Press review: Mining in the South Pacific

Vol. 10, No. 4, July - August 2018, 86 pages

Compilation: Dr. Roland Seib, Hobrechtstr. 28, 64285 Darmstadt, Germany http://www.roland-seib.de/mining.html

Copyright: The material is copyrighted by the media and authors quoted.

Abbreviations in common use:

- BCL: Bougainville Copper Limited
- LNG: Liquid Natural Gas
- PIR: Pacific Islands Report
- PNG: Papua New Guinea

Websites:

Radio New Zealand: http://www.radionz.co.nz/international

PNG Post-Courier: http://postcourier.com.pg/

PNG National: http://www.thenational.com.pg/

SLN mining expansion suspended in New Caledonia

Radio New Zealand, 30 August 2018

Reports from New Caledonia say the government of the northern province has ordered the suspension of work aimed at opening a new mine at the Kouaoua site. All mining operations in Kouaoua were halted earlier this month after an arson attack on the installations and amid a blockade by young people opposed to expanded mining. The public broadcaster reported the northern province president Paul Neaoutyine has now signed an order withdrawing the authorisation for further mining. The SLN mining company had earlier been given the consent by local elders to expand mining at Kouaoua which supplies about 600,000 tonnes of ore a year to the SLN smelter in Noumea. However, dozens of mainly young locals want the expansion to be stopped. With the help of a French mediator, a first round of talks have been held this week between the elders and the protesters. Hundreds of people have been affected by the shutdown. **Fiji: No short cuts to dealing with community grievances on mining** The Fiji Times, 29 August, 2018



FCOSS executive director Vani Catanasiga. Picture: FT FILE

There are no short cuts or easy solutions to dealing with community grievances and disputes arising from mining or extraction says the Fiji Council of Social Services (FCOSS). FCOSS executive director, Vani Catanasiga shared the sentiments after presenting to the UNDP-organised "Addressing grievances and disputes from the Development Mineral" Capacity Building Workshop in Nadi Catanasiga who presented on "Free, Prior, Informed Consent – A proactive approach to dealing with community grievances and disputes in extraction" said while development stakeholders favour a faster and more efficient approach to dealing with community grievances and disputes, this approach undermined the community's right to decide on projects that could affect them adversely.

"Working to obtain Free, Prior and Informed Consent or FPIC is about involving communities the right way so that development can have a lasting and positive legacy for both communities and companies," she said. "FPIC is an intentional process that should avail to affected communities information on government, business or banks that are stakeholders in the project, project details in their preferred language as well as convening community discussions that involve everyone – including women, children, elders, non-indigenous neighboring settlements – to discuss project terms."

She said using FPIC could be a proactive approach to dealing with community grievances arising from access to and utilisation of natural resources. "So yes it may seem, a long and sometimes difficult process but ultimately as you mainstream FPIC into your approaches, you indirectly build communities' sense of ownership into ensuring the success of the project because you have included them," she said. Catanasiga said FPIC is emerging as a best practice approach for people centred development around the world because it promotes the inclusion of all communities that will be affected by proposed development projects.

NZ fishing industry celebrates win over deep-sea mining proposal Intrafish (NZ), 28 August 2018



New Zealand's fishing industry successfully appealed against the Environmental Protection Authority's (EPA) decision to allow Trans-Tasman Resources (TTR) to mine 50 million metric tons of seabed annually, and discharge 45 million metric tons of waste sediment into the waters off the coast of Taranaki for 35 years. The appeals were lodged by Cloudy Bay Clams, New Zealand Federation of Commercial Fishermen, Fisheries Inshore New Zealand, Southern Inshore Fisheries Management, Te Ohu Kaimoana, Talley's Group, Greenpeace, Kiwis Against Seabed Mining, Te Runanga O Ngati Ruanui Trust, Forest and Bird, Taranaki-Whanganui Conservation Board, and the Trustees of Te Kahui O Rauru.

TTR's first application was refused in June 2014 after a Decision Making Committee (DMC) appointed by the EPA found the application was premature and more time should have been taken to understand the proposed operation, its effects on the receiving environment and existing interests. Fisheries Inshore New Zealand (FINZ) Chief Executive Jeremy Helson, said TTR's most recent application was almost identical to the first, and did not address the EPA's key reasons for refusing TTR's application in 2014. By allowing the appeal, the High Court has today confirmed our view that the application, and the DMC's decision, were deficient," he said. "The court quashed the decision saying the narrow interpretation of the adaptive management approach was inconsistent with the law. "This is a good decision by the High Court and we are pleased this matter has again been rejected," said Helson. "It is clear from these failed attempts that a significant re-think is required on seabed mining."

Environmentalists win appeal against seabed mining decision CATHERINE GROENESTEIN AND CHRISTINA PERSICO, Stuff NZ, August 28, 2018

KASM chairwoman Cindy Baxter said the news was a victory for those who fought against the seabed mining consent. The South Taranaki Bight seabed mining decision was overturned because its method of environmental management was illegal, the High Court ruled. In August last year, Trans Tasman Resources was granted consent to mine up to 50 million tonnes of ironsand from a 66sqkm area off the South Taranaki Bight for 35 years by the Environmental Protection Authority. Following a split decision a casting vote was used in favour of TTR's consent. However, the decision was appealed in the High Court by 11 parties and a hearing was carried out in the Wellington High Court in April, but Justice Peter Churchman reserved his decision. The decision was released on Tuesday and ruled in favour of the environmentalists. The judge ruled incorrect interpretation of legal terms around protecting the ocean environment "may well have influenced" the outcome of the seabed mining consent.



TOM PULLAR-STRECKER/STUFF

It was found the decision-making committee's (DMC) conditions either was or contributed to an "adaptive management approach", which was not permitted in an area governed by the EEZ Act, and labelled a "suck it and see" method by appellants. Adaptive management is allowing an activity with uncertain effects and continually assessing it - any unanticipated effects must be able to be managed by changing or stopping the activity. The judge ruled that the interpretation was "inconsistent with the purpose of the Act" in protecting the environment from pollution and with the obligation to favour caution and environmental protection if the information available was inadequate. The error "may well have" influenced the outcome of the consent application, it was ruled. "The appeal is allowed and the decision of the DMC [decision making committee] is quashed. The matter is referred back to the DMC for reconsideration, applying the correct legal test in relation to the concept of adaptive management approach," the decision outcome said.



Bruce Mercer

The appellents argued it was illegal under New Zealand law applying to the EEZ and continental shelf, and the judge agreed. Kiwis Against Seabed Mining (Kasm) and Greenpeace issued a joint press release saying the overturning was a "victory for the oceans". "This is a victory for the thousands of people who have protested and the 13,000 who made submissions against this awful proposal, a victory for the South Taranaki Bight, the blue whales and the entire New Zealand marine ecosystem," Kasm chair Cindy Baxter said. The main part of the decision by Justice Churchman fo-

cused on what the appellants all argued was "adaptive management" – a practice of essentially "trying it out and seeing what happens, and adapting the conditions accordingly". That, they argued, was illegal under New Zealand law applying to the Exclusive Economic Zone and continental shelf.

Greenpeace executive director Russell Norman said the decision had prevented "vandalism" of the ocean. The judge agreed with these arguments, and has sent the decision back to the EPA "for reconsideration, applying the correct legal test in relation to the concept of adaptive management approach". "This is a huge win for the oceans, and for people power. Oceans are the life support system of our planet," Greenpeace NZ executive director Russel Norman said in the statement. "I certainly hope this will be the last we'll see of these wannabe miners." In overturning the EPA's decision, the High Court had prevented "vandalism" of the ocean and a habitat for blue whales, Norman said.



CHARLOTTE CURD

After hearing the new Chris Wilkes said he would head out for a surf knowing the ocean was being protected. (file photo) Chris Wilkes, who was with Kiwis Against Seabed Mining (Kasm) at the appeal hearing but has since resigned from his post, was heading out to sea just minutes after hearing the news. "The whole idea of the ocean being desecrated is a personal thing for me, I'll be sitting at Stent Rd knowing it's safe, that's such a relief." Hopefully this is the last we see of TTR, he said. "On a personal level it took a lot of my life, its great to see that has paid off."



SIMON O'CONNOR/STUFF

Debbie Ngarewa-Packer pictured of Ngati Ruanui an iwi that was among the appellants. Ngati Ruanui said the High Court win proved voices and actions counted. "We have fought this battle twice and won each time," Te Runanga o Ngati Ruanui Trust Kaiarataki Debbie Ngarewa-Packer said. "This is a clear sign that the EPA did not get things right to start with so we hope they're actually listening this time."



ROBYN EDIE/STUFF

Forest and Bird CEO Kevin Hague was thankful ocean mammals were being protected. Ngati Ruanui will keep up the pressure to decline this archaic form of economic development should TTR appeal this decision, Ngarewa-Packer said. She said the iwi led the appeal because it "goes to the heart of who we are as tangata whenua, ensuring generations can enjoy our shoreline". Fisheries Inshore New Zealand said the High Court decision "confirmed our view that the application, and the DMC's decision, were deficient". Forest & Bird chief executive Kevin Hague said the news would give the country's only known population of blue whale a reprieve from the imminent threat of experimental seabed mining. "This area is habitat for 34 species of marine mammals, including Hector's and Māui dolphins, humpback whales, and New Zealand's own population of blue whale," Hague said in a statement. "This activity would likely kill everything on the seafloor, and severely disrupt the habitat of blue whales and other sound sensitive creatures."



ANDY JACKSON/Stuff. Green party MP Gareth Hughes said the decision was a win for people power.

The Green Party's Gareth Hughes said: "Risking the habitat of threatened Blue Whales and the world's smallest and most endangered dolphin, the Maui's for a quick buck went against New Zea-

landers values and now, also against our law. "The Green Party has long been opposed to seabed mining and is urging New Zealand adopt a seabed mining moratorium as other states have."

