Oceans Governance’ *The Journal of Environment & Development*, 24(2), pp 135-160.
- SPREP. (2017). *Valuing the Ocean: Pacific Blue Economy* [Online]
- Stone, G. S. & Obura, D (eds) (2012). *Underwater Eden: Saving the Last Coral Wilderness on Earth*. Chicago: University of Chicago Press
- Taylor, M. (2018). ‘Introductory Remarks’ *Opening of Research Week by the Honourable Tuilaepa Lufesolai Neioti Aiono Dr. Sa’ilele Malielegaoi, Prime Minister of the Independent State of Samoa*, Suva: University of the South Pacific [Online]
- The Economist. (2017). *The deep ocean is the final frontier on planet Earth*. [Online]

photo | Mereoni Chung



Preconditions for a Blue Economy

by Hugh Govan

photo | Aaron Ulsh from Pexels



■ This time it's Blue!

The term Blue Economy has become increasingly used over the past decade, despite its lack of definition, with a multitude of agents and agencies finding the term acceptable to frame their 'economy' strategies, regardless of the hue. There are also many skeptics, given the long succession of let-downs since the 1980s such as when a similarly attractive term, sustainable development, was coined and supposed to meet economic, social and environmental objectives but in practice mainly focused on the economic at the expense of the environmental.

Developed and developing economies are now eyeing the oceans. Having explored the limits of 'sustainable' development on

land, there is a clear appetite by the private sector and some governments to pursue development of the ocean. People are supposed to be reassured by the inclusion of wording on environmental management, social and cultural issues and equity (always after hard civil society lobbying) in the international declarations and conference pronouncements. Sound familiar?

■ Blue peril

Over the past fifty years there has been a rapid and even exponential growth in a wide variety of ocean industries in a phenomenon recently dubbed Blue acceleration. These industries have joined their land-based brethren in negatively impacting the ocean despite the emergence, over approximately the same time period, of evermore

sophisticated global and national legal instruments for environmental protection.

The world's oceans are in serious decline. Not just directly because of what industries take out, such as over-fishing, or what they put in, such as pollution, but indirectly, because of the fundamental link between (over) industrialisation and climate change. The effects of human-induced climate change on the oceans, some of which have only recently begun to be understood, include warming, acidification and oxygen depletion. These drive impacts such as more intense storms, reduced coastal protection and carbon uptake, loss of key habitats such as coral reefs, decreased fisheries, sea level rise and inundation of coastal areas.

■ **Coping with the blues**

While the solutions to the direct industrial impacts on the ocean are self-evident though not simple, it has taken some time for consensus to emerge on what can best be done about the indirect industrial effects on the ocean of climate change. In this respect, the 2018 The Intergovernmental Panel on Climate Change (IPCC) report suggests win-win solutions. While the first priority is bringing emissions under control, the most feasible and cost-effective responses, ready for implementation, turn out to be actions which not only mitigate or adapt to climate change but are already required to address the impacts of 'development'. At the top of the list are reducing coastal and ocean pollution, restoration of coastal habitats and eliminating over-exploitation of marine resources. But none of these urgently required responses and solutions are novel. Not only are they ready for implementation, some progress and investment have already been made. But unfortunately, not at the scale that the vastness of the oceans of our Blue Planet requires. However, at least enough to know what works and what doesn't. For a species

that depends on a healthy ocean for its very existence it is incredulous that ever-increasing industrialisation of the ocean could be contemplated, without securing its health and the very resources that the new and Blue Economy is to be built on.

“The time has come for a moratorium on all further plans to industrialise the world's oceans until evidence-based strategies to address the decline have resulted in measurable reversals in ocean decline, across multiple sectors and geographies.”

This will be controversial for many reasons. Measuring a healthier ocean is possible and merits more investment. This however does not equate with commonly used proxies, such as numbers of projects, amounts of international development aid, and/or percentages of ocean space defined on paper as protected. The monolithic objection, of course, will be from the (vested) interests of industry arguing that globally, livelihoods and well-being depends on continued economic development and profits – though recent events may fuel robust questioning of this paradigm. There are other Blue alternatives that may be illustrated by the example of the fisheries sector.

■ **Fisheries and the Blue Economy**

Fisheries contribute more than US\$270 billion to global GDP. Fisheries are a key source of economic and food security, providing livelihoods for the 300 million people involved in the sector and helping meet the nutritional needs of 3 billion people who rely on fish as an important source of animal protein. But the proportion of fisheries that are fully fished, overfished, depleted, or recovering from overfishing increased from over 60% in the mid-1970s to almost 90% in 2013. For economists this is grave news, as it



is estimated that global marine fisheries are incurring an annual loss of approximately US\$83 billion in 2012 prices due to ineffective governance.

The answer is a win-win, wherein fisheries reforms leading to appropriate management could restore fisheries and, according to major studies, nearly triple the biomass of fish in the ocean, increase annual harvests and unit fish prices, and increase the annual net benefits to the fisheries sector by a factor of 30. These metrics get better, given that the estimated costs of fisheries reforms are far outweighed by their benefits, in some cases by up to ten times. The strongest and most costly reforms, such as rights-based management, can lead to the greatest net economic benefits.

The Pacific Islands have led the way in successfully proving the benefits of this approach in the extremely valuable skipjack tuna fishery. Through creative reforms and use of UN allocated rights over migratory stocks, eight island countries, the eight Parties to the Nauru Agreement (PNA), have been able to increase the proportion

of benefits accruing from access fees more than fivefold. This has contributed up to 75% of government revenue in some countries, while the increased control afforded allows them to ensure the stocks remain healthy. Significantly, this move has not been popular with many Distant Water Fishing Nations or development partners.

What are the key barriers to such reforms? Political will and effective governance are vital for improving legal and rights regimes and dealing with fisheries crime, corruption and illegal, unreported and unregulated fishing.

Where to from here – it's not colourful?

The risks involved in increased industrialisation of the oceans do not seem worth taking until we have a handle on restoring the existing damage and ensuring current activities are sustainable. But there is much scope for improving not only the sustainability but also the profitability of many existing ocean 'industries'. Furthermore, it

seems that investing in sustainability will pay off handsomely. So, what is and why the hitch?

Just as reformed rights regimes resulted in huge gains for Pacific Islands tuna fisheries, securing or enhancing small-scale fishers' rights is increasingly accepted as the best way to secure the health of coastal resources as well as that of fish dependent communities. These examples offer glimpses of where the real obstacles may lie. Just as strengthening the rights of fish dependent nations or communities reduces the assumed rights of industrial fishers, more equitable distribution of the benefits provided by our oceans affects the allocations of those currently benefitting.

The evidence available of humans' mismanagement of the planet is now overwhelming. Other events of recent months illustrate amply the need to reexamine what we invest in and the things we should value. Can we use this to reboot or reset political will in the real interests of all humankind? The need is greater than ever.

Political will should be directed first to design, invest in and implement effective strategies that measurably recover and secure the functioning of ocean services. In this respect not just for humans but also for the planet itself. Governance reforms should target win-wins whereby increased sustainability of existing ocean industries afford increased benefits that are also more fairly distributed. The subject of equity will have to become central to the debate, including across humanity and across generations. Discussion on equity will need to encompass ocean dependent island states and powerful ocean oblivious states, north and south, to be socially inclusive (gender, class, race) and value those whose relationship with the ocean affords them the status of stewards.

Only on the basis of this successful track record should new Blue economic 'sustainable

development' opportunities be seriously contemplated. ■

■ Bibliography

CEA. (2015). *Ocean Prosperity Roadmap: Fisheries and Beyond. A Synthesis Report on the Economic and Biological Upside of Fisheries Reform to Unlock the Value of the Ocean* [\[Online\]](#)

FFA/SPC. (2019). *Tuna fisheries report card*. Forum Fisheries Agency/The Pacific Community [\[Online\]](#)

Govan, H. (2017). 'Ocean Governance – Our Sea of Islands', in Katafono, R. (eds) *A Sustainable Future for Small States: Pacific 2050*. London: Commonwealth Secretariat. ISBN (paperback): 978-1-84929-163-7 / (e-book): 978-1-84859-957-4 [\[Online\]](#)

IPCC. (2018). *Global Warming of 1.5°C. An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty*. Geneva: World Meteorological Organization, pp 32.

Jouffray, J.B., Blasiak, R., Norström, A.V., Österblom, H. & Nyström, M. (2020). 'The Blue Acceleration: The Trajectory of Human Expansion into the Ocean' *One Earth*, 2(1), pp 43-54.

Mangin, T., Costello, C., Anderson, J., Arnason, R., Elliott, M., Gaines, S.D., Hilborn, R., Peterson, E. and Sumaila, R. (2018). 'Are fishery management upgrades worth the cost?' *PloS one*, 13(9).

Silver, J. J., Gray, N. J., Campbell, L. M., Fairbanks, L. W. & Gruby, R. L. (2015). 'Blue Economy and Competing Discourses in International Oceans Governance' *The Journal of Environment & Development*, 24, pp 135-160.

Voyer, M., Quirk, G., McIlgorm, A. & Azmi, K. (2018). 'Shades of blue: what do competing interpretations of the Blue Economy mean for oceans governance?' *Journal of Environmental Policy & Planning*, 20(5), pp 595-616 .

