

RESEARCH CENTRE





Submission to the Special Rapporteur on the implications for human rights of the environmentally sound management and disposal of hazardous substances and wastes, Call for inputs – The toxic impacts of some climate change solutions

13 April 2023

About Jubilee Australia Research Centre

Jubilee Australia Research Centre engages in research and advocacy to promote economic justice for communities in the Asia-Pacific region and accountability for Australian corporations and government agencies operating there.

Jubilee Australia works in partnership with the civil society sector, principally in Papua New Guinea and Fiji.

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About Bismarck Ramu Group

The Bismarck Ramu Group (BRG) is a development organization that is guided by the concept of a Melanesian Philosophy and way of life. The organization exists to build a movement of like-minded and like-spirited Melanesian people by heart, who seek to protect and promote the Melanesian philosophy, values and principles. In pursuing this, our people will contribute towards securing their heritage and adding to the global course of maintaining human dignity and protection of our ecosystem.

BRG's vision is Melanesian self-determination for Gutpela Sindaun (highest quality of life). BRG believes that if communities in PNG do not reclaim and uphold their own ways/their own development models, the nation will be consumed by the evils of globalization.

The organization's role is facilitation of restoration and transformation of people's lives. BRG's helps Papua New Guineans to understand who they are and take control of their own development.

BRG believes that people are the center of any development and therefore must believe in their own ability to define and control the course of their own development.

BRG believes that only way to drag Papua New Guineas out of physical and spiritual poverty is to allow PNGeans to live on their land the best way they see it. It is landlessness that has caught billions into poverty.

Facebook: @BismarckRamuGroup

Introduction

Jubilee Australia Research Centre and Bismarck Ramu Group welcome the opportunity to provide input on the toxic impacts of some climate change solutions, to the Special Rapporteur on the implications for human rights of the environmentally sound management and disposal of hazardous substances and wastes. We note that the purpose of this call for inputs is to inform the Special Rapporteur's 2023 thematic report to the Human Rights Council.

This submission will address some of the toxic impacts of mining cobalt, nickel and copper that our partners have witnessed, and projects that are proposing to mine for copper that are in approval stages in Papua New Guinea that we believe will have toxic environmental impacts.

Regulation, legislative protection and transparency

At Jubilee Australia, we have observed that there is insufficient regulation, legislative protection and transparency, as well as community education, across Pacific states to enforce the rights of communities, including Indigenous communities, to provide free, prior and informed consent to extractive projects.

In Papua New Guinea, we note that there is a particular lack of legislative protections surrounding waste management from mining projects, with riverine and ocean disposal of tailings, waste rock and chemicals, permitted across a variety of projects.

At Jubilee Australia, we have also observed a lack of accountability of companies operating in the Pacific region, with severe environmental degradation occurring, which has deleterious impacts on communities, and often without remedy.

We note that the Pacific is anticipated to continue to be mined for transition minerals, with many new proposed mines across the Pacific. This includes mines for nickel in the Solomon Islands, as well as copper and gold in Fiji.

We submit that as a hunger for more transition minerals grows, that States lacking the appropriate legislation and regulation will be sought out for the provision of transition minerals. Jubilee Australia has already seen an example of this, with the commencement of mining of magnetite from the black sands of beaches and river mouths of Fiji's Viti-Levu island. The industry is currently planning to expand in Fiji. However, there is no legislation, regulation or regulatory authority specifically regarding magnetite mining in Fiji.

This is important to recognize, as these states will bear the burden of the energy transition.

Environmental racism

We note that in October 2022, a report of the Special Rapporteur on contemporary forms of racism, racial discrimination, xenophobia and related intolerance on ecological crisis climate justice and racial justice, detailed environmental human rights violations are often connected to race, and racial injustice.

The report described environmental racism as "institutionalized discrimination involving "environmental policies, practices or directives that differentially affect or disadvantage (whether intentionally or unintentionally) individuals, groups or

communities based on race or colour'; the report also noted that environmental racism occurs within nations and across borders.'