Pruaitch cautions govt on LNG project

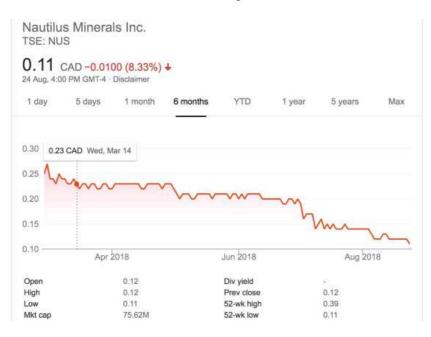
Post-Courier, August 28, 2018

The Opposition has cautioned the Government against fast tracking negotiations for the second LNG project. Opposition leader Patrick Pruaitch proposed new regulations to fully capture incountry benefits and enhance transparency. Mr Pruaitch is urging the government to include important non-fiscal issues during current negotiations for proposed construction of three additional LNG trains using gas from P'nyang and Elk-Antelope. "The government should not make the coming APEC summit the deadline for conclusion of a fiscal agreement," he said. "It has taken 11 months of negotiation in 2008 to conclude the PNG Gas Agreement, which laid the foundation for development of the US\$20 billion PNG LNG project. "I am sure the government is looking at fine tuning these fiscal measures to maximize Papua New Guinea's financial returns. "However, a range of non-fiscal issues need to be addressed to ensure that a second world scale LNG venture is closer in line with the nation's aspirations." According to Mr Pruaitch, future resource projects should only commence construction after landowner groups associated with projects are identified with agreements concluded on the benefit streams they will enjoy.

He said ExxonMobil, as operator of the PNG LNG project, has been exempted from Bank of Papua New Guinea regulations. "The operator of the LNG facility should be required to provide a fully audited account of the operation, inclusive of the dividend stream going to project participants," Mr Pruaitch said. "I would recommend that ExxonMobil and Oil Search be required to divest newly acquired exploration licenses associated with their takeover of InterOil assets." "Alternatively, they can avoid this divestment by setting aside 1.5 trillion cubic feet of gas for use by a third party they can attract, within a reasonable timeframe, to build and operate a petrochemical plant." Mr Pruaitch said a portion of that gas could be set aside for power generation. He would also like to see a positive regime for royalty and development levy payments which flow to landowners, provincial governments and local level governments.

Nautilus Minerals Dives to New 12-Month Low at \$0.11

Michael Baxter, X News Press, August 26, 2018



Nautilus Minerals Inc. share price hit a new 52-week low during trading on Friday. The stock traded as low as C\$0.11 and last traded at C\$0.11, with a volume of 14100 shares changing hands. The stock had previously closed at C\$0.12.

Progress good on landowner

Post-Courier, August 23, 2018

More than US\$200 million (K652.4 million) of PNG LNG landowner benefits is being held in trust, pending the completion of landowner identification and verification. That is while royalty and equity payments continue to flow to landowners in the PNG LNG plant site area and along the pipeline route, stated Oil Search CEO Peter Botten in OSL's 2018 half year report this week. "The government is making good progress on resolving outstanding issues and Oil Search is continuing to support the government where it can, to ensure a speedy release of these funds to the rightful beneficiaries," Mr Botten issued.

Mr Botten reported that during July- August, the PNG LNG project co-venturers entered into two mid-term LNG sale and purchase agreements (SPAs) with PetroChina and BP, broadening the customer base for LNG from PNG and increasing total contracted volumes to approximately 7.5 MTPA. Under the PetroChina SPA, the project will supply 0.45 MTPA of LNG for three years, commencing July 2018. The BP SPA involves the supply of approximately 0.45 MTPA of LNG for three years, three years, commencing August 2018, and approximately 0.9 MTPA for two years thereafter. This is in addition to the 6.6 MT of annual output already committed under long-term contracts to JERA, Osaka Gas, Sinopec and CPC.

MOU breached, say Payabe and Hamaga

Post-Courier, August 24, 2018

The Payment of more than K58 million by the state to the Hela Provincial Government as a development levy is in beach of an MOU signed in 2016 and the NEC decision. Hides landowners Umbrella Association chairman Chris Payabe and Hides PDL 7 Special Purpose Authority chairman (SPA) Andy Hamaga said the payment of K32.2 million on Tuesday this week and the payment of K26 million last week by the state to the Hela Provincial Government is illegal as per the MOU signed between the state and the landowners in Hides in 2016 and the NEC decision for all state funds to be paid to the government-sanctioned Special Purpose Authority. Mr Payabe and Mr Hamaga said the landowners have decided, through the MOU, that they do not want the Hela provincial government to manage the funds as the funds are never used for the intended purpose and are often mismanaged

"We have agreed that the funds should be paid to the SPA, a government sanctioned entity to deliver services to the impacted local level government but the state has breached the MOU. "We are now calling on the national Government and its agencies including the Hela Provincial Government to direct the funds to the Hides PDL 7 SPA as per the benefit sharing agreement percentage. "All related funds should be paid to the SPA and not the provincial government. That is the legally binding document in place and yet that agreement has been breached," they said. They said they have a mandated Agency, the Hides PDL 7 SPA in place they urge the state and provincial government to redirect the fund to the SPA to manage and deliver impact projects for the impacted landowners and the LLG. The leaders have also called on the state to honour its commitment to the landowners by releasing the infrastructure development grants of K75 million and another reinforcement K100 million of state commitment, made during the signing of the landowners based benefit sharing agreement in Hides.

PNG Mining Minister cautious about Hidden Valley Mine Threat Gabriel Lahoc, NBC News, 26 August 2018



Papua New Guinea Mining Minister Johnson Tuke says he is not aware of issues arising from the Hidden Valley mine and will only respond upon receiving official complaints. The Minister made this response to Rex Mauri, Chairman of Nakuwi Landowners Association, the traditional landowners of Hidden Valley mine operated by South African company, Harmony Gold Mining Company. Mauri threatened to shut down the mine as a last resort approach, saying it is unfair that the government failed to review the Hidden Valley mine Memorandum of Agreement, five years after it was due, while now rushing into negotiating a new agreement for the new neighboring Wafi-Golpu project. Mauri said, he will lead the locals in forcefully shutting down the Hidden Valley mine, after failing to get the national government to review the outdated HiddenValley Mine MoA. Mauri claimed the state agencies responsible for agreement review is the Mineral Resources Authority, Department of Mining, Department of Environment and Conservation, Office of State Solicitor, Department of Mineral Policy and Geohazzards Management, are responsible in dragging the review process.

As a result, this has given room to the developer in abuse some operational matters, especially overlooking its obligation in prioritizing the landowners in employment, contracts and other spin-off activities. "This government is not playing the right thing, no," Mauri, who initially got into the mining industry 36 years ago as a young local, guiding gold explorations teams into the jungles of what is now the Hidden Valley mine, said. The minister, who is also Kainantu MP, said there are procedures in place for landowners grievances. He added that he has not yet received any formal complaints from Mauri, who is also president of all mine landowners associations around the country, and will only respond to accordingly. "I only talk about what is before my table and nothing of such nature has reached my table," he said. "But again, we are guided, the mining industry is a guided industry, we've got sets of laws and acts," Minister Tuke said. "I will only respond as and when a letter of complaint come forth to my office but at this point in time I am fairly ignorant," he said.

Govt focuses on planning for closure of mines

August 24, 2018, The National

THE Government has a renewed focus on planning for the closure of mines, says Mining Minister Johnston Tuke. He told The National this had recently become a key policy directive. Tuke said changes to the Mining Act currently underway were also trying to follow Apec guidelines. "That was never captured in our Mining Act long before," he said. "With the recent review, we have that captured because mining has been in the country for a fair number of years. "We need to amend our

act to come up with policies to handle closures. "An example of this was our Misima mine where there was never a closure plan in place. "This situation has triggered Government intervention. "This is now contained in our reviews. "Once it is passed, it will give the certainty on this matter in mining. "This will be done following the Papua New Guinean context." Apec Secretariat executive-director Allan Bollard said: "This is actually a big issue across a lot of Apec economies. "For that reason, Apec has agreed on a set of closure guidelines which I understand that PNG is taking on as well."

Geopacific now holding 93% of PNG goldfield

Matt Birney, The West Australian, 23 August 2018

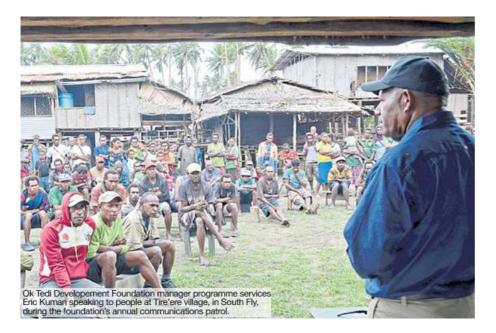
ASX listed gold developer Geopacific Resources now holds a 51% direct interest in its flagship Woodlark gold project in PNG, after achieving the second tranche incentive milestone with its project JV partner Kula Gold Limited. The company now holds a 93% economic interest in the project, courtesy of its 85% controlling interest in Kula Gold in addition to its direct interest in the project. The project level earn-in agreement with Kula dates back to July 2016 and required the company to spend up to A\$8m over a 2-year period and complete an estimation of an initial ore reserve exceeding 1.2 million gold ounces to achieve this second tranche. With both of these hurdles now overcome, Geopacific will concentrate on meeting the requirements of the third and final tranche of the JV agreement with Kula, where it can earn a 95% economic interest in the project, effectively winding up the JV. The remaining 5% interest will be taken up by the PNG Government, who has agreed to take this stake when the project is ready to be mined, by reimbursing a proportionate share of sunk costs.

