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Is everything new old again?

Deep seabed mining's unprecedented ecosystem risks are exacerbated by environmental and governance practices imported from terrestrial mining

A presentation by Catherine Coumans for:

Talanoa on Deep-Sea Mining in the Pacific

A multidisciplinary workshop exploring the significance of deep-sea mining for the Pacific Island Countries and their communities

University of the South Pacific (Suva) | Samoa Conservation Society (Apia)
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“Is everything new old again? Deep seabed mining’s unprecedented ecosystem risks are exacerbated by environmental and governance practices imported from terrestrial mining”¹

The following presentation was given by Catherine Coumans, MiningWatch Canada, as part of the “Talanoa on Deep-Sea Mining in the Pacific: A multidisciplinary workshop exploring the significance of deep-sea mining for the Pacific Island Countries and their communities.”

Over the last 20 years, there has been considerable research conducted to understand and explain the many harmful outcomes of mining on land.

Studies have been done on harmful outcomes of mining on affected communities, such as:

- Loss of land that provided subsistence, leading to food insecurity
- Forced evictions leading to housing insecurity, food insecurity, loss of identity and social and cultural cohesion; loss of education; loss of security of women, girls, and children
- Destruction of sacred sites such as mountains and rivers, gravesites, and ceremonial areas
- Loss of access to clean water through contamination of ground and surface water
- Sexual abuse of women and girls – for example, through an influx of men to work in mines or provide security services to mines
- Assaults on local men and boys by mine security
- A wide range of abuses of Indigenous Peoples rights, including the right to Free Prior and Informed Consent

Studies have also been done on harmful outcomes of mining on environments, such as:

- Loss of biodiversity
- Long-term contamination of ground and surface water
- Soil contamination
- Air contamination
- Long-term risk, as in thousands of years, of toxic environmental contamination from massive mine waste dumps left behind at the end of mining

¹ Paper available as a contribution to a Special Issue “Deep-Sea Mining and the Pacific Island Countries” in the journal *Extractive Industries & Society* (editors Dr. Pascale Hatcher and Dr. Isoa Korovulavula). For the full paper see <https://www.sciencedirect.com/science/article/abs/pii/S2214790X26000997>

And studies have been done on harmful outcomes of mining on national economic growth:

- For example, research on the so-called “resource curse” and on a phenomenon called “Dutch disease” has shown how strong reliance by developing countries on natural resource extraction for economic growth – without strong governance and diversified economies – leads to slower economic growth and worse economic outcomes than in similar developing countries that did not rely on natural resource extraction for their economic growth.

Finally, studies have been done on harmful outcomes from mining on democratic development and transparency:

- Studies have shown that economic reliance on resource extraction for national wealth creation is often paired with increased corruption, lack of governance transparency, and weak democratic development.

Over the last 20 years, many studies have exposed not just a wide range of harmful impacts of mining on land, but also the underlying causes for these harms. I will focus on just a few of these causes today and show how harmful practices from terrestrial mining are finding their way into the proposed new industry of deep seabed mining, through *intermediaries* that have a long history of working in terrestrial mining.

Environmental Impact Assessment

Let’s start by looking at environmental impact assessment. A key way the environmental impacts of mining on land have been managed is through the tool of environmental assessment. Environmental assessment has evolved over the last 20 years to become an area of expertise in and of itself, with its own terminology, practices, and protocols. And with the development of the practice of environmental assessment, an entire industry has evolved of environmental assessment consultants who offer their services to the global mining industry to help them get through the environmental assessment process in various jurisdictions so that they can secure permits to mine.

What we are now seeing, is that many of these environmental assessment consultants are hanging out a new shield and marketing themselves as experts to nascent deep seabed mining companies aiming to secure mining permits, as well as to governments who seek guidance on regulating this new industry. There are a range of

concerns regarding the transfer of environmental assessment practices from mining on land to the deep sea environment. Let me review just a few of these with you today.

The largest and most obvious problem in transferring practices and protocols that have been developed for environmental assessment on land to the deep sea environment is just how radically different the deep sea environment is from the terrestrial environment – and how little we know about it.