World Bank. (2017). 'The Sunken Billions Revisited: Progress and Challenges in Global Marine Fisheries' *Environment and Development*. Washington, DC: World Bank Publications [\[Online\]](#)

World Bank; Food and Agriculture Organization. (2009). 'The Sunken Billions: The Economic Justification for Fisheries Reform' *Agriculture and Rural Development*. Washington DC: World Bank Publications [\[Online\]](#)

Blue Economy: poem

by Tyler Rae-Chung

She lies in front of us,
Opening her eyes so we may see the sunrise,
On the land you and I now call mine.
She lies in front of us,
Opening her mouth,
Breathing life to all creatures around.
Yes, she lies in front of us,
Opening her body,
Gifting us with her mana,
Like overflowing liquid of blue gold
Birthing a blue earth of island jewels
Where our ancestors
Sailed to find home.
Yes, there she lies in front of us,
Caressing our bodies her liquid feeding and flowing
Through us and around us.
Her currents excite us.
Her changing tides ignite us.
Bringing new waves filled with energy
She is filled with so much mana
Yet we under-estimate our wai-tui.
Her flowing currents bring up micro-organisms
From the depths of the ocean
Creating a motion of nutrients
Feeding our fish of the deep sea
All the way to our coral reefs,
Where our women in fisheries now go out to chest deep
All because of global warming.
Look! Our sea levels rising
Taking responsibility to catch fish to feed their mataqali
Breaking our hearts completely
To see plastic pollution flowing in you so freely
One day suffocating you and me
Creating a plastic human biology
In a society already filled with plastic policies
Who give no apologies for violating your spirit
With their so-called new sustainable technologies
How dare they!
How dare they surf your waves on massive polluted vessels
We don't see every day,
It's not okay.
Our Pacific Ocean is not for play
Not for you to bring your toys into the BBNJ
And rape her purity away
Leaving her and her people
Dying silently.
What a monstrosity it would be to extract minerals

From areas connected to our seas, only to heal the rich
And have our Pacific peoples die out and bleed,
Never mind it came from our seas
And you call yourselves stewards of the sea?
What a hypocrisy!
Now, there she lies tears of toxicity
Screaming waves so violently
Destroying our islands
Her body has been violated
Because we stood there silently
No sun rising as she opens her eyes
No breath of life,
mouth dead open wide.
No body to gift our children's children with
Her mana,
Soon we will be called the dead Pacific sea
All because we weren't strong enough to stand up
To our own societies.
It's time to unite
Our Pacific oceans and gain some clarity
To be better stewards of these big ocean states
To bring justice to our wai-tui that has connected you to me
And me to you
In a kinship so strong
Let's not be silent
As she bleeds out for you and me.



photo | Mereoni Chung | Timor Leste Beach

Intersecting interests in Deep-sea mining: Pacific SIDS, venture capital companies and institutional actors

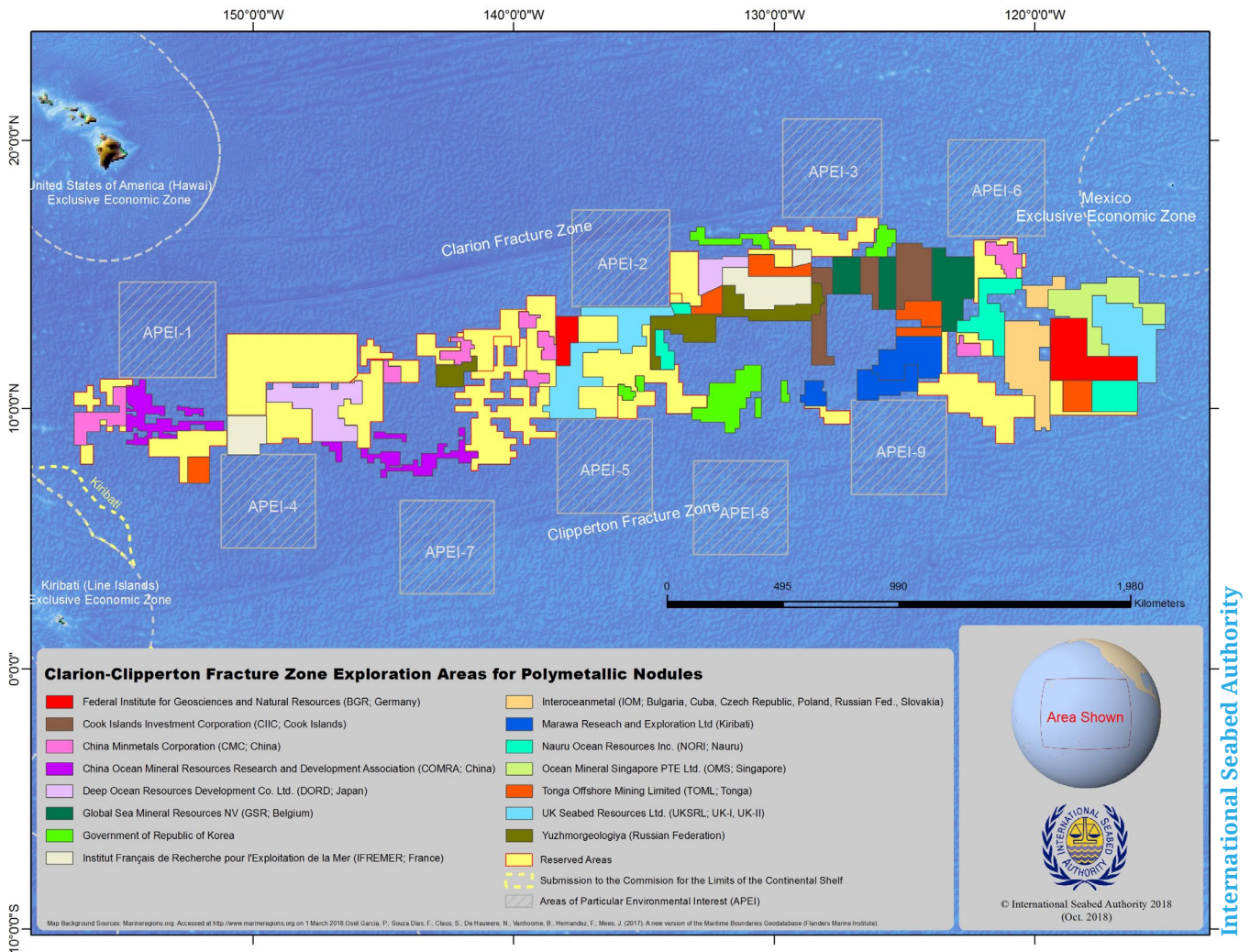
by Claire Slatter



Introduction

Blue Economy/blue wealth/blue growth narratives have lent themselves to the promotion of risky experimental seabed mining, even among Pacific Island States whose Oceanic peoples have deep cosmological and spiritual connections with the Pacific Ocean. While Pacific Island States collectively assert themselves as Large Ocean States and claim custodianship over ‘our ocean’, a handful of them see little contradiction in simultaneously harboring seabed mining ambitions. That they have been encouraged in these ambitions by two closely connected Australian-led but Canada-based venture capital start ups, registered as mining companies and busily engaged

in raising investment capital to support an expected highly profitable, quick-return seabed mining venture, is clear. This seeming opportunity for a change in fortunes of a few small island Pacific states, typically considered ‘resource poor’ by the World Bank, the IMF and the Asian Development Bank but viewed anew through blue-tinted glasses as ‘resource-rich Large Ocean States’, is fraught with risks. With more than 300 exploration licenses for deep sea minerals already granted across the Pacific,¹ and an international mining code close to being adopted by the International Seabed Authority (ISA) to clear the way for mining to commence in areas of the deepsea beyond national jurisdiction, it is timely to examine the intersecting interests of state, corporate, regional and international



institutional actors that have been involved in advancing the controversial ‘blue washed’ seabed mining agenda in the Pacific region.

A tale of two venture capital companies and a handful of PSIDS

Despite Papua New Guinea’s woeful experience with extractive industries, the PNG government leapt into a joint venture with Canadian based Nautilus Minerals Inc., granting it a license in January 2011 to mine metal deposits within its EEZ at hydrothermal vents on the seafloor, 1600 metres below the surface of the Bismarck Sea. The licence was reportedly issued before PNG had adopted national legislation to regulate Deep-sea mining, and without sufficient assessment of possible environmental impacts or satisfactory consultation with potentially

impacted communities (Davidson & Doherty, 2017). Nautilus’ agreement with PNG was nonetheless welcomed at the time by Michael Lodge of the International Seabed Authority (ISA), who said it was ‘an exciting opportunity that should give valuable insights into the technical feasibility and environmental impact of Deep-sea mining’ (Shukman, 2014).

Nautilus was described by the World Bank as the ‘dominant commercial player in seabed minerals exploration and development in the Pacific’, mostly because it was sitting on ‘approximately 423,000 km² of exploration tenements (either under application or awarded) in Fiji, New Zealand, PNG, the Solomon Islands, Tonga and Vanuatu, as well as in the Clarion Clipperton Fracture Zone (CCFZ), a region of the Pacific Ocean’s deep seabed beyond national jurisdictions, via its subsidiary Tonga Offshore Mining Limited’

(World Bank, 2016). Actual mining by Nautilus was delayed by a dispute over PNG's expected investment in the venture, suggesting that the company was struggling to raise the needed funds to start.²

PNG was luckily spared the environmental impacts of the project by Nautilus going into administration before mining started, but it was a close shave. Aside from the possibility of causing untold destruction of deepsea ecosystems within PNG's own territorial boundaries, the project might well have caused transboundary harm, exposing the PNG state to legal liability for damages. The Nautilus debacle cost PNG 153 million Australian dollars.³

There is a risk of the project resuming if Nautilus sells its PNG licenses. However, interest and attention within the Deep-sea mining sector has shifted away from mining sulphides in deepsea hydrothermal vents (by now scientifically understood to be 'a major force in ocean ecosystems, marine life and global climate')⁴ to mining polymetallic nodules lying on the surface of the seafloor instead.

DeepGreen Metals Inc., formed in 2011, is the first mover among 'the polymetallic nodule miners' (Thaler, 2019)⁵ leading the charge for the commencement of mining in the CCFZ where it was reported to control 'a gigantic nickel-copper deposit'. Like Nautilus, DeepGreen is not only actively mustering financial support from would-be investors, the company enjoys similarly strong endorsement from ISA.⁶ Nautilus and DeepGreen also share genealogy as well as rapacious Deep-sea mining interests. The founder of DeepGreen, Australian geologist David Heydon was CEO of Nautilus from 2001 until 2008, when he left to pursue a stronger interest in mining in the CCFZ. Heydon founded DeepGreen Resources in 2011 and is Deputy Chair of the company. DeepGreen's CEO and Chair,

Gerard Barron, also an Australian and a friend of David Heydon, is a self-described 'active investor' with a record of successfully establishing, growing and selling start ups.⁷ An early investor in Nautilus, he had helped David Heydon secure part of the \$400 million that Nautilus had managed to raise by 2007, after going public.⁸ Other leading figures in DeepGreen's team either previously worked with Nautilus or have prior work experience in the Pacific Islands directly related to advancing Deep-sea mining.⁹ Just as PNG gave Nautilus an open door to commence experimental Deep-sea mining in 2011, another Pacific Island State – Nauru – enabled DeepGreen in the same year to secure its first exploration contract in the CCFZ.