Geopacific Managing Director Ron Heeks said: "Geopacific now directly owns 51% of Woodlark Mining Limited and will continue to increase ownership as we move forward with development of the project." "The DFS continues as does exploration to scope out the larger goldfield that holds such potential. Our debt advisors Ironstone Capital are also progressing well. The project is coming together as we hoped and continues to move towards a 2019 start to construction." The company has strongly focussed its attention on the Woodlark gold project over the last two years in order to stay on schedule for this intriguing opportunity. Geopacific reported the outcome of its PFS for the Woodlark project in March, saying the results indicated a robust, low-cost, low stripping ratio, open pit operation that could deliver an average of 100,000 ounces of gold annually, over a 10-year initial mine life.

Since that time, the company has commenced an island-wide soil sampling program over its tenements in PNG and has hardly missed a beat, turning up multiple gold and copper targets pretty much everywhere it looks. This is perhaps unsurprising, given the project's location in the "ring of fire", surrounded by multi-million ounce deposits at Lihir, Panguna, Simberi and Misima. Geopacific has proved up a mineral resource of 1.57 million ounces, whilst developing new exploration targets nearby to potentially add to its arsenal over coming years. The big picture envisaged by the company more than 2 years ago is finally coming together, with project development well underway, ongoing exploration success outside the main mining leases and consolidation of the project ownership on schedule. Geopacific is well on track to become PNG's next significant gold producer over the coming year or so

Ok Tedi foundation hopes K132mil will be released

August 22, 2018, The National Business



Ok Tedi Development Foundation (OTDF) is hopeful that K132 million of the Community Mine Continuation Agreement (CMCA) component of development funds from the Western Province People's Dividend Trust Fund (WPPDTF) will now be released. This follows Waigani National Court judge Derek Hartshorn's Aug 8 dismissal of all matters in a court action brought by one Pastor Steven Bagari and six others. All audits conducted by a team from the Department of the Prime Minister and the National Executive Council, led by internal audit consultant Andy Peperaija Pape, have been completed. The audit was completed on Aug 14 and handed over to Chief Secretary Isaac Lupari.

The audit team declared that the OTDF audit of all CMCA WPPDTF funding and associated project nomination through to contract award and implementation was "clean, transparent and in accordance with all associated guidelines". Pape complemented OTDF in this regard, saying: "I would like to take this time on behalf of the audit team to acknowledge the tremendous effort and time each of you devoted to assisting the team to successfully conduct the physical inspection phase of the audit. You are doing a fantastic job over there." Three high-impact projects already approved by former Minister for Mines Byron Chan that remain to be funded through the WPPDTF and implemented are:

- Livelihood Development Package Programme that will be integrated into the WestAgro Master Plan;
- Relocation for three South Fly delta villages; and,
- Western Province Education Improvement Strategy.

Ok Tedi Development Foundation chief executive Ian Middleton said despite the long delay in funding those high-impact development projects and associated frustration from many CMCA communities, especially those across the South Fly region, "OTDF remains committed to delivering these on behalf of the CMCA people, in the same transparent manner as it has for all previous CMCA WPPDTF funded projects and programmes".

Beaked whales may frequent a seabed spot marked for mining

Carolyn Gramling, Science News, August 21, 2018



DEEP DIVER Beaked whales, such as this Cuvier's beaked whale (Ziphius cavirostris), may have made the shallow seafloor depressions seen near a region designated for seabed mining. ANDREA IZZOTTI/SHUTTERSTOCK

A series of seafloor grooves look a lot like those made by the deep-diving marine mammals. Whales may have made their mark on the seafloor in a part of the Pacific Ocean designated for future deep-sea mining. Thousands of grooves found carved into the seabed could be the first evidence that large marine mammals visit this little-explored region, researchers report August 22 in *Royal Society Open Science*. If deep-diving whales are indeed using the region for foraging or other activities, scientists say, authorities must take that into account when planning how to manage future mining activities. The Clarion-Clipperton Fracture Zone, or CCZ, is a vast plain on the deep seafloor that spans about 4.5 million square kilometers between Hawaii and Mexico. The region is littered with trillions of small but potentially valuable rocky nodules containing manganese, copper, cobalt and rare earth elements. Little is known of the seafloor ecosystems in this region that might be disturbed by mining of the nodules. So several research cruises have visited the area since 2013 to conduct baseline assessments of what creatures might live on or near the seafloor.

A 2015 cruise led by Daniel Jones of the National Oceanography Centre Southampton in England is the first to find evidence that suggests that live whales may have dived down to visit the seafloor in the region. Using an autonomous underwater vehicle to scan the seafloor at depths from 3,999 meters to 4,258 meters, Jones' team found 3,539 grooves in all. These depressions tended to be arranged into sequences of as many as 21 grooves, spaced six to 13 meters apart. It's difficult to determine exactly when the marks were made, because sediment settles very slowly through the deep water to fill in seafloor depressions. The oldest marks were made within the last 28,000 years, the team estimates. But some newer tracks appear to overlap older tracks. No known geologic mechanism could produce the grooves, report Jones and his National Oceanography Centre colleagues, deep-sea ecologist Leigh Marsh and marine geoscientist Veerle Huvenne. But living creatures might: Some scientists, including biologist Les Watling of the University of Hawaii at Manoa and marine ecologist Peter Auster of the University of Connecticut at Avery Point, previously suggested that certain deep-diving whales, known as beaked whales, can make such markings as they use their beaks to forage for food hiding in the seafloor.

The new research is intriguing, Watling says, but adds that the biggest question mark is whether a beaked whale could really dive so deep. "When we published our paper, we were extending the probable depth of diving of the whale by several hundred meters," he says. "These authors are doubling the depth that we talked about." But, he adds, the new paper also points out that some anatomical studies suggest that a Cuvier's beaked whale (*Ziphius cavirostris*), at least, may be able to survive a 5,000-meter dive. Auster adds that the researchers were careful to consider other possibilities

for what might have made the markings and systematically eliminate those options, leaving only the whales. And that's definitely a matter that prospective miners will have to pay attention to, he says. Before mining proceeds, he says, future seafloors studies in the region should include efforts to detect whales, using passive acoustic monitoring, for instance.

Groovy pair



A camera mounted on an autonomous underwater vehicle snapped this image of two shallow grooves, estimated to be about 13 centimeters deep, in the seafloor at the Clarion-Clipperton Fracture Zone. Metal-rich manganese nodules litter the ground in the region, which is 4,153 meters below the surface. L. MARSH, V. HUVENNE AND D. JONES/ROY. SOC. OPEN SCIENCE 2018

"This is a huge finding," says Diva Amon, a deep-sea biologist at the Natural History Museum in London. She has previously cataloged a wealth of seafloor life in the CCZ, including new genera of jellyfish, starfish and sponges. That abundance may be attributable to the variety of sediment types in the region, she adds: Soft seafloor sediment and hard rocky nodules offer numerous places for life to get a foothold. But whales can be a game changer, because large, charismatic marine mammals can garner public attention in a way that smaller seafloor-dwellers don't, she says. Although the new study can't pinpoint when the grooves were made, she says, "this is why more work needs to be done." Even if the observed grooves were made by whales thousands of years ago, the whales' behavior may not have changed significantly in the ensuing years, given the stability of the deep-sea environment.

"I would expect that if they were [making the depressions] a couple of thousand years ago, they're probably still doing it now," she says. To date, the International Seabed Authority, the organization that oversees both mining licenses in international waters and environmental regulation of those regions, has issued 16 exploration contracts within the CCZ. Contractors working in the area must record marine mammal sightings within surface waters, as well as sightings of migratory birds, Amon says. But, she adds, "the fact that these whales may be diving about a thousand meters deeper than was previously known" — and using seafloor that could be irreparably altered [by mining] — has the potential to change the way we manage the CCZ."

The new battle for Bougainville's Panguna mine

Catherine Wilson, The Interpreter, 21 August 2018



Rusting trucks at Panguna mine, Bougainville

Speculation about the future of the Panguna copper mine in Papua New Guinea's autonomous region of Bougainville, which ignited a decade long civil war in the 1990s, peaked late last year when an application for exploration by former Rio Tinto subsidiary, Bougainville Copper Ltd (BCL), was put to a local vote. The outcome revealed that the mine remains a contested site and that a new battle for its riches is deepening divisions among traditional landowning groups. Chris Baria, a Bougainville writer and commentator, who lived through what is known as the "Crisis", explained the sentiment in a recent interview:

When those with mining interests meddle with Panguna, it makes people revisit the pain and suffering, and the horrors of war that the government wrought on its citizens for closing down a mine, which they felt had not compensated them enough for their loss. The mine still stands in ruin. From the Morgan Junction checkpoint near the entrance, the drive is long and winding up into the white mist that often veils the peaks of the Crown Prince mountain range. In a valley at the top is the scene of a time warp: rusting mine machinery disintegrating into the all–consuming jungle, rows of silenced trucks and gutted housing blocks.



Locals amid the ruined mine buildings at Panguna (Photo: Catherine Wilson)

In 1989, the Nasioi on Bougainville were the world's first indigenous people, angered by inequity and environmental damage, to shut down a multinational mining venture. But the feat came at a huge cost. The ensuing civil war, primarily between local rebel groups and the PNG Defence Force, decimated infrastructure and development and left 15,000–20,000 people dead, with many more suffering still from untreated trauma. Yet debate about the mine's possible revival has persisted for the last eight years. It's the focus of the Bougainville autonomous government's ambitions of fiscal self–reliance as an independence referendum approaches in June 2019; an enormous challenge for a region still occupied with post–conflict reconstruction and heavily dependent on aid. Last year, only 14% of the government's expenditure, totalling K162 million (\$67 million), was covered by internal revenues, while experts point out that an independent nation of Bougainville will need a budget two to three times greater.