While we now know that the deep sea ecosystem is rich in biodiversity, we know next to nothing about the many species that live in the deep sea. We know very little about the complex web of life that links those species to others up the water column to the surface, or about the movement of toxins both vertically and horizontally in this fluid world. We don't fully understand how carbon is captured in the deep sea and how this capture may be affected by deep seabed mining. We don't know what deep seabed mining machines will look like, how they will work, and what their impacts will be – to name but a very few things!

Environmental assessment relies – at the most fundamental level – on knowing a lot about the ecosystem that is to be impacted by mining and about the mining process itself. Environmental assessment protocols rely on what is called a “baseline” of knowledge about the environment that will be impacted. We do not, and will not, have such an environmental baseline for the deep sea ecosystem for many years to come.

Furthermore, environmental assessment protocols for mining on land rely on decades – close to a hundred years – of experience to support terminology such as “Best Environmental Practice,” “Best Available Techniques,” “Best Available Scientific Evidence,” and “Good Industry Practice (GIP).” These protocols rely on a long history of practice. We do not have that history of practice for mining in the deep sea.

Environmental assessment protocols for mining on land rely on ways to offset or mitigate any harm that may be caused that cannot be avoided. Marine scientists have looked at these protocols and determined that for the deep sea ecosystem and the species that will be harmed, there can be no reasonable expectation that these harms can be mitigated or offset.

Another term in environmental assessment protocols for mining on land is “Adaptive Management.” This means that if harms occur that were not anticipated or predict-

ed, the mining process can be halted, re-evaluated, and may be adjusted to avoid, mitigate, or offset these harms as mining proceeds. In deep seabed mining, adaptive management is complicated by the types of legally binding contracts that may be signed by governance bodies such as the International Seabed Authority (ISA) or national governments and mining companies. It is further complicated by the fact that under international law – specifically, the United Nations Convention on the Law of the Sea – seabed mining should be prohibited if it will cause serious harm. This makes adaptive management not a real option for deep seabed mining as serious harm will have already occurred in breach of international law before adaptations can be made. What's more, making these adaptations may be prohibited by the contracts governance bodies have signed.

And yet, despite the complete lack of fit for all these terms and protocols adopted from environmental assessment in terrestrial mining, all of these terms and practices are making their way into the regulatory development work being done at the International Seabed Authority (ISA). The ISA governs activities on the seabed in international waters, known as the “Common Heritage of Humankind.” These environmental assessment protocols and practices are also finding their way into the regulatory development processes of various Pacific Small Island Developing States (PSIDS). And it is the middlemen – the environmental consultants from mining on land – that are facilitating this transfer of inappropriate terms and protocols into environmental regulations for deep seabed mining.

A final point on this: As we know, environmental assessment in land-based mining exists primarily to allow mining to proceed. The last 20 years of serious environmental harm caused by mining on land all over the world should alert us to the fact that environmental assessment protocols have not proved sufficiently protective of terrestrial environments. In fact, it can be argued that environmental assessment exists to provide a legal way for harm to occur.

Mining Contracts

Let's turn now to the role that corporate lawyers with expertise in mining on land play in designing mining contracts for deep seabed mining. I have mentioned that in terrestrial mining, not only the environmental impacts have often been severe, but also that the financial benefits to countries that rely on mining for their economic growth have often been disappointing.

One of the ways financial benefits are lost to countries is through provisions in the contracts that corporate lawyers with expertise in mining include in the contracts signed by investors (mining companies) and the countries in which the mining will occur.

These provisions include so-called stabilization clauses. These clauses ensure that, once signed, the government of the country where mining will occur cannot change its rules or regulations regarding financial benefits for the country or increase environmental protections. In other words, if the harm caused by mining is worse than was anticipated – a scenario that can easily be envisioned for deep seabed mining – the government cannot change its environmental regulations to avoid that harm going forward. Or if the financial benefits to the country are less than were anticipated, the government cannot adjust the regulations to increase revenues.

One of the reasons for disappointing revenues from mining can be found in the way corporate lawyers draft contracts between investors and states. One of the provisions that can be found in these contracts is something called “transfer pricing.” In and of itself, this is not illegal. But the way this provision has been used in land-based mining for decades is illegal and has led to massive losses of revenues from mining by poor developing countries. This practice is also known as tax-shifting or profit-shifting. In a nutshell, many mining multinationals operate in multiple countries, including tax havens such as the Cayman Islands where they do not have to pay taxes. Transfer pricing provisions allow mining companies to sell their products to their own subsidiaries. If a mining company sells – say its gold – at a low price to its subsidiary in a tax haven, it has not made much money in the country where the gold was extracted and so it pays a low tax in that country. The subsidiary then sells the gold at the highest price it can get on the open market and makes a large profit, but because it is in a tax haven, it does not have to pay taxes on that profit.