The ISA, PSIDS and sponsorship of exploration contracts in the CCFZ

An intergovernmental oceans governance body of 168 member states, established in 1982 under the UN Convention on the Law of the Sea (UNCLOS), the ISA came into existence when UNCLOS came into force in 1994. Its mandated responsibilities are to 'organise, regulate and control all mineral-related activities in... 'the Area', or the international seabed lying beyond the exclusive economic zones (EEZs)' (Schmidt, 2015), which is considered under UNCLOS the 'common heritage of mankind'. ISA considers and approves applications for contracts from companies, provided they are sponsored by states, to explore or exploit minerals in the Area. As at December 2018 the ISA had approved 29 exploration contracts, 17 for polymetallic nodules (PMNs) in the CCFZ (Thompson, Miller, Currie et al., 2018). Once the ISA's Mining Code has been adopted, which is scheduled to occur in December 2020, the ISA will consider applications and approve contracts from state-sponsored companies to exploit deepsea minerals. Pacific Island States identify strongly with

UNCLOS, through which small island states and coastal states gained exclusive sovereign rights over areas of sea/ocean within a radius of 200-miles from their shorelines (the 200 nautical mile Exclusive Economic Zones or EEZs). This was due in no small part to the key role played by the late Satya Nandan, Fiji's first representative to the UN in the early 1970s who led the complex negotiations on UNCLOS including the agreement on the EEZs. The relationship of Pacific Island States with the ISA is largely one of trust, influenced by the facts that Satya Nandan held the position of ISA Secretary General for 12 years until 2008; others within the ISA Secretariat, including current ISA Secretary General, Michael Lodge¹⁰ and Dr Russell Howorth,¹¹ spent years working in the Pacific and are believed to have Pacific Island interests at heart; and UNCLOS also is mandated to ensure equitable sharing of the benefits deriving from mineral related activities in the Area among states, with special consideration for SIDS and Landlocked and Least Developed States.

In all, four Pacific Island States – Nauru (in 2011), Tonga (in 2012), Kiribati (in 2015) and Cook Islands (in 2016) – have become 'sponsoring states' of Deep-sea mining companies in their applications for exploration contracts from the ISA to probe sections of the mineral-rich CCFZ, a six million square metre Area beyond national jurisdiction in the Eastern Pacific Ocean, for polymetallic nodules (PMN). Two of them did so for DeepGreen – Nauru, through Nauru Ocean Resources Ltd (NORI), a wholly owned subsidiary of DeepGreen; and Kiribati, through a fully state-owned company, Marawa Research and Exploration Inc. According to the World Bank, the ISA applications of both Nauru and Kiribati were prepared and funded by DeepGreen in return for offtake agreements.¹² Tonga had sponsored Nautilus through Tonga Offshore Mining Ltd (TOML), a wholly owned subsidiary of Nautilus. In early April 2020, DeepGreen was in the final

process of acquiring Tonga Offshore Mining Ltd (TOML) from Deep Sea Mining Finance, which is overseeing Nautilus' restructure',¹³ which will add a third contract in the CCFZ to its belt.

Becoming sponsoring states is a high-risk undertaking. Under UNCLOS it is sponsoring states that carry legal liability for environmental damage resulting from mining activity in the CCFZ, not contractors, nor even the ISA which approves applications and issues contracts. Pacific Island States may consider themselves adequately protected by their adoption of national laws and a regional framework to regulate seabed mining, both of which resulted from an SPC-EU Pacific Islands Deepsea Minerals Project. The regional regulatory framework was spruiked as a global model but was critiqued by Blue Ocean Law and the Pacific Network on Globalisation (PANG) for ignoring both the 'precautionary principle' and the principle of 'free prior and informed consent'.¹⁴ See article by James Sloan (**DAWN Informs**, this issue) for more on these legislative frameworks.

ISA has shown keen support for the seabed mining plans of DeepGreen in partnership with Nauru and Kiribati, openly joining DeepGreen in promotional events on Deep-sea mining. Michael Lodge, who became Secretary General of ISA in January 2017, told the Hamburg Business Club on 28 September 2018 that it had been 'a long and arduous road to turn the promise of seabed mining into commercial reality' and that 'the contribution of deep seabed mining towards increased long-term demand for minerals must be part of the overall vision for a sustainable world' (ISA, 2018).¹⁵ In February 2019, Gerard Barron had a seat at the table of the intergovernmental ISA Council as a member of the Nauru delegation. Addressing the Council, Barron highlighted Nauru's pioneering role as the first developing state partnering with a corporation to 'help accomplish UNCLOS' vision of sharing

benefits with developing states arising from activities related to the mineral resources in the Area', and presented DeepGreen's new sales pitch for seabed mining as the magic bullet to tackle the global climate crisis (Barron, 2019).

DeepGreen's new argument for the urgency of Deep-sea mining

Nautilus Minerals' Deep-sea mining ambitions were motivated by nothing more than the prospect of windfall profits. While still CEO of Nautilus, David Heydon expressed single minded interest in the wealth to be gained from mining the seabed, countering critics who doubted the extent and quality of seafloor deposits in the Solwara 1 site by saying some deposits were '19 meters deep'—enough to be 'economically viable' (Forbes, 2007). Heydon told the Prospectors and Developers Association of Canada conference in Toronto in March 2011, of DeepGreen's plan 'to mine a whopping 60,000 tonnes of nickel and 50,000 tonnes of copper a year over a mine life of more than 30 years,' and of the deposit *resting 4,500 metres below the surface*, and being 'far bigger than even the mighty Voisey's Bay mine in Labrador' (Koven, 2011; emphasis added). For Heydon, the plan was always unambiguously to penetrate deep below the seabed to extract metals.

Only later, did DeepGreen begin claiming that it had developed technology to safely mine the seabed for polymetallic nodules (PMNs) where machines would delicately pick the PMNs off the seafloor where they lie like potatoes waiting to be harvested, with minimum disturbance. Later still, evidently in response to increased published research on deep-sea ecosystems and calls for a moratorium on seabed mining, the company began its clever, albeit disingenuous, sales pitch of PMNs holding the solution to the global climate crisis. Describing PMNs – which contain

cobalt, copper, nickel and manganese – as 'a battery in a rock' that will help the world transition from fossil fuels to renewable energy by supplying the base metals needed for electric car batteries, windmills, cell phones etc, Barron said DeepGreen was 'on a quest for a more sustainable future' (The Government of the Republic of Nauru, 2018).¹⁶ At the ISA Council meeting, he said DeepGreen was not a mining company, but a 'transition business', that aimed to 'keep... the ocean chapter of metal production as short as it takes to transition away from fossil fuels and avoid the catastrophic impacts of climate change' (Barron, 2019). This was the 'global public good' DeepGreen hoped to create.¹⁷

'Our vision is a zero-carbon, circular economy. To get there, we will source metals with the least environmental and societal impact, then move to metal recycling'

[\(https://deep.green/journey/\)](https://deep.green/journey/)

Challenges to the DSM narratives and the ISA

DeepGreen's noble self-image is strongly challenged by critics of the company. The minerals on the seabed that DeepGreen proposes to mine are reportedly worth trillions of dollars and the investment in DSM is expected to return massive profits, only a portion of which will be paid to the ISA for equitable distribution among member states.

In its 2019 critical analysis of seabed mining, titled *'Why the Rush? Seabed Mining in the Pacific Ocean'*, published before Nautilus went into receivership, Deepsea Mining Campaign cast doubt on whether either of the companies would do any actual mining apart from 'mining' investment capital, suggesting speculative profiteering behind both 'would-be mining companies' and some of their financial backers.¹⁸

Concern is also growing about ISA's imminent adoption of the Mining Code that is expected to clear the way for mining the deep seabed to commence. There is growing criticism of ISA's active promotion of seabed mining, ignoring concern by environmentalists and marine scientists over the very real risks of irreversible environmental damage to Deepsea ecosystems, which are insufficiently explored and understood.¹⁹ The ISA is also criticised for its heavy focus on 'facilitating exploitation rather than ensuring protection' (Thompson, Miller, Currie et al., 2018), for looking at *how* to mine, rather than *whether* to do so, and for its non-transparent processes – closed session meetings of its Legal and Technical Commissions, which are drafting the Mining Code, and 'by-invitation-only' workshops on policy (ibid). Last year, Deep-sea Mining Campaign accused the ISA of 'getting into bed with mining companies'.²⁰

■ Concluding comments

The story of the intersecting interests in seabed mining in the Pacific is a murky one in which a resource-rich Pacific Island state and a handful of resource-poor PSIDS have become entangled with profit-seeking venture capital companies, sharing ambitions of attaining wealth from the newest extraction industry – experimental mining for high value minerals in the deep seabed of the earth's last frontier, oceans. It is disingenuous for a seabed mining company to pose as a 'climate warrior' and propose high-risk seabed mining as the magic bullet to solve the climate crisis. If the climate crisis has taught us anything it is to stop messing with planetary systems. In the past year, a few Pacific Island States, led by Fiji and backed by PNG, have joined the call for a moratorium on Deep-sea mining. While the efforts of the SPC's Applied Geoscience and Technology Division in support of PSIDS staking claims in the CCFZ may be understood as coming from a genuine concern to see PSIDS get a fair share of the wealth realised

from mining seabed resources, there is a need for regional organisations to critically rethink and reposition themselves on the issue of Deep-sea mining, bearing in mind the future of the planet. Pacific Island States have admirably provided global leadership on climate change; it's especially incumbent on them, as Large Ocean States to now show leadership in defence of oceans, especially given the coming Decade of Ocean Science for Sustainable Development 2021-2030.