This is a dilemma for many Panguna landowners. A few years ago, as I sat with villagers near the mine pit, no-one expressed a wish for mining to return to this beautiful valley. But views faltered among those committed to secession. Janet Colman from Guava Village said she did "not really" want the mine to reopen. If I had a choice, but I don't think I have a choice. If I am crying for independence; then I need the mine. When BCL's latest bid was defeated, Bougainville's President John Momis announced an indefinite moratorium on exploration and mining in Panguna, highlighting his fears of potential conflict between landowner factions. However, the link between mining and political aspirations continues to fuel the contest for Panguna's wealth. Other foreign companies are jostling for position, such as Perth–based RTG Mining, which has forged an alliance with Philip Miriori, former combatant and now president of the Panguna–based Mekamui government, and chairman of the Special Mining Lease Osikaiyang Landowners Association.

Three years ago, Bougainville passed new mining legislation vesting traditional landowners with ownership of minerals on their land and rights to participate in key development decisions. At the same time, power plays appear to be mounting between Panguna landowning clans and groups; those who previously, without rights, united against a common external foe. As Baria explains: people who come from around the mine area are not homogenous, and deep divisions exist along family and clan lines going back to the time before the Crisis. Mining companies now understand they will not be successful without landowner support. At least five ex–combatants and local leaders are known to be entertaining a range of corporate interests from Australia, Canada, China, Brazil and the US. It is another hurdle for Momis and his government, who are working to rally a sense of political unity in a Melanesian society, where people still prioritize allegiance to their clan and customary land.



Panguna mine in operation, circa 1971 (Photo: Robert Owen Winkler/Wikimedia Commons)

Suspending developments in Panguna aligns with those landowners, such as Lynette Ona, Chairwoman of the Bougainville Indigenous Women's Landowner Association, who believe the mine should stay closed until they can master their own destiny. Yet independence in itself won't remove landowner rivalries or other risk factors Bougainville is currently challenged with, such as high youth unemployment, constrained institutional capacity to reach and govern rural areas and incomplete disarmament. Some armed groups, such as the Mekamui Defence Force, didn't sign the peace agreement or surrender firearms.

Helen Hakena of the local Leitana Nehan Women's Development Agency has expressed concern that "they [the Mekamui] get their strength from guns ... there needs to be a priority set by the government in getting those arms out before the reopening of the Panguna mine". Bougainville is still working toward establishing the post–war unity, strong governance and state resources that are needed to manage the complex combination of post–conflict recovery, unaddressed mining grievances, and risks of resource–related corruption and land disputes. For mining, without peace, won't contribute to Bougainville's longing for successful self–government and equitable development.

Key New Caledonia mine shut for third week

Radio New Zealand, 20 August 2018

The Kouaoua nickel mining site in New Caledonia remains closed for a third week amid calls to protect endemic oak trees. The SLN mining company closed the site last week following a fire at its installations and amid a blockade by dozens of people opposed to expanded mining. The group told the news site *Les Nouvelles Caledoniennes* that it did not want the mine's closure because Kou-aoua's livelihood depends on it. They were opposed to the cutting of more oak trees, however, despite customary leaders approving it. SLN told the news site that it wanted to cut only 700 of the more than 33,000 trees. The Kouaoua mine produces 600,000 tonnes of ore a year which is shipped to the Noumea's SLN smelter.

Ramu NiCo well placed for PNG-China relationship

Post-Courier, August 19, 2018

The Ramu NiCo Project in Madang Province is strategically located on the growing economic relationship between China and PNG. This was pointed out by chairman of Ramu NiCo Management Limited Zong Shaoxing during a luncheon with the project's landowner representatives and the company management in Madang recently. Mr Zong said with China's "One Belt, One Road" initiative now in place, relationship between countries are becoming more interactive, and Ramu NiCo being the largest Chinese investment in the Pacific region, the company is obligated to enhance the relationship between China and PNG. He said the wants to be in the country for the long term for further cooperation and development in wider areas.

Mr Zong said as the largest nickel/cobalt project in the Pacific region, the Company was challenged by constant deterioration of international market. However, the Company had successfully managed to cut operation costs while increasing efficiency through management optimisation. He further stated that in the future, Ramu NiCo would continuously pursue the management philosophy of "efficiency, cooperation, perfection and innovation", advocate study and creation, respect cultural differences and expand its global vision. "Besides, we will maintain a harmonious relationship with impacted communities following the motto of 'One Ramu NiCo, One Community'" Mr Zong said.

More schools planned for alluvial mining

By EREBIRI ZURENUOC, August 17, 2018, The National

THE need for more small-scale mining training centres was identified during a recent alluvial mining convention and tradeshow in Lae. Alluvial mining schools are to be established in three other regions of PNG besides Morobe to cater for small-scale miners and developers in the industry who were not aware of most requirements. There is currently only one training centre established by the Mineral Resources Authority (MRA) and it is located in Wau, Morobe. Mining Minister Johnson Tuke highlighted the need but also said that there were many challenges. "The budget has already closed but we still need to make sure this happens through a submission. This will happen only if there is support of politicians and governments of alluvial mining areas," he said. "The funds can go to MRA and MRA can manage it for the sake of our alluvial miners around the country.

"Our locals must be encouraged to take part in the alluvial mining sector. Some of us our land is good for agriculture, others not. We need to establish one training centre possibly at Kainantu, one in Alotau and another in Kavieng or Namatanai. "We need to provide incentives for our local miners. Most of our local communities are engaged in this activity and we must be mindful of our environment too." Bulolo MP and Minister for Communication Information, Technology and Energy Sam Basil is supporting the idea. "For alluvial mining and training programmes, similar set ups like the training centre in Wau must be established in regional centres to accommodate the demands for the respective alluvial mining regions," Basil said. Some of the challenges faced by the training centre is to reach the large number of small-scale alluvial miners that are yet to receive training, helping miners understand the use of mercury, how to apply occupational health and safety and to help miners overcome social issues such as child labour, drugs, HIV/AIDS and gender issues

Papua New Guinea's disappearing resource revenues: Part 1

By Glenn Banks and Martyn Namorong, Post-Courier, August 15, 2018

Government revenues from Papua New Guinea's mining, oil and gas sector have essentially dried up. With the ongoing effects of the devastating earthquake in Hela province, the eruption of election-related violence in the Southern Highlands, a significant budget shortfall, and a foreign exchange crisis driving business confidence down, the resources of the government are severely stretched... and the massively expensive APEC meeting looms in November. In this context, the drop in government revenue from the resource sector is staggering. And accounts in significant part for the growing fiscal stress.

Figure 1 shows the extent of the issue: in 2006-2008, according to Bank of Papua New Guinea figures, the government collected more than K2 billion annually from the sector by way of taxes and dividends, on mineral exports that had just topped K10 billion for the first time. In 2017, the figure is just K400 million on exports of K25 billion – a revenue reduction of more than 80% in the same time that exports have increase by 150%! Government dividends and corporate taxes made up just 1.6% of the value of exports in 2017 (and that was a significant increase over 2015 and 2016). If we take the long-term average share of the value of exports that the government has received (at a little over 10 percent), this points to a potential "hole" of at least K8 billion over the past four years, an amount that would go a long way to covering the current fiscal deficit.

There are some precedents for the rapid drop in government revenues from the sector, as Figure 1 shows. In 1990 and 1991 – just as the "resources boom" triggered by the Porgera gold mine and oil production at the Kutubu oilfield began – revenues collapsed, largely due to the closure of the Bougainville copper mine in 1989; and again, briefly in 2009 due to the onset of the global financial crisis in 2008. But neither of these has been as deep or as sustained as the current hole. A full explana-

tion of the precipitous decline in resource revenues is beyond the scope of this analysis. Clearly, a number of factors are involved, including a fall in commodity prices, major construction and expansion costs (which attract accelerated depreciation provisions) and generous tax deals. The revenue dry-up of the past four years also reveals that the State bears a disproportionate share of the risks associated with resource projects and investments. If we go back to the original intent of the post-Independence mineral policy, it was to translate mineral wealth into broad-based development across the whole country: '...known mineral resources should be developed for the revenue they can provide to the Government' (PNG Department of Finance 1977: 2).

This clearly has not happened in the last four years. And certainly the Treasurer can't be critiqued for commissioning yet another fiscal review: this seems appropriate, although whether it effectively addresses broader issues of a 'fair share' of mineral wealth remaining in PNG remains to be seen. While there is much less money coming from the resources sector, there is at least better data than there used to be. The Extractive Industries Transparency Initiative (EITI) is a global initiative begun in 2002 to give transparency to what were regarded as often opaque flows of resource revenues from multinational companies in the extractives sector (especially oil) to the state in the countries in which they were operating. It is a voluntary initiative in which countries (and companies) can elect to become a 'candidate' country, and so long as they are able to be compliant with EITI standards, they can be admitted as a full member of EITI. The key requirement is to be able to report in a reliable way (through third party audits) on the revenues paid by companies, and reconcile these with payments received by the different arms of the state. The involvement of all parties – companies, governments and civil society – and public communication around the event and its products is also seen as central to both transparency and raising awareness of the nature of resource revenues and their destination.

PNG initiated its involvement in EITI in 2012. Four annual EITI reports have so far been produced (for the years 2013 to 2016). These reports provide an increasingly rigorous and transparent set of data on flows from the sector to the government, and identify additional revenue streams to the government than what BPNG use (and have used for the past 40 years). When all the additional revenue streams that EITI identify are included, the total share of the value of mineral exports rises to around 6.5% for 2017, up from the 1.6% based on the BPNG data. EITI is not without its problems and the most recent PNG country report identifies areas where it needs to be strengthened in PNG, and a focus on companies rather than operations can lead to the obfuscation of total flows and payments from each mine, oil and gasfield. In the PNG context, an examination of the sub-national flows and audit trails is also significant, and an initial study into this is underway.....