Another clause that is often included in mining contracts by corporate lawyers is one that says that any disputes between the investor – the mining company – and the state will be addressed in an international tribunal, not the courts of the country where the mining is occurring. These international tribunals that handle so-called Investor-State Dispute Settlements (or ISDS) can only be used by corporations to sue states. States cannot use them to sue corporations.

What we have seen in the use of these international tribunals in mining on land is that more and more mining companies are suing countries for astronomical and ever-increasing amounts – in the billions of dollars. They are doing this over disputes regard-

ing environmental provisions and financial provisions, but even in cases where they have been denied a permit to mine. A deep seabed mining company, which has licenses in the territorial waters of the Cook Islands, has used provisions in its contract with Mexico to sue the Mexican government for not permitting it to mine in Mexico's off-shore waters. Odyssey Marine Exploration sued the Mexican government for upward of US\$2.36 billion in such an international tribunal. The company won a settlement for US\$37.1 million. I cannot imagine there are many Pacific Island States for which such an amount would be negligible! Often just the threat of a company filing an ISDS claim is enough for a government to withdraw its efforts to reduce environmental harm, increase revenues from mining, or withhold a permit.

Again, it is corporate lawyers with expertise in terrestrial mining that are putting the clauses we have discussed here into contracts for deep seabed mining.

In my paper, I discuss the latest legal contract signed by the Kingdom of Tonga in 2025 with a subsidiary of The Metals Company. This contract includes provisions that fundamentally circumvent the authority and role of the International Seabed Authority and thereby directly contradict Tonga's own *Seabed Minerals Act* of 2014 – specifically sections 8 and 82 of the Act, which prohibit the government from entering into agreements inconsistent with the United Nations Convention on the Law of the Sea (UNCLOS) and ISA rules.

Regulatory Capture

Let's look at one more area where harmful practices from terrestrial mining are finding their way into the arena of deep seabed mining. Just as there are environmental consultants that have built lucrative businesses helping terrestrial mining companies with their environmental assessment requirements, and just as there are corporate lawyers who have a long history of helping companies mining on land to secure contracts that are designed to protect the financial interests of the company over the interests of the state – or local communities, or the environment – so too are there lobbyists with extensive experience in swaying governments to meet the needs of their corporate clients (companies that mine on land).

These are lobbyists with specific expertise in lobbying for mining companies and often possess decades of experience in places such as Washington, D.C. or Ottawa, Canada, where rules are made that impact mining companies. We are now seeing these lobbyists at work for deep seabed mining companies.

In my paper, I discuss the fact that rule making for deep seabed mining at the International Seabed Authority has been slow – in large part, and rightly so, because of the particularly challenging environmental realities associated with deep seabed mining that we have just discussed.

Some mining companies, such as The Metals Company from Canada, have long railed against the multilateral process ongoing at the ISA as being too slow for its own financial interests.

TMC has paid lobbyists to promote deep seabed mining as a national security imperative in the US's competition with geopolitical rivals for access to critical minerals required for military purposes. Washington-based lobbyists for TMC include: The Vogel Group, specializing in defense; Bracewell LLP, specializing in natural resources; and Lighthouse Strategies LLC, specializing in government relations. TMC has also worked with ICR, a New York-based public relations firm with expertise in metals and mining.

There is evidence that the US government was largely uninterested in getting involved in permitting deep seabed mining unilaterally – outside the multilateral ISA process. But the national security angle has found fertile ground with a government that is extremely concerned with national security and with its competition with other geopolitical great powers. This has led the US government to position itself to permit deep seabed mining in international waters in contravention of international law and the multilateral process underway at the ISA.

My paper's title asks "Is everything new old again?" Regarding the very new prospect of mining the deep seabed, it very much looks like many of the old and highly-problematic aspects of mining on land – the very things that have long made mining on land so harmful – are re-appearing in the deep seabed mining space.