The role of ISA in supporting DeepGreen is concerning. As the international body with specific ocean governance responsibilities over the 'Area', the ISA needs to reinterpret its role in protecting the 'common heritage of mankind' in light of both the present planetary crisis of anthropogenic climate change, and what is now known (to a limited extent) of deepsea ecosystems and biodiversity, and hydrothermal vents and seeps which sequester carbons and moderate climate change.²¹ ISA should abandon its preoccupation with exploiting the resources of the seabed in the Area for a supposedly equitable sharing of the resulting monetary benefits and instead, informed by the precautionary principle, conserve the Area. At the very least, it should agree to a 20-year moratorium on Deep-sea mining in the Area. ■

■ Bibliography

Barron, G. (2019). 'Address to ISA Council' *ISA Council meeting* [\[Online\]](#)

Blue Ocean Law & Pacific Network on Globalisation, (2016) 'An Assessment of the SPC Regional Legislative and Regulatory Framework (RLRF) for Deep Sea Minerals Exploration and Exploitation' *Blue Ocean Law* [\[Online\]](#)

Brightmore, D. (2019). 'How DeepGreen is deriving critical metals from the seafloor' *Mining* [\[Online\]](#)

Davidson, H. & Doherty, B. (2017). 'Troubled Papua New Guinea deep-sea mine faces environmental challenge' *The Guardian* [\[Online\]](#)

Deep Sea Mining Campaign & Canada Mining Watch. (2019). 'Nautilus Seeks Financial Protection: Key Players Looked After at the Expense of Small Stakeholders and Papua New Guinea' *Deep Sea Mining Campaign* [\[Online\]](#)

Deep Sea Mining Campaign, London Mining Network, Mining Watch Canada. (2019). 'Why the Rush? Seabed Mining in the Pacific Ocean' *Mining Watch Canada* [\[Online\]](#)

Doherty, B. (2019). 'Collapse of PNG deep-sea mining venture sparks calls for moratorium' *The Guardian* [\[Online\]](#)

Forbes. (2007). 'Deep Water', *Forbes Media* [\[Online\]](#)

Hunt, J., Singh, P. & Aguon, J. (2018). 'Broadening Common Heritage: Addressing Gaps in the Deep Sea Mining Regulatory Regime' *Harvard Environmental Law Review* [\[Online\]](#)

ISA. (2018). *Secretary-General Michael Lodge Makes Deep Sea Mining Presentation at Hamburg Business Club* [\[Online\]](#)

Jouffray, J., Blasiak, R. et al. (2020). 'The Blue Acceleration: The Trajectory of Human Expansion into the Ocean', *One Earth*, 2(1), pp 43-54 [\[Online\]](#)

Koven, P. (2011 b). 'The outer limits' *Financial Post Magazine* [\[Online\]](#)

Koven, P. (2011 a). 'Pioneer ocean miner heads for open water' *National Post* [\[Online\]](#)

McClellan, N. (2020). 'Fiji calls for sea-bed mining moratorium as Nautilus restructures' *Islands Business* [\[Online\]](#)

McCormack, G. (2019). 'The precautionary principle: Will seabed mining release carbon emissions?' *Cook Islands News* [\[Online\]](#)

McKie, R. (2020). 'Race to exploit the world's seabed set to wreak havoc on marine life' *The Guardian* [\[Online\]](#)

Miller, K.A., Thompson, K.F., Johnston, P. & Santillo, D. (2018). 'An Overview of Seabed Mining Including the Current State of Development, Environmental Impacts, and Knowledge Gaps' *Front. Mar. Sci.* 4 (418) [\[Online\]](#)

Pacific Community. (2016). 'Breaking the Surface: The Future of Deep Sea Mining in the Pacific', *Secretariat of the Pacific Community* [\[Online\]](#)

Schmidt, C. W. (2015). 'Going Deep: Cautious Steps towards Seabed Mining,' *Environmental Health Perspectives*. 123(9) [\[Online\]](#)

Shukman, D. (2014). 'Plans to open the world's first mine in the deep ocean have moved significantly closer to becoming reality', *BBC News Science & Environment* [\[Online\]](#)

The Government of the Republic of Nauru. (2018). *Nauru Partners with Deep Sea Mining Company on Quest for Sustainable Future* [\[Online\]](#)

Thaler, A. (2019). 'Is this the end of Nautilus Minerals?' *Deep Sea Mining Observer* [\[Online\]](#)

Thompson, K.F., Miller, K.A. & Currie, D., Johnston, P. & Santillo, D. (2018). 'Seabed Mining and Approaches to Governance of the Deep Seabed' *Front. Mar. Sci.* 5 (408) [\[Online\]](#)

World Bank. (2016). 'Precautionary Management of Deep Sea Mining Potential in Pacific Island Countries' *Pacific Possible* [\[Online\]](#)

■ Notes

1- *Breaking the Surface: The Future of Deep Sea Mining in the Pacific*, Pacific Community, March 14, 2016 [\[Online\]](#)

2- *Within PNG the Nautilus project triggered strong public protests, a sustained national campaign against seabed mining, and a court challenge in 2017 by environmental groups.*

3- Doherty (2019) 'Collapse of PNG deep-sea mining venture sparks calls for moratorium'. [\[Online\]](#)

4- Davidson and Doherty (2017)

5- Andrew Thaler (2019) 'Is this the end of Nautilus Minerals?' [\[Online\]](#)

6- DeepGreen and ISA have often jointly participated in workshops promoting DSM including a jointly organized/ advertised lecture by Greg Stone of DeepGreen and Russell Howarth of ISA, at the University of the South Pacific on November 22, 2019. The lecture was converted into a panel discussion at the insistence of DAWN and PANG to allow critical views to be presented.

7- Barron advertises himself as a 'Serial entrepreneur w/ 3 x \$1BN+ venture realisations to [his] name', among which are Adstream Pty, a million dollar online advertising business. [\[Online\]](#)

8- Mining's Tesla moment: DeepGreen harvests clean metals from the seafloor [\[Online\]](#) accessed 14 Nov 2018

9- They include Anthony O'Sullivan, DG's Chief Development Officer, formerly Nautilus' Chief Operating Officer; he led work 'culminating in grant of the environmental permit and mining lease' from the PNG Government (DeepGreen website op.cit.); David Heydon's son, Robert Heydon, Head of New Territories at DeepGreen, previously worked for Nautilus and is reported to have 'pioneered deep sea mineral ventures with Pacific Island countries'; including assisting in 'progressing the development of national and international legal frameworks regulating seafloor mining' and was a member of the UNEP/GRID-Arendal Steering Committee for the Pacific Marine Minerals and Deep Sea Mining Assessment (DeepGreen website; op cit); and Dr Samantha Smith Head of Environment & Social Performance for DeepGreen, was formerly Nautilus Vice President - Corporate Social Responsibility. DeepGreen's Chief Ocean Scientist, Dr Greg Stone, joined DeepGreen in 2018 after spending many years working in the Pacific region for Conservation International, during which time he became a close friend of former Kiribati President Anote Tong, famed as a world leader on climate change. Through Stone, Anote Tong joined the Board of Conservation International and may have been introduced to DeepGreen by Stone.

10- Lodge spent many years living and working in the Pacific, including five years as legal counsel to the Forum Fisheries Agency, and was one of the lead negotiators for Pacific Island States of the 1995 UN Fish Stocks Agreement. [\[Online\]](#)

11- Dr Russell Howorth, an earth scientist, spent many years, including as Director, with SOPAC, initially an autonomous regional body which has undertaken scientific research and exploration of deep sea minerals in the Pacific Islands region for more than 40 years. SOPAC was later incorporated into the larger regional organisation, SPC.

12- World Bank (2016) Precautionary Management of Deep Sea Mining Potential in Pacific Island Countries. Cook Islands independently formed a state-owned company – Cook Island

Investment Corporation (CIIC) – and lodged an application with ISA in partnership with Global Sea Mineral Resources (GSR).

13- 'With TOML acquisition, DeepGreen expands its footprint across the Pacific' [\[Online\]](#)

14- Blue Ocean Law and PANG (2016) An Assessment of the SPC Regional Legislative and Regulatory Framework for Deep Sea Minerals Exploration and Exploitation.

15- [\[Online\]](#) (Accessed 6 February 2019)

16- 'Nauru partners with deep sea mining company on quest for sustainable future', The Government of the Republic of Nauru, July 23, 2018. [\[Online\]](#)

17- Address to ISA Council by Gerard Barron, CEO & Chairman of DeepGreen Metals Member of the Nauru Delegation, 27 February 2019. [\[Online\]](#)

18- Deep Sea Mining Campaign, London Mining Network, Mining Watch Canada (2019) Why the Rush? Seabed Mining in the Pacific Ocean. [\[Online\]](#)

19- See Miller, Thompson et al (2018) for elaboration of these concerns.

20- 'Seabed Authority slammed over links to mining companies', Radio New Zealand. [\[Online\]](#)

21- As Hunt, Singh and Aguon (2018) argue, recent discoveries about the deep sea from recent scientific research 'suggest that the "common heritage" of the seabed extends beyond its mineral resources to include substantial contributions to biodiversity and climate regulation—contributions that may be less quantifiable in terms of projected revenue, but indispensable to human life'.

photo | Mereoni Chung



The legal risks of seabed mining: what should be taken into account by decision-makers in Pacific Island States as they consider how to develop their Blue Economies?

by James Sloan



photo | Mereoni Chung | Somosomo Strait_KoroLevu

At the present time, and as agreed by the United Nations Law of the Sea Convention (UNCLOS), Pacific Island States have the user and management rights to the resources within and under huge areas of ocean in their Exclusive Economic Zones (EEZs). This includes the exclusive sovereign rights to all of the resources in these ocean spaces including on and under the seabed that are in demand from the latest proposed industrial use of the ocean – seabed mining.

At present, there is not a unified approach among all Pacific Island States regarding whether and how the resources of the ocean seabed should be exploited. A unified approach may assist Pacific Island States as they determine how to define and develop their concepts of a Blue Economy that balance

concepts like sustainability and the health of existing resources against the regulation of industrial uses of the ocean.