Papua New Guinea's disappearing resource revenues: Part 2

By Glenn Banks and Martyn Namorong, Post-Courier, August 17, 2018

One surprising revelation from EITI is that the single largest revenue stream from the mining, oil and gas sector to the government for at least the last two years has been so-called "group taxes": the taxes paid on the wages and salaries earned by employees in the sector (Figure 2). These were worth more than K500 million in both 2016 and 2017, and in 2016 represented 34 per cent of the revenue streams from the sector to the government. This is significantly more than the K46-88 million in corporate income taxes, K200 million in dividends paid to the State, or the almost K200 million paid in royalties in 2017. These group taxes are likely to be a more stable revenue stream than taxes or dividends – the workforce is unlikely to expand and contract to the extent that it impacts on the taxes they pay (leaving aside construction phases), or at least not as much as global commodity prices and profitability. But – and here we come back to the issue of PNG securing a fair share of its mineral endowment – this is a tax on the labour used to extract the resource, not a means of necessarily securing a direct share of the value of the resource itself.

The second area where EITI has revealed some interesting questions is around the operation of the Infrastructure Tax Credits (ITC). ITC originated in the sector in 1992 when the Porgera Joint Venture negotiated with the state to use a portion of their taxable income to directly provide infrastructure for surrounding local and provincial governments in exchange for a tax credit on this spend. Over the years the value and the uses of the ITC have varied, including at times supporting various national projects, and has been the subject of debates in various reviews as to its value. In 2016, four companies reported expenditures of K135 million in tax credit projects to DNPM, a significant amount that could well have contributed significantly to local and provincial development aspirations... but we don't really know given the relatively poor reporting of the outcomes of these expenditures. More significantly, though, it is difficult to reconcile the size of these expenditures with the actual taxes paid by the four companies, which come in at well under K100 m in total. That tax credits have come to exceed tax payments should ring alarm bells, and would explain why the government has in fact put a temporary stop on them.

Going forward, we would suggest two additional areas of focus, based on the above analysis. This first is local procurement. What is clear from the EITI reports (and earlier work by Banks (1990) on BCL) is that extraction of minerals is an expensive process, and a significant amount of the value of the mineral resource is spent by the companies on the labour, machinery, fuel, food, and the multi-tude of other costs needed to extract and export the mineral resource. An analysis from the last year of the Bougainville Copper Ltd mine at Panguna revealed that an estimated two thirds of the value of the mine accumulated directly outside Papua New Guinea, and indirect or second round spending would increase this (Banks 1990: 108). Imported materials and services made up 23 per cent of the total value of the gross revenue of the minerals exported, cost of sales (all spent offshore) another 13 per cent, depreciation 8 per cent and dividends to non-PNG shareholders 12 per cent. Local content spend on materials and services sat at just 5.5 per cent, less than a quarter of the equivalent imported costs, while in total local wages and salaries were around two-thirds of the expatriate salary costs, despite the much greater numbers of local employees.

A long-standing objective and challenge for the State has been to find ways to ensure a larger proportion of these capital and operating costs are spent on PNG based labour and other inputs. Plans at most of the major operations have been successful in localising the workforce significantly, hence reducing imported labour (and costs) at operations over time, although foreign labour continues to be important during construction. In terms of the goods, services and materials used to construct and operate a mine though, there appears to be scope to increase the proportion that is spent and retained locally. In large part this is tied to corporate and state support for a stronger local small business sector that can effectively service these mines (and potentially service the growing extractives industry across the Pacific).

The second area to which attention needs to return is the Sovereign Wealth Fund (SWF). This Fund, which would serve the dual function of saving a component of the resource revenues and having a portion committed to developmental needs through the budget, is in place (in terms of the legislation for it) but has not yet been implemented by the government. This well-proven mechanism for translating immediate resource revenue into a long-term sustainable fund can play a critical role in reducing the volatility of flows to the government. Ironically it may be that the factor holding back the government from moving on its implementation is the dire need for all the resource revenues right now. But neither is it sensible to wait for revenues to return to high levels before initiating the SWF: it will almost be certain that political and bureaucratic processes would delay the first flow of revenue to such an extent that several years' worth of revenues that could kick start the fund would be lost. In other words, in many ways this period of low revenue is an excellent time for the Fund to begin.

So, the answer to the question of where have all the resource revenues gone, is not a simple one. The EITI reports show that a range of factors at the different operations (accelerated depreciation, tax holidays, ITC and re-capitalisation in plant expansions etc), have impacted on the revenue flows to government. To this we can add global commodity price drops, a compromised fiscal regime and some less-than-transparent governance structures and processes. The fact remains though, that over the past four critical years in its development, Papua New Guinea has missed out on a 'fair share' of the value of its mineral resources that have been extracted. Although confusingly there are different figures recorded as tax credits claimed by the companies from IRC – where the total credit offset against tax from three of the four companies come to K54 million.

Ramu NiCo leads lateral development, hydro-metallurgy worldwide

Post-Courier, August 17, 2018

With its monthly production maintained well above 3000 tonnes and production capacity above 106 per cent, Ramu NiCo is currently leading the industry of red laterite development and hydrometallurgy worldwide. This was revealed recently by the chairman of Ramu NiCo Management (MCC), Zong Shaoving, during a luncheon with landowner association representatives and company employees of its Madang Operation base late last month. Mr Zong said Ramu NiCo has always been working positively to promote cooperation with landowners on community levels to improve the livelihood of landowners. He said that Ramu NiCo's mining operations are located in the most remote parts of Madang, however, the company has overcome tremendous difficulties to bring much needed infrastructures such as roads and bridges, schools and health centres in project impacted areas.

Zong said Ramu NiCo will continue to respond actively to community requests to realize sustainable development. During the construction phase of the Ramu Project from 2007 to 2010 the company had made significant contributions in areas of local procurement, tax revenue, community compensation and relocation and over K250 million worth of business opportunities was provided, 11 public service facilities including schools, clinics, power and water supply stations. Furthermore, the company also provided over 3000 job opportunities for the Nationals. Mr Zong said following the commencement of production, Ramu NiCo had spend K435 million on local procurement and K136 million on taxes. It is also paying K50 million for business opportunities, K50,000 for education and K80,000 for medical assistance on a yearly basis. In early July, Ramu NiCo made its first royalty payment, which was endorsed by the Government. The royalty payment would assist land-owners and underpin community development.

Talks held to resolve dispute over New Caledonia mine

Radio New Zealand, 17 August 2018

Talks have been held in the north of New Caledonia to resolve the disputes which led to this week's closure of the nickel mine in Kouaoua. The SLN nickel company closed its mining operations indefinitely amid a blockade of the site by dozens of young people and after another arson attack on its installations. A meeting has now been held in Kone involving the French government, the New Caledonian government, the Kouaoua local administration and SLN. The dispute includes disagreements between customary leaders who agreed to expanded mining and young locals who blocked access to the site to stop to the clearfelling of trees. A French official Marie-Paule Tourte-Trolue told the public broadcaster that over the next few days attempts would be made to involve the young protesters in the talks. The mine closure threatens about 400 jobs. Political parties have called for those responsible for the damage caused to SLN's installations to be identified and punished.

Mayur set to drill Feni Island

PNG Industry News, 13 August 2018



Field mapping at Matakangkaka Creek

MAYUR Resources says it is ready to mobilise a team do begin a drill program at its Feni Island copper-gold project in New Ireland Province. This follows the completion of a detailed field mapping and sampling programme within the Matangkaka Creek area at Feni Islands EL2096. The company says Matangkaka Creek is an eastern tributary of the Nanum River and is rated as one of the top three gold bearing streams in the Feni Island group. It is also near and upstream from the Kabang structure that hosts a 650,000 ounce gold resource. "The trip was undertaken by Dr David Lindley, Mayur's veteran expert geologist who has decades of experience on Feni," Mayur said. Mayur has correlated this new information with historical data to finalise a drilling programme of up to 2400m.

The programme of up to seven holes is focusing on the gold mineralisation in structures beneath and along strike of the Matangkaka Creek. Mayur managing director Paul Mulder said the company was essentially ready to mobilise and execute the drilling programme at Feni. "This is particularly exciting as Feni Island sits between Lihir, one of the largest gold mines in the world, and Bougainville, one of the world's great copper-deposits. You could not ask for a more prospective postcode location of the Feni prospect being the situated island between these two world-class giants. "This, coupled with historic attractive copper and gold mineralisation from near surface (continuing at depth), provides an attractive backdrop to conduct a drilling campaign, which will be the first in many years on the island," Mulder said.

Alluvial gold, silver production up: MP

BY BENNY GETENG, Post-Courier, August 15, 2018

The alluvial gold and silver production for the year 2017 achieved the second highest revenue figure of K356 million since the records were reviewed this year. Mining Minister Johnson Tuke said this placed the alluvial sector in 5th place by revenue when compared to major mines operating within PNG. "This is evidence of both the status and potential for the alluvial sector within PNG." Mr Tuke spoke to delegates during the 4th Alluvial Convention and Trade Show in Lae yesterday stressing that while it was unfortunate that the price of gold is ever reactive to world events, trade, and political influences such as the prospect of a full blown international trade war currently has dropped off its highs of the first six months of 2018.

"Despite this, production in the alluvial sector was recorded as 93,080 ounces of gold and will be exceeded and revenue forecasts suggest revenue over K400 million in a calendar year." Mr Tuke said last month the Mineral Resources Authority Act 2017 was gazetted. He said amongst other policy changes this revised legislation has raised alluvial levy to 0.5 per cent from 0.25 per cent. "The additional levy funds will enable further policy development within the sector and a wider reach for the small scale mining training. "Every alluvial mining operation is a small or medium enterprise whether it be a simple panning and sluicing operation or a more complex and sophisticated mechanised development supported by an alluvial mining lease for alluvial purposes and a tribute agreement," Mr Tuke said.