The report details:

The global ecological crisis is simultaneously a racial justice crisis... the devastating effects of ecological crisis are disproportionately borne by racially, ethnically and nationally marginalized groups—those who face discrimination, exclusion and conditions of systemic inequality because of their race, ethnicity or national origin. Across nations, these groups overwhelmingly comprise the residents of the areas hardest hit by pollution, biodiversity loss and climate change. These groups are disproportionately concentrated in global "sacrifice zones"—regions rendered dangerous and even uninhabitable due to environmental degradation. Whereas sacrifice zones are concentrated in the formerly colonized territories of the Global South, the Global North is largely to blame for these conditions. As noted by the Special Rapporteur on the environment: "[h]igh-income States continue to irresponsibly export hazardous materials ... along with the associated health and environmental risks, to low- and middleincome countries[.]" Notably, the distinction between "highincome" and "low-income" countries is directly related to the racist economic extraction and exploitation that occurred during the colonial era, for which colonial powers have not been held accountable."

According to the Special Rapporteur on the environment, '[t]oday, a sacrifice zone can be understood to be a place where residents suffer devastating physical and mental health consequences and human rights violations as a result of living in pollution hotspots and heavily contaminated areas.'^{||||} "Sacrifice zones," as demonstrated in this report, are more accurately described as "racial sacrifice zones."

We note that one of the key recommendations within the UN special rapporteur's report is the need to 'systematically hold transnational corporations accountable for environmental racism and climate injustice'.iv

We submit that this is relevant to consider in the management and disposal of hazardous substances and wastes, and that this can appropriately be seen to be the underbelly of the energy transition.

Uses for transition minerals

Nickel is used in the strengthening of steel, which means that it is also used in wind, solar photovoltaic, hydro, geothermal, energy storage, and nuclear, i.e., all renewable energy technologies.¹

Copper is present in almost all renewable technologies, reflecting its similarly varied usage as a base component in a range of conventional technology. Copper is used in the electrodes of Li-ion batteries, in the internal combustion systems of EVs and in the wiring and cabling of wind turbines. However, the most dominant renewable usage is in the heat exchangers, wires, and cables of solar photo-voltaic (PV) systems. ¹

Lithium, nickel, managanese and cobalt are all minerals used lithium-ion (Li-ion) batteries, the most common batteries used in electronic vehicles (EVs). The relative proportions of each mineral depends on the type of battery produced, but lithium is of particular importance because it is the only indispensable element in Li-ion batteries. The push for new sources of these four elements is therefore strongly connected to the EV sector which will soon be the main downstream destination for most of these minerals.

Cobalt/nickel

The Ramu-Nico nickel and cobalt laterite mine, Madang province, Papua New Guinea

We wish to raise our significant concerns regarding environmental and human rights impacts faced by communities along the Ramu River in Papua New Guinea.

In Papua New Guinea, communities living along the Ramu River, north of the Kurumbukari mine, are reporting significant impacts on the environment and on human rights. We believe that these impacts may be connected with mining and associated waste management at the Kurumbukari mine, a nickel, cobalt laterite and chromite mine in the Madang province.

Production at the Kurumbaraki mine commenced in 2012, following a protracted legal battle with communities who sought to oppose the project from going ahead, and who subsequently lost the legal challenge to the mine. The mine is operated by the Metallurgical Corporation of China (MCC).

The waste management for the Kurumbaraki mine involves a 135km pipeline from the Kurumbukari plateau, to the Basamuk process plant. The Basamuk process plant is located 75km east of the provincial capital of Madang, on the Rai Coast of the Vitiaz Basin.

The Ramu River is located approximately 4km from the mine site. The mine site is located on a mountain top right next to the river - the Ramu River runs at the bottom of the mountain. When rain falls, erosion of soil uphill appears to be dumped into creeks which feed into the Ramu River. Communities report that the water in the creeks is yellow, and plants near the creek are dead.

Along the Ramu River, impacts are being reported by communities on the physical environment, their health and society.

We wish to raise these to the attention of this inquiry, as we believe that these impacts are serious, and warrant further attention. Further, we are concerned that these impacts could be replicated in other nations that lack the appropriate regulation and legislative protections regarding waste management.

Life along the Ramu River depends entirely on the river itself, where approximately 50,000 people live in a subsistence lifestyle.