The regulation of seabed mining poses a new and particular challenge for the development of a Blue Economy because it is a new industry with an untested regulatory framework. As such seabed mining contrasts with existing industrial uses of the ocean such as shipping and fishing that aim to protect the resources of Pacific Island States via well understood regulatory frameworks, that amongst other things encourage sustainability and regional cooperation to reduce threats to the health of the ocean and its resources.

This brief analysis considers the proposed regulatory framework for seabed mining

that places the onus on nation states to implement effective legislation to comply with international law obligations and takes a look at whether nation states interested in seabed mining have met these obligations. A brief look at this aspect of the proposed regulatory framework suggests that Pacific Island States should adopt a unified and regional approach to the activity of seabed mining to ensure that the development of their Blue Economies in the Pacific are both sustainable and beneficial to ocean health and the people of the Pacific.

Seabed mining – an incomplete regulatory regime and legal risk

Independent scientists generally accept that all the risks of seabed mining are presently not known. As such, the precautionary approach¹ to the activity of seabed mining is relevant both within and outside areas of national jurisdiction.

There are also legal risks in relation to the activity of seabed mining. These legal risks apply to Pacific Island States if they either decide to regulate seabed mining within areas of seabed that they control, or if they become a Sponsoring State, pursuant to the international legal regime in areas outside national jurisdiction, described by UNCLOS as the ‘Area’.

A Pacific Island State on its own may issue a mining licence in areas of seabed within its EEZ or areas of ocean subject to sovereignty, where it has the rights to mine. Whereas in the Area, the International Seabed Authority (ISA)² issues licences to mining companies through a Sponsoring State. However, regardless of where the activity of seabed mining takes place, the relevant state must first adopt an adequate regulatory framework to ensure that the activity of mining is undertaken in accordance with their duties under international law and

the requirements of good governance. This includes, but is not limited to the duties to protect and preserve the marine environment (Article 192 of UNCLOS) and the duty of each sponsoring party to ensure recourse for prompt and adequate compensation for any damage caused by pollution of the marine environment (Article 235 of UNCLOS).

When reviewed from a legal risk perspective, there are some significant concerns relating to the adequacy of preparedness of intending Sponsoring States that want to participate in seabed mining through mining companies (Sloan, 2019). The Center for International Governance and Innovation (CIGI) has published the results of a legal review in a paper entitled *Sponsoring State Approaches to Liability Regimes for Environmental Damage Caused by Seabed Mining*, authored by Hannah Lily (2018), a UK qualified solicitor and legal expert on regulatory law who specialises in seabed mining. CIGI’s research reveals startling underpreparedness in the national regulatory frameworks of all intending Sponsoring States.

Some of the more startling points that CIGI reports are that while 20 Sponsoring States have received exploratory licences for seabed mining:

- 10 of them had no targeted national legislation to regulate seabed mining, meaning that 10 sponsoring States that have been granted 13 exploratory contracts between them by the ISA have no legislation to meet their international commitments
- The laws that are in place are ambiguous regarding what can be claimed in the event of damage to the environment
- The laws that are in place create evidentiary burdens and do not lay down strict liability as would be expected.
- The laws in place do not solve the difficult issues relating to jurisdiction

The overall conclusion from CIGI's review is that the new industry of seabed mining is not, as yet, ready to proceed in accordance with good governance and the framework of international law.³

■ Conclusions

Pacific Islanders have an opportunity to determine and define their blue economies and how their ocean resources should be conserved, managed, explored and exploited. This opportunity arises from their unique cultural heritage as well as from the international legal framework that recognise the resource rights of Pacific Island States in their ocean spaces. The international legal framework also recognises cultural rights, sustainability and the importance of, and duty to protect, ocean health.

At the same time, Pacific Islands face well known challenges including a lack of financial resources and demands from outside interests for their resources.

Unfortunately, CIGI's findings strongly suggest that the national regulatory systems that are envisaged by the international law framework in UNCLOS are not, as yet, up to the required standard and this poses a legal risk for seabed mining inside and outside areas of national jurisdiction and poses a threat to the development of the Blue Economies of Pacific Islands.

However, the decision to open the door to seabed mining within a Pacific Island States' EEZ or to become a Sponsoring State for seabed mining in the Area remains a sovereign decision for each Pacific Island government.

Given the competing demands and challenges, Pacific Island States should continue to develop transparent and inclusive decision-making processes towards a unified regional and national approach to the Blue Economy that best suits the Pacific Islands' context. ■

■ Bibliography

Lily, H. (2018). 'Sponsoring State Approaches to Liability Regimes for Environmental Damage Caused by Seabed Mining' In *Liability Issues for Deep Seabed Mining Series: Paper No. 3 Centre for International Governance Innovation* [\[Online\]](#)

Sloan, J. (2019). 'Seabed mining - how is it intended to be regulated and what are the risks for States that seek a licence from the International Seabed Authority?' *Oceans Law Bulletin* [\[Online\]](#)

■ Notes

1- The precautionary approach developed from international law, including the Rio Convention and supports the science based approach to decision-making. In brief, if the available science concludes that the potential adverse effects of a proposed development or use are unknown then precaution should be taken. This same thinking as well as transboundary/transnational effects of proposed uses and developments have also led to the commonly adopted practice of seeking Environmental Impact Assessments (EIAs) that are legislated for in national law. For example for Fiji see the Environment Management Act, 2005.

2- The International Seabed Authority (ISA) is an institution created by UNCLOS to regulate the activity of seabed mining in the Area (all areas of seabed where the rights to seabed resources are outside national jurisdiction). The creation of ISA recognises the principle in UNCLOS that all resources in the Area belong to all humankind. ISA has detailed duties in relation to the licensing of any mining activities and has improved scientific knowledge of the deep seabed and its ecosystems. At the present time ISA has only issued exploratory and not exploitation licences, but once a licence is issued to mine resources in the Area it is not ISA that regulates the activity but the Sponsoring State which joins the mining venture, which is required to have an appropriate legal framework in place in accordance with its duties under UNCLOS.

3- The International Tribunal for the Law of the Sea (ITLOS), like ISA created by UNCLOS, has published an advisory opinion (case number 17 – Responsibilities and obligations of States with respect to activities in the Area) that has considered the responsibility of the sponsoring State and has provided that the sponsoring State must exercise high standards of due diligence to secure compliance with the terms of the contract awarded by ISA. Further, the advisory opinion from ITLOS mentions the precautionary approach and the obligation to undertake environmental impact assessments which it describes as a "general obligation under customary law".

Navigating the BBNJ

by Mereoni Chung

photo | Mereoni Chung



DAWN and PANG have been engaging in the UN process towards developing an international legally binding instrument (ILBI) under the United Nations Convention on the Law of the Sea (UNCLOS) on the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction (ABNJ), commonly known as the BBNJ. The first of four intergovernmental conferences (IGCs) was held in September 2018, with the second and third sessions in 2019, and a final session was to be held in March 2020. Due to the current global pandemic of COVID-19, the fourth session has been postponed to a later date, yet to be determined.

DAWN's engagement with BBNJ is part of the ongoing work of tracking and critically analysing the growing global interest in oceans and discourses on the Blue Economy, under DAWN's thematic focus on Political Ecology and Sustainability. This process

towards a legally binding treaty involves various elements of ocean governance and there are multiple actors with Blue Economy agendas at play in developing this treaty.

The BBNJ IGCs have progressed from initial general statements, a plethora of priorities and options for consideration, to a narrowing of positions and definition of priorities, especially on specific areas of the four elements (MGRs, EIAs, AMBTs, CBTT)¹ under this treaty. BBNJ is in its critical stage of adopting treaty language. DAWN and PANG have observed country statements for their alignment with human rights frameworks, including women's, indigenous and environmental rights treaties, declarations and principles. The core purpose of the instrument is weighted in a delicate balance between conservation and sustainable use of marine biodiversity in the high seas. Negotiating positions indicate how this balance is approached and whether one

would outweigh the other when states are under pressure.

DAWN and PANG are wary about the instrument becoming a facilitator to exploit ocean resources, and especially to further the interests of Global North states and corporations that look to regions of the Global South where rich ocean resources exist. While environmental groups are very active within the BBNJ process, the direction of negotiations must not risk undermining the ‘conservation’ focus to enable resource ‘use’ due to quasi-state corporate interests challenging the ‘sustainable’ function of this instrument. The advocacy of NGOs is important in shaping the objective of this treaty. This includes advocating for:

1 Strong accountability provisions under the new Treaty to govern access to and use of the ocean areas beyond national jurisdiction by corporations and states;

2 Adherence to existing international binding agreements, obligations and principles, including the right to development, right to a livelihood, obligation to prevent trans-boundary harm, the principle of free,

prior and informed consent and the Paris Agreement on Climate Change;

3 Mandatory independent environmental and social impact assessments of proposed industrial activities; and

4 Equity in benefit sharing, including gender-equitable sharing of training opportunities and benefits from marine scientific and genetic research, and inter-generational equity, to protect the interests and rights of future generations.

As negotiations advance, sites of power emerge more evidently. IGC3 showed the emerging positionality of big influential states on oceans development framing (US, EU, China, Russia, Japan, and Norway). As states become more rigid in their priorities, specific ocean interests surface and it is imperative to maintain a spotlight on the rights and ocean health obligations of states. ■

■ Notes

1- MGR- Marine Genetic Resources; EIA – Environmental Impact Assessments; ABMTs – Area Based Management Tools like Marine Protected Areas (MPA); CBTT – Capacity Building and Technology Transfer.





From the frontline of climate change to the forefront of climate action: ocean fragile marine biodiversity and vulnerable coastal communities at COP25 and beyond

by Uta Schuchmann

Given the long neglected attention to the ocean-climate nexus in the system that has developed under the UN Framework Convention on Climate Change (UNFCCC) since 1994, as well as delays in implementing the substantial ocean-related obligation under the Convention, it is encouraging to see the increasing support of a growing multi-party-stakeholder ocean-climate partnership to integrate the ocean into the UNFCCC mechanisms and bodies. In taking the ocean to the top of the priority themes of its presidency, Chile's initiative and leadership have provided new impetus. COP25 can be a stepping stone in transferring the ocean from the sidelines to the core structure of the UNFCCC.