He further highlighted MRA shares his desire to see the mining SMEs grow and prosper and develop into productive business. Mr Tuke said the mining advisory council at its last meeting in 2017 approved a trial of a newly established alluvial lease and tributer monitoring committee. "This committee with additional funding available is to assist failing tenement holder and tributer joint venture arrangements to re-establish trust and confidence, provide fiscal advise and facilitate resolution of disputes." He said the outcome is hoped to be successful ventures which in turn lead to transparent, well managed, and productive operations with profits available for distribution in the communities supporting the alluvial venture. "Furthermore the proposal for development and tribute agreement templates developed by MRA to assist alluvial miners to lodge an application have been reviewed this year." The process he said was undertaken to capture common issues faced by applicants and to give them greater control of their mining operation and fairer and more transparent commercial terms.

Morobe leaders unite on Wafi-Golpu project

BY BENNY GETENG, Post-Courier, August 15, 2018

Several Morobean MPs including Governor Ginson Saonu have taken a united stand in calling for more Morobean presence in the Wafi-Golpu Mine Project. This is first time ever for Morobe leaders to come together to show their concerns on the technical advisory and spinoff benefits from negotiations, construction phase, and the development of the Wafi-Golpu Project located between Bulolo district and Huon Gulf district. The MPs – Morobe Governor Ginson Saonu, Bulolo MP Sam Basil, Huon-Gulf MP Ross Seymour, Tewae-Siassi MP Dr Kobby Bomareo, Nawaeb MP Kennedy Wenge and Lae MP John Rosso. The emerging Morobe position aims to address lessons from the Bougainville Copper Limited and the crisis it ignited, the Ok Tedi Mining environmental issues that fueled the exit of BHP Billiton, landowner issues affecting the PNG LNG Project and the Hidden Valley Mining Project including other mines that will all be captured in a memorandum of agreement.

They have called for disclosure of pertinent information and engagement instead of limiting Morobe Provincial Government and the landowners to positions on Extractive Industries Transparency Initiative, special support grants and cooperation and assistance to the State and the developer. "As leaders and stakeholders, we need to have in-depth information and knowledge to formulate our positions on matters of equity, royalties, business development grants, employment and training, compensation payments and infrastructure developments. "We also need to know the source and independent checks that formed the basis of the figures used in the financial model and benefits by Department of Treasury. Inclusion of future ore discovery prospects, its implications on mine life and related financial benefits," the leaders said. Governor Saonu has expressed further concern that the recent second Wafi-Golpu Mining Development Forum in Kokopo has sparked criticism from Morobeans and said that from now on all meetings will be held in either Lae or Morobe. "If we hold meetings outside of Lae and or Morobe we will fuel unnecessary suspicions among Morobeans that we have things to hide. "Mining Minister Johnson Tuke has already taken note of this matter and has told Mineral Resources Authority and the Department of Mineral Policy and Geohazards Management in Kokopo to take note and not hold Wafi Golpu Mining Project related meetings outside of Lae and Morobe," he said. The MPs have taken the strong stance that the MOA to be signed must be right, and that as stakeholders and host province they demand access to the draft mining development contract before it will be signed by the Head of State and developers.

New Caledonia party wants Paris to act over mine woes

Radio New Zealand, 15 August 2018



The SLN plant in Noumea. Photo: RNZ / Johnny Blades

SLN shut down the site, saying it could no longer assure the safety of its employees after a further arson attack and amid a blockade of the site by dozens of young people opposed to expanded yet approved mining. The weekend fire was the tenth and again crippled the operation, threatening the job of about 400 people. The party said those responsible have to be identified and punished. It also said given the situation is extremely concerning, it calls for a dialogue with the young protesters in the interest of the Kouaoua community, the region, the company and all affected Caledonians. The President Philippe Germain, who belongs to Caledonia Together, said he is ready to help but has no miracle solution to propose.

Papuan authorities shut mine over labour hiring dispute

Authorities have closed a gold mine in Korowai in the southern part of Indonesia's Papua province, following uproar over the company hiring newcomers ahead of local tribe members. Radio New Zealand, 14 August 2018

The *Jakarta Post* reports the mine was closed on Friday by the Papua Governor Soedarmo, along with the police and military chiefs. Two helicopters that were to be used to transport workers to the mine site, were sealed at the Tanah Merah airport in Boven Digoel regency. The mine is understood to employ about 3000 workers.. Separately a Papua councillor, John Jose Gobay, said the mine should be managed by the local residents of Korowai, as stipulated in the 2014 law on local admin-

istrations. He urged the Papua governor to propose to the Energy and Mineral Resources Ministry to hand the mining site over to the local tribe.



Photo: copyrighted Mark Agnor 2014

New Caledonia protest prompts SLN mine closure

The SLN nickel company in New Caledonia has decided to close indefinitely its mining site at Kouaoua, saying security can no longer be assured for its staff and its installations. Radio New Zealand, 14 August 2018



Photo: RNZ / Johnny Blades

The decision comes as access to the site has been blocked by about 50 mainly young people for more than a week and after a weekend fire which further damaged the conveyor belt system feeding ore to the coast. The protest was reportedly triggered by SLN felling trees and expanding its mining activities, which had been approved by the authorities. According to reports, the protesters brought all operations to a halt and threatened to set fire to the installations. SLN said the closure affected its employees who it said it would try to redeploy at its other sites, with the remainder to be laid off. The company also said since the start of the blockade last week, it has invoked force majeure and thereby suspended all contracts, which concerns a total of 400 employees and contractors.

The weekend fire targeting the belt system was the tenth in two years, causing each time substantial material damage. Les *Nouvelles Caledoniennes* reported that police trying to intervene were at-tacked. Discussions planned for Sunday involving the protesters and local leaders were called off. SLN said it was prepared to engage in talks to re-open Kouaoua but this can only happen if the safe-ty of its employees and sub-contractors can be assured. It also said the disruption to the ore supply has been very damaging to the operations of the smelter in Noumea as SLN continues to run at a loss.

Wafi Landowners Slam Kokopo Meeting

Post Courier, August 13, 2018



The landowner group from Wafi-Golpu mine in Morobe Province has described the consultative meeting in Kokopo as political maneuvering. Paramount chief and landowner for Babuaf tribe Ezra Kwako said such political maneuvering is a disgrace to the Wafi landowners. Mr Kwako accused the meeting of being hijacked over to Kokopo, East New Britain Province between the government and the miner, Wafi Golpu JV. He questioned why the sharing consultative meeting was moved to Kokopo and not held in Lae. He said legitimate landowners were left out when the meeting was moved to Kokopo. He said only a few of their "paper landowners" attended the Kokopo and have ill-documented the meeting as the representative of the tribe when the case was still before the National Court pending decision, which is soon to be handed down.

"We were not properly consulted and the meeting venue over to Kokopo was a denial for the better process when we are yet to identify the real legitimate landowners of Wafi mine development area," Kwako said. "We do not want to keep on making mistakes like that of the Hidden Valley Mining, enough is enough. "Political interference to propagate better process is not to be entertained. Bring your discussion points to the village and let's share with the people of mine affected areas. The MOA signing is one key document that will benefit the landowners and thus be very mindful of this current trend after all clan vetting process if fully completed. "This is Morobe resource and we must discuss this issue amicably with well-informed dialog including the legitimate landowners in Morobe and not elsewhere," Kwako said.

As Gas Boom Falters in Papua New Guinea, China Steps In

Faced with revenue crunch, country is relying on Chinese loans to develop ports, airports, roads and power stations; Beijing expands influence in Pacific Rob Taylor and Rachel Pannett | Wall Street Journal | August 11, 2018

When Papua New Guinea joined the ranks of the world's significant energy exporters four years ago, the government was betting on a revenue windfall it hoped would transform the impoverished South Pacific nation better-known for jungles, violence and corruption. But the payday from a \$19 billion Exxon Mobil Corp. -led natural-gas project has so far been a trickle, crimped by a downturn

in gas prices that allowed Exxon and its partners to claim losses against royalty payments. To bridge the revenue gap and revive its slowing economy, Papua New Guinea has increasingly turned to China.



A plant at the Exxon Mobil-led natural-gas project in Papua New Guinea. Government revenues from the \$19 billion project, which began production in 2014, have fallen far short of estimates.

The government now owes the state-owned Export-Import Bank of China close to \$1.9 billion in low-cost loans for infrastructure and other construction projects, almost a quarter of its total debt. That has raised concerns the country's growing indebtedness is allowing Beijing to further expand its influence in the Pacific. China's stamp on Papua New Guinea will be on show in November when Pacific Rim leaders, including President Donald Trump and China's President Xi Jinping, gather in the capital, Port Moresby. Delegates attending the Asia-Pacific Economic Cooperation forum will meet in a convention center built by Chinese workers and paid for with a Chinese grant. Official motorcades will travel on a six-lane boulevard constructed and financed by Chinese loans.



Papua New Guinea Prime Minister Peter O'Neill meeting with China's President Xi Jinping in Beijing on June 21. Almost a quarter of the country's debt is owed to the state-owned Export-Import Bank of China. PHOTO: POOL/GETTY IMAGES

"We took on APEC knowing it would be a massive challenge for such a small country," said Charles Abel, Papua New Guinea's treasurer and deputy prime minister. "It is a bold undertaking by our small country to introduce ourselves to the world." A former Australian colony of eight million, Papua New Guinea has long relied on foreign aid. The country has minimal infrastructure outside Port Moresby and companies typically negotiate terms with local landowners to gain access to resources—a knotty problem in a country with hundreds of ethnic groups. The government has historically looked to Australia for assistance. The country, along with other APEC members, is also chipping in for the summit, covering about a third of the cost. Australia's foreign minister, Julie Bishop, said the country wants to be the "natural partner of choice" for Papua New Guinea and other Pacific countries.