The following are a range of impacts identified by members of communities along the river, as told to our partners:

Physical Environmental Impacts Reported by Communities

Communities along the Ramu River report that:

- Fish are dying and floating in the river;
- Sedimentation in the river is building up;
- Growth of plants along the river are not in their healthy state compared to more than a decade ago. Their leaves are turning yellow as soon as the deposits from the river covers their stem;
- Before the operation of KBK (MCC) at Kurumbukari, the river banks had long stretched of sand and gravels during dry seasons. Now, most stretches of sand banks are filled with muddy clays;
- The color of the river now has changed from clear during dry season, and brown during wet season, to muddy yellowish brown. yellow. f
- The taste of the river upon drinking it is not the same as before the mining operation begun:
- Most people along the river are not accessing the Ramu River for drinking. People are now looking for drinking water source elsewhere. Some of them are purchasing iron roofs just to collect rain water and store them for drinking;
- Flood during wet season reaches higher locations which was not experienced in the past. This change is also affecting gardens, food crops and cash crops of the people;
- Most communities along the river are experiencing unhealthy harvest from their gardens. Also, the quality and quantity of the food crops is not the same as more than a decade ago;
- The water quality of Ramu River is diminishing as the taste upon drinking it is not the same as it used to be. Also, the river is becoming narrow during dry season when sedimentation surfaces the river, which is totally unseen after more than a decade ago.

Health Impacts Reported by Communities

- People along the river, after drinking from the Ramu River are experiencing stomach ache, swollen stomachs and diarrhea.
- Sores on the skin is becoming a common health issue faced by people along the Ramu River. It usually begins with itchiness in legs, and upon continuous scratching, develops into big sores that take a long time to heal when treated.
- During the wet season and when the river over-floods, it affects the normal operation of health services. Nurses especially those not from communities along the river forcefully vacate the health centers and health posts for their

respective communities due to flood. Unfortunately, this affects the number of health personals in various health centers and health posts along the Ramu River.

Social Impacts Reported by Communities

- It is a key part of the culture that children along the Ramu River enjoy themselves by playing in the river and along the long stretches of sand during dry season. Nowadays, this is not happening. Parents are not allowing their kids to go swim and enjoy themselves in the river for an hour because they do not want their children to contract skin diseases after swimming in the river.
- It is becoming difficult for people to catch fish compared to what they used to experience more than a decade ago. The quality and quantity of every catch is also diminishing.
- The Ramu River also has its cultural significance to the people. Some clans along the river have cultural connection to the river, which is seen as their 'Mother'. However, the river is now affecting the livelihood of people. To them is like their 'Mother' has contracted a disease which is totally a new experience to see.
- One of the fish that is commonly seen dying and floating in the river has cultural significance to the people. Especially for the Iski Language speaking People in the Middle Ramu District, that fish is the Tatham of a clan. Families connect with their relatives through the history of that fish. The fish is called 'Agma' in the Iski Language and is commonly referred to as 'Kondong' by the people living along the Ramu River.

Economic Impacts Reported by Communities

- The healthy growth of cash crops (betel nut, cocoa, vanilla) is lessening compared to that of more than a decade ago. That is also affecting their quality and quantity when it comes to selling of them.
- Transportation of the cash crops to their respective markets in Madang Town is becoming harder during dry season when sedimentation builds up. Sedimentation is affecting smooth travel in the outboard motors. As a result, transportation expense goes high affecting the local buyers to buy those cash crops at a low price from the local farmers. This is also affecting the income of locals to sustain themselves as well as paying for other costs such as school fees, medical fees and so on.

Other Social Impacts Reported by Communities

- During the wet season and when the river over floods, it disrupts the normal operation of schools. Schools experience unscheduled closure affecting learning of students due to flood hindering movement of students to and from their villages. Moreover, teachers especially those who are not from the Ramu River communities find it very difficult to cope with the life of living in the flood. Therefore, they are forced to leave the schools resulting in unscheduled closure of schools.
- Most of the people along Ramu River use motorized dugout canoes to travel along the river for kilometers and miles to reach the nearest road link to Madang Town to access necessary goods and services. During dry season it becomes very difficult to travel along the river as build-up of sedimentation prevents the

smooth operation of outboard motors, which is not experienced before the operation of KBK up at Kurumbukari.