Why is the ocean-climate-biodiversity emergency important to us all?

The ocean is a part of the Earth's life support system. It produces half of the annual oxygen, regulates the global climate, provides food and many other goods and services which are vital to all life on Earth and are important to people and societies all over the world. A healthy ocean is key to achieving international environment and development goals.

Although precious, the ocean is not protected and continues to degrade as a result of numerous anthropogenic pressures. Climate change has become an increasing

threat to the ocean while multiple impacts, including warming and marine heat waves, acidification, stratification, oxygen loss, changes in ultra-violet radiation, sea level rise, altered currents, extreme storms and cyclones, often occur at the same time and place. The ocean is getting hotter, higher, more acidic and lower in oxygen.

The IPBES Global Assessment and IPCC's special reports on global warming on 1.5°C and on the ocean and cryosphere (SROCC) show that the predicted impacts are coming much earlier than expected and at rates unprecedented in human history. Meanwhile warming from anthropogenic emissions will cause further long-term changes in the climate system and irreversible sea level rise and biodiversity loss.

The current emission pathway and related impacts of climate change on the marine environment threaten our planetary survival and human well-being all over the world. But these impacts are distributed unevenly around the globe, affecting high and low latitude regions the most. They entail specific threats to coastal areas and populations, especially in low-lying small island developing states (SIDS) and archipelagic countries.

Although the 1.5°C scenario suggests less loss and damage in comparison to 2°C, the loss of marine biodiversity is considerably and particularly high in lower latitudes, where communities and economies depend

MOANA BLUE PACIFIC PAVILION



on marine and coastal ecosystems. Most of all warm water corals cannot survive. They are already at high risk under current 1°C warming. The majority (70-90%) of tropical coral reefs that exist today are expected to disappear even if global warming is constrained to 1.5°C, with losses being even greater (99%) at 2°C. A decline of 30 or even 10 percent of coral reefs means they will no longer be able to provide vital functions and services to the more than 500 million people and economies who depend on coral reefs for food, income, revenue, coastal protection and other risk reduction benefits.

The cryosphere, besides being an important water reserve especially in mountain regions, is a major climate regulator interrelated with tropical regions via physical, chemical and biological processes and migratory species. The cryosphere is responding very slowly and sensitively to global warming. Permafrost thaw and melting of ice sheets, mountain glaciers, sea ice and ice cliffs in the Antarctic, Arctic and Greenland are progressing much faster than what has been recorded in geologic history. This will not only accelerate and exacerbate climate change related impacts on the ocean's physical and chemical processes. A loss of ice mass comes with a dramatic loss of phytoplankton.

This results in a shortage of oxygen and zooplankton and loss of biodiversity. It impacts on fisheries and deterioration of ecosystems from the high latitude to the low latitude regions.

Moreover, the carbon capture potential of marine biodiversity, including fisheries, is expected to decrease considerably at 1.5°C and runs up against the limits of its existence in a 2°C world. With every bit of warming and increasing loss of marine biodiversity, humankind is losing its greatest allies to combat climate change. Restoring marine biodiversity and strengthening ocean resilience is a low hanging fruit to becoming carbon negative without costs and risks, with many co-benefits to food security and other SDGs.

What does this mean from a feminist perspective?

The ocean crisis demonstrates a deeper crisis of the human/nature relationship which is the result of societal divisions of labour and relationships of power and domination in the private and public spheres. The dominant economic system and its paradigm of economic growth are based on

inequality, injustice, violence, monetarisation, commodification and privatisation of common goods and rampant extraction of resources. It encourages overexploitation, destruction and pollution of the ocean, as it does of land. The vast majority, including the most vulnerable bear the highest risks and costs while a few reap the profits. This system will not reduce pressures on nature as resources become scarce, but rather create even more competition in a vicious circle of degradation.

The ocean-climate-biodiversity emergency may end disastrously for us all. But the urgency and distribution of impacts is very uneven around the world and affects natural and human systems and communities differently. If the current trajectory is not changed, it will aggravate societal cleavages and injustice in the private and public domains, from the local to the global level. The ecological crises will cause unimaginable suffering and result in more frequent and intense social, economic and political conflicts and even more violent repression.

Most affected are vulnerable groups and persons living in poverty in all societies. Coastal populations, including small-scale fishing communities and indigenous peoples in high and low latitude regions are at the frontline of climate change, biodiversity and coral reef loss and fisheries degradation. Their lives and livelihoods are most highly impacted.

All over the world, women disproportionately carry greater burdens and face specific risk in situations of environmental degradation. Women living in coastal areas and working in fisheries and marine related economies are most reliant on marine biodiversity's goods and services. Inequalities in the private and public sectors often prevent women from participating in decision-making and implementation and result in a lack of

power, creating a vicious circle. Yet, women are already playing a critical role in their communities in response to climate change as well as biodiversity loss, due to their concern, knowledge and leadership.

Ocean health is a common concern and shall be considered the common heritage of mankind. Changing the current trajectory needs a common commitment, collaborative effort and integrated approach from the local to the global level.

For decades, women's rights and feminist movements have brought forward an analysis and critique of human relationships to nature as societal relationships of power and domination, and protected and defended their communities and environment. They endorse a concept of sustainable development as a process 'that meets the needs of the present without compromising the ability of future generations to meet their own needs' and that balances ecological, socio-economic and cultural values, prioritises needs over profits, and promotes peace and equity.

Women, indigenous peoples and small-scale fishing communities are often among the most experienced and committed guardians of marine and coastal biodiversity. Now, their knowledge and voices are indispensable to tackle the ocean-climate-biodiversity emergency and to develop and implement a just and effective ocean-responsive climate policy that is guided by a vision of a new and peaceful human-ocean relationship.

■ Ocean demands for COP25

- recognise the specific risks, knowledge, commitment and rights of women, indigenous people, small-scale fishers and associated poor communities from coastal areas, especially in tropical and Arctic regions at the frontline of the ocean-climate-biodiversity emergency;



and institutionalise the special consideration and meaningful participation of coastal communities, fisherwomen and fishermen side by side with farmers and agriculture under the UNFCCC framework and when deciding and implementing any ocean-climate biodiversity policy from the local to the global level, in line with the Gender Action Plan, the Local Community an Indigenous Peoples Platform, human and specific rights,

- reduce climate change related impacts on oceans and implement the substantial obligations under Art. 4.1 (d) and (e) of UNFCCC that directly refer to the conservation and enhancement of GHG sinks and reservoirs in marine and coastal ecosystems and other obligations that are relevant to oceans as well as ensure the integrity of all ecosystems, including oceans, and the protection of biodiversity as noted in the preamble of the Paris Agreement. To that end parties shall:
- boost the urgently needed holistic integration of ocean and marine biodiversity issues into all respective bodies and mechanisms of UNFCCC under mitigation,

adaptation and loss and damage and adjust the respective strategies and goals to the alarming IPBES and IPCC findings; and reduce the risks and impacts of climate change on fragile marine ecosystems and most vulnerable coastal communities with special consideration of women, small-scale fisherfolk and indigenous peoples; and promote ocean's conservation and sustainable use in line with international environment and development goals, human rights obligations, peace and justice,

* Ocean and mitigation:

- raise ambition to keep the global temperature rise this century well **below** 1.5°C above pre-industrial levels, slow down the rate of change, and become carbon negative well **before** 2050 in order to save coral reefs, promote biodiversity integrity and protect and enhance marine sinks and reservoirs;
- address and reduce all maritime sources of GHG, end fossil fuel subsidies in maritime transport and fisheries that contribute to overfishing, destructive fishing and IUU

fishing, end bottom trawling and other activities disturbing carbon and methane stored in the seafloor;

- no energy and traffic turn in the North at the expense of marine biodiversity and food security in the South: Stop seabed mining!;
- further explore the role of coastal and oceanic blue carbon in climate regulation and protect and enhance marine ecosystems' and species' great potential in carbon sequestration which comes along with benefits for food security and other SDGs,

*** Ocean and adaptation:**

- exhaust all means available to help fragile marine systems and vulnerable coastal communities to adapt to irreversible climate change;

*** Ocean and loss and damage:**

- institutionalise negotiations and mechanisms on loss and damage under UNFCCC while recognising the specific concerns and rights of vulnerable coastal communities in the context of climate-induced migration, displacement and relocation and increasing coastal urbanisation;
- in particular, recognise and compensate for loss of coral reefs and marine biodiversity and the foregone goods and services to associated coastal communities;
- redirect all financial flow: stop subsidising overexploitation and destruction of marine ecosystems and resources, instead finance ocean protection and sustainable use for the benefit of present and future generations;
- trigger the integration of climate change issues in all relevant ocean regimes, especially the currently negotiated BBNJ instrument under UNCLOS and the Post 2020 Framework

of CBD, and in any ocean policy from the local to the global level in a coherent manner;

- recognise cumulative impacts on the ocean, reduce existing pressures from fisheries, pollution, coastal development applying the source to sea principle, and prevent additional pressures such as seabed mining applying the precautionary principle, and raise ambition to meet the SDG 14 targets that mature in 2020;
- protect and restore marine biodiversity and strengthen ocean resilience through ecosystem-based management, area-based management, including marine protected areas and reserves, ocean-climate-biodiversity-responsive environmental impact assessment and integrative governance across sectors, areas and jurisdictions;
- promote integration and coherence among regular processes for global reporting and assessment of the state of climate change, ocean and marine and coastal biodiversity while balancing environmental, socio-economic and cultural aspects. ■



photo | Mereoni Chung

Fishing for an equitable development outcome: WTO, right to development and the controversial issue of fisheries subsidies

Adam Wolfenden

photo | Dorran from Pexels



Fisheries is a key resource and a major industry within the Blue Economy development frame. For Pacific Small Island Developing States (PSIDS), inshore and artisanal/small scale commercial fishing are the mainstay of subsistence and semi subsistence livelihoods in which women regularly participate, and provide the most important source of protein. One third of the world's tuna is found in the Pacific Ocean and the offshore tuna fisheries are the source of considerable revenue for the eight PSIDS that are Parties to the Nauru Agreement (PNA), in whose EEZs the tuna are mainly found. PNA licenses Distant Water Fishing Nation (DWFN) vessels to catch tuna in their Exclusive Economic Zones (EEZs) under a strictly enforced 'Vessel Day Scheme' (VDS) which sets an overall limit on the number of days vessels

can be licensed to fish in PNA waters. Prior to the introduction of the VDS by PNA, Pacific Island States collectively earned a mere 4% of the value of the annual tuna caught by DWFN vessels from their waters under unfavorable licensing agreements. The VDS, under which PNA states control the price and terms of access to Pacific tuna is not popular among developed states that heavily subsidise their fisheries industries, despite subsidies conflicting with World Trade Organisation (WTO) principles. In this article, PANG Campaigner Adam Wolfenden discusses the development implications for PSIDS and developing states generally of new processes being proposed to fast track WTO negotiations on fisheries subsidies relating to IUU fishing, Overfished Stocks and Overcapacity of vessels.