But China's presence is becoming much more visible. Chinese loans have helped redevelop a port and airport in the second largest city, Lae. In November, China promised to build \$3.5 billion of roads, a commitment that if realized would make it the country's biggest aid donor, according to the Sydney-based Lowy Institute's Pacific program. It also imports natural gas from Papua New Guinea and has invested in nickel mines, power stations and other projects. During a visit by Prime Minister Peter O'Neill to Beijing in June, Papua New Guinea became the first Pacific country to sign up to China's One Belt One Road, an initiative to build a global network of ports, railways, roads and pipelines. For Beijing, the program is a way to expand business and trade and extend strategic influence, in part by distributing loans.

Mr. Xi said during the visit that relations between the two countries had "entered a fast track, and political mutual trust and mutually beneficial cooperation have both reached a new level in history." In July, Mr. O'Neill invited Pacific leaders to a meeting with Mr. Xi in Papua New Guinea ahead of APEC. But China's infrastructure push in the region has raised some alarms. A Chinese-financed building spree in Pakistan has been dogged by concerns about the country's growing debt burden to Beijing. Sri Lanka's government, unable to repay a Chinese loan for a port, last year granted a Chinese state company a 99-year lease on the facility.



A road damaged by a February earthquake near Mendi in Papua New Guinea's highlands region. The earthquake killed more than 100 people. PHOTO: MELVIN LEVONGO/AFP/GETTY IMAGES

The International Monetary Fund said Pacific nations including Tonga, Samoa and Vanuatu have significant debts to China and face repayment pressures. Papua New Guinea is no exception. "The speed and scale with which China is acquiring natural resources and amassing debt raise long-term concerns," foreign-policy scholars Gabrielle Chefitz and Sam Parker wrote in a May paper for Har-

vard Kennedy School's Belfer Center for Science and International Affairs. Standard & Poor's in April lowered Papua New Guinea's credit rating to B from B-plus, citing slower economic growth and expanding government deficits. It expects the ratio of government debt to gross domestic product to reach 40% by 2021 from 30% now. Papua New Guinea's Treasurer, Mr. Abel, said he has been closely following the loans offered by China to small Pacific nations. "There remains some concerns about the way that they do conduct business," he said. "But in PNG's case, we quite strictly manage our debt."

China's Ministry of Foreign Affairs said its assistance to Papua New Guinea and other Pacific Island nations has been welcomed by their governments. "China has provided assistance, especially assistance without any political conditions, to the Pacific Island nations, including Papua New Guinea," the ministry said. "It is not targeting on any third party." Mr. Abel, speaking of the Exxonled gas project, conceded that for the hundreds of millions the government paid for its stake through a state-owned oil company — "we have not had the corresponding revenue growth."

Before production began in 2014, the country's Treasury department estimated the project would boost government revenue by roughly \$600 million, or two billion Kina, a year through 2021, rising to more than \$1 billion, or 3.5 billion Kina, a year between 2022 and 2030. Instead, as of September 2017, roughly \$45 million in royalties and development levies had been paid, according to the IMF. "When commodity prices are depressed like they have been for the last few years, revenues to all joint venture participants, including government, are reduced," Exxon said in a statement. The shortfall has weighed on the commodity-dependent economy. The IMF in a December report estimated GDP grew 2.2% in 2017, down from 2.4% in 2016, far below the government's predictions a few years ago that the country would grow 21%.

Pasca A offshore gas project to cost K1.7 bil

August 10, 2018, The National Business

A TOTAL of about K1.7 billion (US\$525m) is the cost of delivering the Pasca A offshore oil and gas project in the Gulf of Papua, according to operator Twinza Oil (PNG) Ltd. Managing director Huw Evans said the project was at an advanced stage of engineering. "The project has a well-defined pathway to deliver the first exports of liquefied petroleum gas and condensate by the first quarter of 2021," he said. "We are very close to the project's award and sanction by the government, which we hope to conclude in the next few months." Evans said that once they got the award of the petroleum development licence (PDL) and finalised the gas agreements, they could go on to final engineering. "That is, the content engineering and design and have it completed within six months so we can turn those into final construction contracts," he said.

"We will look into final investment decisions in the first quarter of 2019. After all the engineering has been done, we will begin the construction." Evans said construction would be completed by the third quarter of 2020. They will look at bringing in facilities and get them commissioned in late 2020. First production will be delivered by the first quarter of 2021. Gas project development manager Erick Kowa said they had done all the prerequisites for the application petroleum development licence, which had gone before the Department of Petroleum since 2015. Country manager Roppe Uyassi said the domestic market obligation was a focus for the developer to get much of the products into the local markets and to train the local people to work on the offshore environment.

Letter to the editor

Bringing in development for Western

Post-Courier, August 8, 2018

Geographically, Western Province has a big land mass and is the biggest province in the country, but is mostly covered with swamp and wetlands and is one of the least developed provinces. There are no volcanic threats, deep valleys or steep mountains to climb especially in the Middle Fly and South Fly electorates. Why is it so hard to bring in development to this parts of the province? Even though the province is richly blessed with the Ok Tedi mine, which is in the North Fly electorate and contributes a lot to the building of this nation. Why are our two leaders of these electorates not working together with Ok Tedi to bring tangible development to the people? The only development or changes taking place is in the North Fly electorate where the mine is situated. Ok Tedi mine assisted the latest quake victims in Southern Highlands with K50 million, while one wonders how much portion of that money was spent on its own people along the Fly delta who also suffered from the effects of the earthquake.

Current Member for Middle Fly is no exception. This is now his third term in parliament, but Middle Fly still lacks basic services as well as South Fly. Building of roads and bridges to link people in the lower plains of Western Province will bring with it changes. People living in these rural areas just need basic services delivered to their doorsteps. Building of new hospitals and upgrading of currently running aid posts and schools will greatly improve the well-being of the rural population and improve education standards. Air service is another setback in the province. Airports and airstrips in the province need to be upgraded. At one time there were Mission run airstrips in the rural areas which are no longer in operation. Why can't the services be brought back into operations to help the remote rural population who greatly miss out on basic services? **Skeibies, Nio-Obo**

Porgera leaders urged to get house in order

BY JEFFREY ELAPA, Post-Courier, August 8, 2018

The continuous tussle over landowner leadership and finances has resulted in deaths of innocent people and the closure of important institutions like the Paiam hospital. President of the Porgera Commerce and Industry Nickson Pakea said the leadership tussle over the past four years has created a lot of social and economic problems in the mining town and the surrounding communities of Porgera. Mr Pakea said the landowner conflicts has resulted in lives being affected and that includes people dying from curable and preventable sicknesses, as a result of the closure of the Paiam district hospital over the years, due to non-funding of its operational funds. "Life in Porgera is at stake while the leaders are in Port Moresby battling each other at the National and Supreme courts," Pakea said.

"The issues between the Porgera Development Authority (PDA), the Porgera Landowners Associations, the Justice Foundation for Porgera and the Porgera SML Landowners Associations have led to the closure of Porgera's main hospital at Paiam, the closure of the Paiam main market, the closure of Paiam town management company, the non payment of royalties and equities to the landowners for the past three years and the breakdown in law and order are among the many issues now facing the people and communities of Porgera." He said in relation to the law and order issues, there has been an increase in illegal mining and tribal fighting. He said the impact is being felt by many of the shareholders and beneficiaries. He said one example is the death of landowner and shareholder, Lollu Poi, who collapsed and died in Porgera in the early hours of August 1 from a stroke, and the death of landowner and beneficiary Yalapaia Koai from birth complications in July this year. "Things are getting worse here in Porgera and I appeal to Porgera leaders to return to ensure they have ther house in order before talking about national issues," Pakea said.

Letter to the editor

Misima legacy issues need attention

Post-Courier, August 7, 2018

From 1987 to 2004, the small island of Misima in Milne Bay province, hosted a world-class gold and silver mine project basically to serve the economic interest of our country, Papua New Guinea. The Misima gold and silver mine opened merely to salvage our Papua New Guinea economy from the loss of revenue with the abrupt closure of the world's largest copper mine on Bougainville Island. It is believed the Bougainville rebellion of a grand scale obviously emanated from disagreement by traditional inhabitants over the way they were treated by the developer and the State, ranging from unequal benefits to severe environmental damages.

Comparatively for Misima island people, who share the same sea (Solomon sea) border with Bougainville, their Agreement with the State never delivered the desired outcomes despite the rhetoric statement 'leaving behind a better future' that the then developer Placer Pacific posted on all of its corporate communication mediums to appease the Provincial and the National Governments. The Mining Development Agreement between the State and Developer was signed in December1987 to commission the commencement of the mining operations. Interestingly, three years after the Mining Development Agreement was signed, MOAs between the State and Misima Landowners (MTSA) and the State and Milne Bay Provincial Government (MBPG) were signed in August of 1990 when Sir Rabbie Namaliu was prime minister.

The mine operated for 15 years, and in 2004, it ceased. The Misima Mine Closure and Sustainability Plan (2003-2010) solely developed by the developer – Placer Pacific, was presented to the National Government without any inputs from the landowners and with nothing containing the Misima mining district's infrastructures maintenance and development programmes, thereby resulting in the then Governor of Milne Bay Tim Neville refusing to sign off this plan. The Mine Closure & Sustainability Plan expired in 2010 without a review. According to the MOA audit by the landowner association MTSA (Misima Towoho Siung Association), the commitments of both the National and Provincial Government's under the MOA were not implemented.

- On Special Support Grants (SSG), the total paid directly to landowners was K220,000. SSG to the Milne Bay Provincial Government not available. There must be a review and reimbursement of outstanding SSGs for Misima district and landowners.
- On equity, an amount of K5.5 million was paid to landowners. MRDC should declare full investment value to Landowners and reimburse.
- On Royalty, one payment of K3 million made in 1997. Funding into Future Generation Fund is unknown. Milne Bay Provincial Government must provide all royalty receipts to Misima Future Generation Trust Fund. Latest is that this fund has been frozen under the new Public Monies Regularisation Act 2017.
- Long-Term Economic Development. No action was taken by State and MBPG. There was never a long-term economic development plan.
- Environmental issues. Environmental degradation is a pertinent issue. Government through Department of Environment and Conservation has to do a post-mine environmental impact assessment.