Community members also report social and health impacts near the mine site:

- Respiratory problems is a common health issue within communities surrounding Kurumbukari Mine site.
- Skin diseases is very common in the area
- Tropical Ulcer is commonly faced by everyone in the communities surrounding the mine site.
- Plants growing in the creek that flows from the mine site down to the Ramu River are dying.
- One of the lakes of the local communities was filled up with waste flowing down directly from the mine site. Fish and crocodiles in the lake were all dead when the mine waste reached the lake.
- Chromite was mined and just piled up in the open space exposed to the open air within the mine site.

Communities are able to provide further information to this inquiry if requested, including photos. Further evidence is currently in the process of being gathered and may be submitted to this inquiry as an addendum to this submission.

We wish to note that we are aware that exploration for nickel in the Solomon Islands is underway, with proposals for a number of projects in advanced stages.

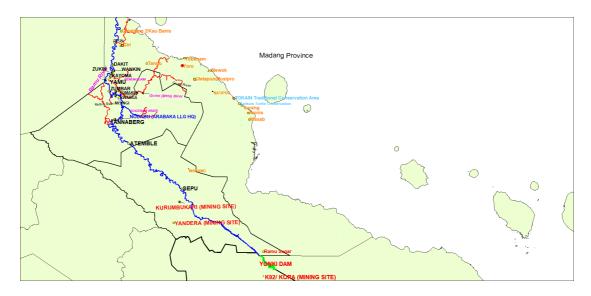
We are concerned that environmental impacts such as experienced in the Ramu River region could be replicated in further nations that lack the appropriate regulatory oversight.

Impacts of Deep Sea Tailings Placement

We wish to highlight that the tailings management method of the RamuNico project has also led to environmental damage.

Ramu NiCo, has been dumping millions of tons of mine waste into the ocean since 2012, and evidence for environmental and health impacts is accumulating.

In August 2019, 200,000 litres of toxic slurry was spilled at the RamuNico plant, with upto 80,000 litres ending up in the ocean, turning the water bright red and staining the shore. VI Despite being more than three years ago, the Conservation and Environmental Protection Authority has not yet completed their response to that spill; no penalties appear to have been applied.



Map: Region of Ramu River

In February 2020, a coalition of more than 5,000 villagers and the Madang provincial government in Papua New Guinea lodged a legal challenge against the world's most productive battery nickel plant. vii

In February, the coalition sued Ramu NiCo, demanding not only that its Chinese owners pay restitution totalling 18 billion kina (\$5.2 billion), but also that it stops dumping mine waste into the ocean and remediate the allegedly contaminated waters.

It is important to note that Ramu produces nickel-cobalt hydroxide - a raw material for the electric vehicle battery industry. VIII

Copper

We also wish to highlight that copper is present in almost all renewable technologies, reflecting its similarly varied usage as a base component in a range of conventional technology. 'Copper is used in the electrodes of Li-ion batteries, in the internal combustion systems of EVs and in the wiring and cabling of wind turbines. However, the most dominant renewable usage is in the heat exchangers, wires, and cables of solar photo-voltaic (PV) systems.'^{ix}

We are concerned that inappropriate waste management at copper mines leads to severe pollution of communities and their environments.

Panguna mine

In March 2020, the Human Rights Law Centre found that thousands of people in Bougainville across 38 villages are still living with the ongoing impacts of the mine: contaminated water sources, land and crops flooded by toxic mud and health problems ranging from skin diseases and respiratory problems to pregnancy complications.^x

Theonila Roka Matbob, a community member, and now the Community Government Minister for the Autonomous Region of Bougainville, has previously said:

We live with the impacts of Panguna every day. Our rivers are poisoned with copper, our homes get filled with dust from the tailings mounds, our kids get sick from the pollution. Some communities now have to spend two hours a day walking just to get clean drinking water because their nearby creeks are clogged up with mine waste.^{xi}

The Panguna mine devastated our communities physically and culturally and we are still living with the consequences. Our land is destroyed and our rivers are poisoned. Kids are drinking and bathing in the polluted water and getting sick. New areas of land are still being flooded with the waste from the mine. xii

The Human Rights Law Centre made a complaint against Rio Tinto on behalf of 156 residents downstream of the Panguna mine, asserting breaches of the OECD Guidelines on Multinational Enterprises. Rio Tinto ultimately agreed to fund an independent environmental and human rights impact assessment of its former Panguna mine.^{xiii}

Future mines

We are aware of copper/gold mines that have been proposed in Papua New Guinea, one of which is the Frieda River mine.