As the world grapples with the impact of COVID-19 we are seeing multilateral institutions shut down and international gatherings cancelled, yet the WTO is still proceeding with negotiations regarding prohibitions on fisheries subsidies. This decision to continue means negotiations must still address the problematic proposals currently in circulation and creates a process that is increasingly opaque and significantly disadvantages developing countries.

Under Sustainable Development Goal (SDG) 14 on Oceans, and 14.6 specifically, by 2020 countries are to act to eliminate subsidies for Illegal, Unreported and Unregulated (IUU) fishing as well as prohibit subsidies that support overcapacity and overfishing, whilst allowing adequate Special and Differential Treatment (SDT) for developing countries. The WTO Ministerial scheduled for June this year in Kazakhstan was to decide on the prohibitions for fisheries subsidies. This has been postponed, possibly to mid or late 2021. Despite the loss of the Ministerial forum to conclude the negotiations, the WTO is ramping up efforts to wrap up the talks this year.

The dangerous virtual path forward

The WTO Secretariat is currently shut down due to COVID-19 restrictions making face-to-face negotiations impossible in Geneva. The first attempt to conduct virtual negotiations was aborted on account of poor connectivity issues for some members (most notably developing countries) with proposals, questions and clarifications taking place over email.

Prior to the shutdown, the Chair of the negotiations, Columbia, had circulated a draft Chair's consolidated text and a number of delegations expressed concern over the inadequacy of the provisions on Special and

Differential Treatment (SDT) for developing countries. New proposals by India and the Least Developed Country (LDC) group were circulated, but the virtual meeting to discuss those proposals failed.

The shift to future discussions taking place over email raises many concerns about transparency and the power that is now given to the Chair of the negotiations. In face-to-face meetings it is clear for all members to see whether the interventions by each member, including concerns raised etc., are accurately reflected by the WTO secretariat and Chair. Moving to private communications removes this transparency and accountability and could see the erasure of long held concerns by developing countries in the interest of securing an outcome in 2020.

In addition to this is the logistical challenge of moving to the digital sphere as good connectivity is more of an issue in developing countries, placing them at a disadvantage. There are also challenges relating to the ability to ensure real-time translation for members in virtual meetings. The ability for developing country blocs to caucus will also be impacted by the inability to meet in person and have frank discussions on substance and strategy.

The Chair recently stated that he still wants an outcome by June 2020. This timeline ignores the reality that all states are dealing with at the moment. Adhering to it will undermine the transparency of the process and the ability of developing countries to participate effectively.

Right to development still on the hook

Any outcome on fisheries subsidies will have major implications for Pacific Island Countries (PICs) as fish provides 50-90% of animal protein in rural areas, and 40-80% in many urban centres, with most of the fish eaten

by rural people coming from subsistence fishers, many of whom are women. Fisheries is also a key economic driver of developing country economies with fish and fish-products generating a higher export value than coffee, bananas, cocoa, tea, sugar and tobacco combined.

Fisheries subsidies by developed countries have long been a point of contention for PICs as they see their natural resources being overexploited by highly subsidised foreign fleets at the expense of their own potential local industries.

Pacific fisheries resources also continue to be plundered by Illegal Unreported and Unregulated (IUU) fishing. As reported by IUU Watch, in the Western and Central Pacific Ocean IUU fishing 'claims at least €470 million annually, with actual lost revenue to Pacific Island Countries around €140 million'.

While problematic subsidies and IUU fishing need to be addressed, it is important that the sovereignty of small island developing states (SIDS) and their right to manage their resources and how they develop are not undermined by any outcome.

Although women in SIDS play crucial roles in the fisheries sector, including in post-harvest processing and sales and as cannery workers and are therefore stakeholders with interests to defend, they are largely unrepresented in the highly technical and politically driven WTO negotiations.

What are at issue in the negotiations?

The negotiations on IUU fishing cover areas relating to how such fishing is determined and how long any prohibitions remain in place. It is important that national processes and Regional Fisheries Management Organisations (RFMOs) are respected and not

undermined by WTO requirements. Some current proposals would do this by locking in burdensome processes that would also open the door to WTO members challenging decisions by RFMOs as well as potentially diverting catch landings away from developing country ports on the ruse of their non-compliance, robbing those developing countries of revenue. Some transition periods are being proposed for developing countries and LDCs. Small-scale and artisanal fisher-folk are vulnerable to any prohibitions on IUU fishing capturing their activities and robbing them of any government support that is essential to their livelihoods. However, the exclusion of prohibitions applying to these countries for unreported and unregulated fishing only extends to their territorial waters, not their entire Exclusive Economic Zone (EEZ) as is currently enshrined under the UN Law of the Sea.

Negotiations on Overfished Stocks are also caught up in who can determine when stocks are 'overfished'. Developing countries should maintain their ability to make determinations over their stocks and in line with their other conservation commitments as well as RFMO determinations for the stocks under their competency. Some current proposals will have the effect of undermining these procedures by placing prescriptive processes on what and how a stock can be identified as overfished. There is also the risk of granting the WTO power to make determinations on what conservation and management measures are 'appropriate' and to allow some subsidies to continue, which is dangerous as the WTO is a body with no expertise in these areas and as such should not intrude on the remit of other bodies.

The issue of subsidies that contribute to 'Overcapacity and Overfishing' are the most contentious. Using the rhetoric of conservation, there is a concerted push by developed countries like the US and EU which

have heavily subsidised and built the capacity of their fleets but are pushing to introduce rules to prevent developing countries from being able to build their fishing capacity to fish their own waters. Some developing countries, including the Pacific Island States, are advocating for an approach that exempts their EEZs from any prohibitions, to allow them to develop their domestic industries, and support local livelihoods and communities. Small-scale and artisanal fisheries must be able to access government support for increased capacity if necessary for their communities and the WTO should not prevent this. Some developed country proposals are to only allow subsidies for members that can prove there are other measures in place for conservation. Again this would involve the WTO ruling on matters beyond its expertise and remit.

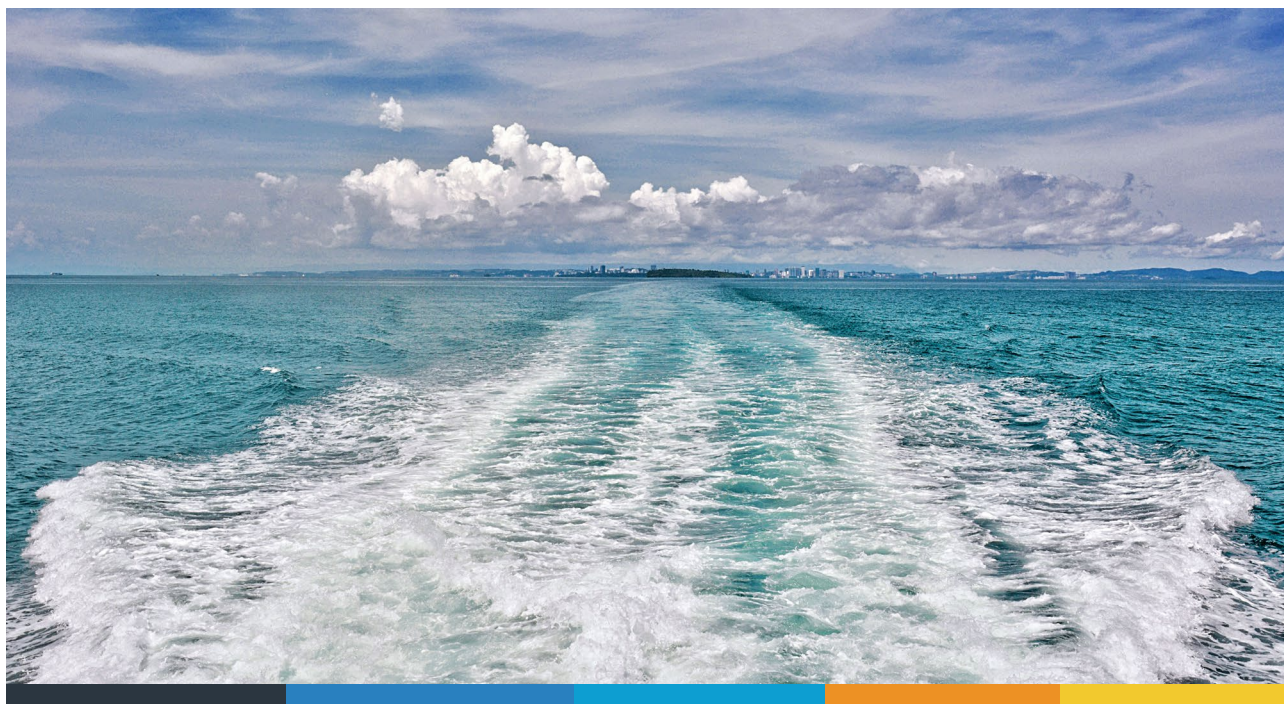
Getting SDT right in fisheries subsidies negotiations is not only important to meet the mandate of SDG14.6 but also crucial to the lives and livelihoods of millions of fisherfolk and communities. Current proposals to protect subsidies for fishing defined as 'subsistence' are not adequate and put at risk vulnerable employed workers within

the fisheries sector. There is no outcome that justifies a poor outcome on SDT.

■ Conclusion

The negotiations on fisheries subsidies are at a critical juncture. The push to get an outcome in line with SDG14.6 is driving a timeline that now appears out of step with reality. The continuation of complex negotiations by digital means will undermine the negotiating power of developing countries and ultimately the livelihoods of the millions of their citizens who rely on fishing and fishing subsidies. There are many proposals from developed countries that will undermine the development capacity of countries. The US will indeed use these negotiations as a 'litmus-test' for whether or not the WTO can respond to its concern to see a reform of flexibilities given to developing countries, which adds a further burden to the already complex negotiations.

At a time of great upheaval and uncertainty, the WTO negotiations on fisheries subsidies must be put on hold and not progressed under pressure to meet a 'development goal' with an outcome that would in reality undermine development. ■



Collaborators of this Issue



MEREONI CHUNG | [Page 2](#), [Page 4](#), [Page 38](#)

Mereoni Chung is the Program Officer at DAWN's Secretariat. Mereoni is a graduate of the University of the South Pacific and the Australian National University. She has been tracking and critically analyzing from a Global South lens, the evolving Blue Economy development framework and assessing the implications of the Blue Economy framing for SDGs implementation and gender equality. This includes engaging global ocean treaty processes and current trade treaty negotiations that use the Blue Economy rhetoric to advance ocean interests.

Photo | Joey Tau



LICE COKANASIGA | [Page 8](#)

Lice is a Research Officer with the Pacific Network on Globalisation. Her research revolves around tracking and critically analyzing the Blue Economy agenda for its impacts on indigenous peoples, the environment, and the corporate capture of public policy space.



PROFESSOR ELIZABETH HOLLAND | [Page 11](#)

Professor Elisabeth Holland is the Norway Pacific Chair in Oceans and Climate Change, a joint appointment of the University of the South Pacific and the University of Bergen based at the University of the South Pacific. Professor Holland was the Director of the Pacific Center for Environment and Sustainable Development, and the University of the South Pacific's Professor of Climate Change from 2012.

Professor Holland brings 30 years of climate change and earth system research experience, including IPCC authorship. She works to support the development of Pacific research capacity to ensure that her legacy becomes empowerment of Pacific students and communities to build resilient futures. She often serves on Pacific delegations for UNFCCC and IPCC negotiations and led USP's delegation to support Pacific governments in negotiating the Paris Agreement. Professor Holland has a profound understanding of the climate risks facing the people and cultures of the Pacific Ocean and Islands.



VINA RAM BIDESI | [Page 14](#)

Vina is a resource and environmental economist. She has taught at the School of Marine Studies, University of the South Pacific for over 25 years. Her teaching, research and consulting experiences are in fisheries economics and management, fisheries policy, gender issues in marine resource management and natural resource assessment and valuation. Vina is a member of the Fiji Women and Fisheries Network. She has written several papers relating to her area of expertise and is currently working on a project on marine ecosystem service valuation for Samoa.



SAMANTHA MAGICK | Page 18

Samantha Magick is the Managing Editor of Islands Business magazine. She is a Fiji citizen and has more than 20 years' experience as a journalist, researcher and writer in the Pacific and internationally.



DR HUGH GOVAN | Page 22

Currently an Adjunct Senior Fellow at USP's School of Government, Development & International Affairs (SGDIA) and continuing his 18 year role as an adviser to the Locally Managed Marine Area Network (LMMA) in Asia and the Pacific. Hugh has worked in the Pacific Islands as well as Central and South America and Europe where his work has spanned human rights, traditional medicine, cultural survival, sustainable forest livelihoods, renewable energy and aquaculture.

His work with the LMMA Network has focused on extending community-driven approaches to resource management from the Pacific into a global phenomenon, increasingly paying attention to factors such as rights and policy that might best ensure local fishers are empowered to sustain their livelihoods in coastal areas.

His free-lance work covers policy as well as practice from the community and sub-national level, to national and regional levels in the Pacific Islands. He is co-author of the region's overarching ocean policy, the Framework for a Pacific Oceanscape, as well as SPC and MSG fisheries strategies and PNG's Roadmap for coastal fisheries. <http://tauika.net/publications.htm>



TYLER-RAE CHUNG | Page 26

Tyler-Rae is a young advocate, marine scientist, and an active member of the Early Career Ocean Professionals (ECOPs) working group from the Fiji Islands. Her engagement in various Pacific youth-led initiatives in the area of social empowerment, the environment and the ocean has increased the urgency by which she intends to carry out her objectives as a technical advisor with the Pacific Youth Council and a member of the ECOPs. Tyler-Rae uses her skills, knowledge and network base to bridge the gaps between policymakers, young scientists and young people in communities to ensure the future generation is actively engaged in decision making processes especially in the area of creating a safe, transparent and healthy ocean for their future and for the generations to come.



CLAIRE SLATTER | Page 27

Claire is a founding member of DAWN and was General Coordinator from 1997 to 2004. She is a feminist scholar with a background in anti-nuclear, anti-colonial, feminist, trade union and social justice activism. She has an M.A from the Australian National University and a Ph.D. from Massey University and has taught politics at the University of the South Pacific for more than 20 years. For nearly three years she taught ethics at the Fiji National University. Claire's research and publications have centred on development and gender issues in the Pacific region.



JAMES SLOAN | Page 35

James is a lawyer and partner in the Suva based law firm, Siwatibau and Sloan, and teaches Law of the Sea and Oceans Governance at the School of Marine Studies within the University of the South Pacific. In 2008, James co-founded the Fiji Environmental Law Association, chairing the Executive Management Committee from 2008-2018. James' particular interest is how the law can promote good decision making by taking into account legal rights including traditional rights within the Fiji and Pacific region's law and governance contexts. In order to promote good decision making processes based on rights and science, James regularly collaborates and publishes updates in relation to ocean governance, and environmental issues via Siwatibau and Sloan's website, these can be found [here](#). James has lived and worked in Fiji from December 2002, and has gained a profound admiration for Fiji's unique law and governance framework and how it balances traditional rights within a modern common law legal system.

Photo | IISD



UTA SCHUCHMANN | Page 40

Uta Schuchmann attended the UN Climate Change Conference (COP25) which took place in Madrid from 2-13 December 2019 under the Presidency of the Government of Chile. Uta has been following and engaging in intergovernmental ocean-related events and negotiations including BBNJ and the UN Climate Conferences where she participates in collaboration with the networks of the Women's Major Group (WMG) and the Women and Gender Constituency (WGC). Her paper below on the ocean-climatebiodiversity nexus, and what it means from a feminist perspective, largely contributed to the COP25 WGC brief on the ocean.



ADAM WOLFENDEN | Page 45

Adam Wolfenden is the Trade Justice Campaigner for the Pacific Network on Globalisation (PANG), a regional watchdog promoting Pacific peoples' right to be self-determining. Adam has worked in the Pacific for over a decade monitoring negotiations on numerous regional trade agreements, WTO accessions and working against resource grabbing. Prior to this, Adam has worked with numerous environmental and trade groups in Australia as well as undertaking self-organised collective projects.



**Click here to
access previous
issues of DAWN
Informs.**

FOLLOW US

@DAWNfeminist



On DAWN's website

www.dawnnet.org



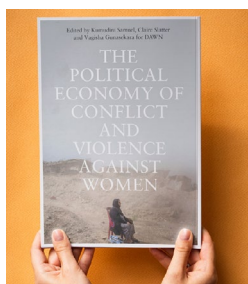
The terrible impacts of the COVID-19 pandemic have been felt around the world. While the virus can affect anyone indiscriminately it does not affect everyone equally, debunking the myth that it is a universal equaliser. Over the months of June and July, DAWN is organising a series of talks with feminists from the Global South to discuss the profound implications of the pandemic, but also the extraordinary measures taken by States battling its impacts.

[view more >](#)



Continuities of Gendered Violence in Conflict Making Political Economy Visible: insights by young feminists from the Global South. In this series, we focus on four countries—Mozambique, Palestine, South Africa and Liberia. The case studies shed light on a multiplicity of forms in which violence against women manifests in different contexts and at various levels. They provide a rich variation for the study of gendered and violent relations in political economies of conflict.

[view more >](#)



The Political Economy of Conflict and Violence against Women shows how political, economic, social and ideological processes intersect to shape conflict-related, gender-based violence against women. Through feminist interrogations of the politics of economies, struggles for political power and the gender order, this collection reveals how sexual orders and regimes are linked to spaces of production.

[view more >](#)

PUBLISHED JULY 2020

Issue Team:

Claire Slatter
Marla Rabelo
Mereoni Chung
Ricardo D'Aguiar
Sala Welelakeba
Seona Smiles (copyediting)
Sharan Sindhu
Tasmy Gómez

PHYSICAL ADDRESS

Development
Alternatives with Women
for a New Era (DAWN)
Global Secretariat,
JP Bayly Trust Building,
193 Rodwell Rd, Suva, Fiji

DAWN EXECUTIVE COMMITTEE

Cai Yiping
Corina Rodríguez Enríquez
Florencia Partenio
Gita Sen (General Co-coordinator)
Kumudini Samuel
María Graciela Cuervo (General
Co-coordinator)
Masaya Llaneranas Blanco
Vanita Mukherjee

DAWN BOARD

Celita Eccher
Claire Slatter (Chairperson)
Fatou Sow
Sandra Tarte
Sonia Corrêa
Tara Chetty
Vivienne Taylor

DAWN GLOBAL SECRETARIAT

Administrator:

Sharan Sindhu

Program Officer:

Mereoni Chung

Finance Officer:

Nai Sassen

Junior Research Officer:

Sala Welelakeba

Junior Finance Officer:

Simran Singh

Admin/ Finance Assistant:

Ana Rakacikaci

Online Communications Officer:

Tasmy Gómez

Communications Officer:

Ricardo D'Aguiar

Designer:

Marla Rabelo



DAWN Informs is published by Development Alternatives with Women for a New Era (DAWN), a network of feminist scholars and activists from the economic South, engaged in feminist research, analysis of the global environment, working for economic and gender justice, and sustainable development.