Frieda River copper/gold mine

The Frieda River copper/gold mine has been proposed to be operated in East Sepik province, Papua New Guinea, by PanAust, an Australian company that is ultimately Chinese owned. The mine's tailings dam has been proposed to be located on the Frieda River, a tributary of the Sepik River, PNG's equivalent of the Amazon River.

The Upper Sepik region has been tentatively nominated for World Heritage Status due to its outstanding biological and cultural significance.

The proposed tailings management method for the Frieda River mine would be a tailings dam, which would be twice the size of Sydney Harbour. To prevent environmental devastation, the tailings dam would need to be maintained and monitored, and endure without breakage or damage, for the rest of human civilisation.

In the event that the tailings dam broke, tailings would collapse down the Sepik River in a tidal wave, inundating villages and devastating the Sepik environment forever. No evidence has been provided by the proponent for the project regarding the dam break analysis.

Jubilee Australia Research Centre, along with PNG NGO Project Sepik, made a complaint to the Australian National Contact Point for Multinational Enterprises regarding the Frieda River mine, asserting breaches of the OECD Guidelines on Multinational Enterprises. An urgent correspondence on this issue was also provided to 6 UN Special Rapporteurs.

We are concerned that as major extractive projects for transition minerals continue to expand into the Pacific - and across the world - that any ill-management of the waste of these mines has immense potential to cause environmental damage that lasts generations.

In the Pacific, challenges regarding tailings management include that areas for mining are often seismically active, may be prone to heavy rainfall, may be located in areas of global significance for biodiversity, and in states that are not as stringent in their legislative protections, regulation and oversight, that have limited capacity (or in some cases, desire) to conduct independent monitoring, in areas where communities depend on the environment for subsistence. Mining for these minerals may also occur in regions that have previously been inaccessible, therefore permitting mining in these regions can also facilitate increases in illegal logging activity.

https://www.ohchr.org/en/documents/thematic-reports/a772990-report-special-rapporteur-contemporary-forms-racism-racial (accessed 5 November 2022) at 13 [45].

¹ A/77/2990: Report of the Special Rapporteur on contemporary forms of racism, racial discrimination, xenophobia and related intolerance on ecological crisis climate justice and racial justice - Note by the Secretary-General, A/77/2990, 25 October 2022, at 12 [41] available at

ii Ibid, at 3 [1].

iii Ibid at 7 [19],

iv Ibid at 21 [81].

VMRDC, https://www.mrdc.com.pg/ramu-ltd.html

vi Bethanie Harrieman, 'Chinese owned nickel plant in PNG shut down after toxic spill,' *ABC News*, 25 October 2019, available at https://www.abc.net.au/news/2019-10-25/chinese-owned-nickel-plant-in-png-shut-down-after-toxic-spill/11636086 (accessed 1 June 2022).

vii https://news.mongabay.com/2020/05/locals-stage-latest-fight-against-png-mine-dumping-waste-into-sea/

viii https://www.reuters.com/article/mcc-nickel-papuanewquinea-idUSL4N2BP1ND

ix Jubilee Australia Research Centre, *Greenlight or Gaslight? The Transition Minerals Dilemma for Australia* (2023), at 1.

^{*} Human Rights Law Centre, *After the Mine: Living with Rio Tinto's deadly legacy* (2021), available at https://www.hrlc.org.au/reports-news-commentary/2021/7/1/after-the-mine-living-with-rio-tintos-deadly-legacy

xi Human Rights Law Centre, *After the Mine: Living with Rio Tinto's deadly legacy* (2021), available at https://www.hrlc.org.au/reports-news-commentary/2021/7/1/after-the-mine-living-with-rio-tintos-deadly-legacy

xii Project Sepik, Jubilee Australia Research Centre, *The Sukundimi Walks Before Me: Six Reasons Why the Frieda River Mine Must be Rejected* (2021), at 30.

xiii https://www.hrlc.org.au/news/2021/7/21/bougainville-rio-tinto-to-assess-environmental-and-human-rights-impacts-of-former-mine