- Infrastructure development and maintenance. Misima wharf, Misima High School, Misima Hospital, Misima airport, Misima island road, water and electricity supply, Wharves for outer islands Misima mining district.
- Local business development. There was no effective direction and guidance provided for business development during the life time of the mine and even after that.
- Financial assistance to landowners. National government gave a one-off K50,000 to the landowners through their association MTSA for mobilisation used to establish Towoho Siung Pty Ltd. There was under the MOA, a loan guarantee of K500,000 through the life time of the mine to assist landowner entities. This was never facilitated by the Department of Commerce & Industry.

In 2013, a delegation of landowner leaders from the MTSA visited the Prime Minister Peter O'Neill to state their concern over the unfulfilled obligations from the MOA of 1990. A documented submission was prepared by the landowner association, estimating K200 million plus. The Prime Minister was considerate enough to assure a response to the concerns of the landowners. I believe some undertaking was given by the PM with some figures particularly on the business development component. In February 2016, after a follow-up enquiry by the landowner representative directly to the Office of the Prime Minister, Mineral Resources Authority and Department of Minerals and Geohazards Management respectively, a top level government delegation from Port Moresby and the Milne Bay Provincial Government met with landowner leaders in Alotau. The Misima MOA was branded as legacy issue and a rescue package was to be considered. Following that meeting, a technical working committee was established and in June 2016, the committee visited Misima Island to verify and confirm the issues raised by the landowners. Various other follow-up visits and enquiries have so far been made in 2017 and early 2018.

The patience and tolerance of Misima landowners had always been evident since 1987, when the State rushed the mining on their land to salvage the economy of PNG without a direct agreement with them, until 3 years later in 1990 and throughout the life time of the mine with no record of landowner disturbances. When the mine ceased in 2004, it had produced in excess of 5 million ounces of gold and 20 million ounces of silver and the developer by then had got the assigned 75 per cent of economic benefit it is lawfully entitled to, the State got the assigned 25 per cent of economic benefit it is lawfully entitled to and gave just a mere two per cent out from its 25 per cent stake to the Misima landowners. In essence, what the landowners gained from this transaction was "breadcrumbs from the table" and painstaking regrets. Just imagine 5 million ounces of gold if estimated in current market price in US dollars. It's like USD\$6.5 billion (K21.4 billion). What is there to show case for on Misima island and the district? The developer's rhetoric of 'leaving behind a better future' indeed 'left behind a bleak future' with two large 'man made craters' in the middle of the small island, and a dried river bed system south of the island that has left thousands of inhabitants dispossessed, unrequited and susceptible to chronic poverty.

Misima people are waiting for the government's response to their outstanding MOA issue when there is already intensive exploration for gold and copper going on in the same mineral region under EL 1747 held by Gallipoli Explorations, particularly in the two 'man-made craters' and their immediate surroundings. Legacy issues from resource exploitation is sensitive and don't fade away easily. It is better to address them in this generation rather than leave it to the unpredictable 'x' and 'millennial' generations. **RG ELIJAH, MISIMA**

ENB leaders want Sinivit gold mine reopened

August 2, 2018, The National Business

East New Britain leaders want the abandoned Sinivit gold mine reopened. Governor Nakikus Konga and Sinivit LLG president Boniface Gerep said this during the launching of Sinivit road infrastructure under Sinivit mining project memorandum of agreement at Riet yesterday. "As the former chairman of Uramot Company, the blame falls squarely on Mineral Resources Authority and the State," he said. "Sinivit gold mine would have been a very successful mine, but unfortunately we did not get support from the mining department." Konga urged Mining Minister Johnson Tuke to ensure the mine reopened. He said it was an economic opportunity for East New Britain now that the province had been given greater autonomy.

Gerep said resources owners had not benefited from the mine when the developer left abruptly. Locals looted and vandalised everything at the mine, including explosives and chemicals. Reports had surfaced of chemicals from abandoned vats flowing into the Warangoi River. Tuke concurred with Konga and Gerep, saying he wanted to see the mine reopened. He said he was ready to work with the authorities in East New Britain to ensure that the mine reopened and provided jobs for locals. Developer New Guinea Gold Ltd abandoned the mine in Sept 2014 blaming the government and MRA for not quickly renewing their mining lease. It was understood the matter was before the court. MRA said that the environmental issues that had been raised were for the Conservation and Environment Protection Authority to deal with.

Hidden Valley goes into commercial production

Post-Courier, August 2, 2018

Harmony Gold Mining announced on Monday that its Hidden Valley operation in the Morobe Province reached commercial levels of production in the month of June 2018. The K540 million investment in further cutbacks was delivered safely, on schedule, and below budget. CEO of Harmony Peter Steenkamp said the company is confident the project will produce more than 180,000 ounces in its fiscal year of 2019. "The mine is well set up to deliver on the long term targets and will continue to make a meaningful contribution to Papua New Guinea's economy through employment, paying taxes (including royalty) and procurement of local goods and services" Mr Steenkamp said. Harmony's commitment to localisation is evident with the current Hidden Valley workforce consisting of 1350 employees and 650 contractors, of which only 4 per cent are employed from outside PNG, about 945 of which are from the Morobe Province.

Over the life of mine paid K111 million of royalties to (among others) landowners, local level government and provincial government. The mine expends, on average, K450 million annually on goods and services in the country. Thirty-three per cent of this in-country transactions are with landowner and landowner joint venture companies. of which NKW Holdings Limited (as the representative umbrella company for the landowner groups directly impacted by the mine) is a significant participant. In addition, targeted social performance initiatives and expenditures by Harmony have further contributed towards the upliftment of communities in the vicinity of the mine. Engagement with the PNG government on the application for a special mining lease (SML) for the Wafi-Golpu project is progressing well. On June 25, 2018, the Wafi-Golpu Joint Venture (WGJV) submitted an Environmental Impact Statement (EIS) for the Wafi-Golpu Project to the relevant regulatory authority, Conservation and Environment Protection Agency (CEPA).

Another NZ seabed mining permit lapses

KASM, Scoop NZ, 1 August 2018

The news that seabed mining company Trans Tasman Resources Ltd (TTR) has let yet another New Zealand mining permit lapse was heralded today by Kiwis Against Seabed Mining. On Thursday last week, the TTR prospecting permit for a 4435 square kilometre section of the seabed off the West Coast quietly lapsed, and is not being renewed. This is the second such permit the company has allowed to lapse in the last six months, the first being near Kawhia off the North Island's West Coast just south of Raglan. The company has confirmed that it has let the permit lapse as it waits for the result of a High Court appeal (heard in April) brought by KASM and a number of other interests against the EPA's consent for mining a 66sqkm area of the South Taranaki Bight seabed.

Whatever the outcome of the appeal, there will be a long process before it's resolved, with the possibility of more court action, or another EPA hearing. "This gives the Government an opportunity to re-think the logic of these seabed mining bids off our coastlines, not least because of the threat to endangered species like Māui and Hector's dolphins, fisheries, seabirds and our surf breaks," said KASM chairperson, Cindy Baxter. "After years of effort, where are we? Two seabed mining applications have been refused, a third is under appeal, permits are dropping like flies, the companies are struggling financially, there are still huge concerns around the environmental impact, and opposition is growing stronger by the day. It's time for the government to put a stop to this madness."

Hides landowners unhappy over K15m disbursement

Post-Courier, August 1, 2018

The Hides Petroleum Development Licence 7 area facility owners in the Hela province are disgruntled over the manner in which the K15 million was paid out by the PDL 7 Local Level Government Special Purpose Authority. The legitimate landowners on the ground claim to have missed out on the project security funds delivered by the national government to the PDL 7 landowners. The landowners said that the Hides Gas Conditioning Plant and the pipeline facility owning clans have missed out on their share of the funding where the funding had disappeared in the hands of the PDL 7 authority board members.

"The funds delivered by national government has gone to the Hides PDL 7 LLG Government SPA and its executives and not to the affected landowners", said. Mr. Alembo Paliawe of the principal facility owning Tuguba Tagobali clan. The PNGLNG project facility landowners namely, Alembo Pliawe, Chief Mathew Yape, Chief Tara Paliwa, Chief Tiki Juli, Chief Parapu Mukani, Chief Enopi Haralu and Henry Parila, said that the funds were paid by the government to the government itself and not to the legitimate landowners. They said that this approach taken by the government is a wrong precedence and that the clan vetting exercise should be put on hold until funds are made available to the legitimate landowners.

Harmony Gold confident of big production

August 1, 2018, The National Business

HARMONY Gold is confident it will produce more than 180,000 ounces of gold from its Hidden Valley project in the 2019 financial year. This is after the asset it re-engineered last year reached commercial levels of production in June, according to chief executive officer Peter Steenkamp. "The K540 million investment in further cutbacks was delivered safely, on schedule and below budget," he said. "We are confident that Hidden Valley will produce more than 180,000oz in 2019. "The mine is well set up to deliver on the long-term targets and will continue to make a meaningful

contribution to Papua New Guinea's economy through employment, paying taxes ,including royalty, and procurement of local goods and services."

Harmony said it was committed to employing locals with the current Hidden Valley workforce consisting of 1,350 employees and 650 contractors. Only 4 per cent of employees are from outside Papua New Guinea, with the rest being nationals. Hidden Valley mine has over the life of mine paid K111 million of royalties to landowners, local level government and provincial government. The Hidden Valley mine expends, on average, K450 million annually on goods and services in PNG. Thirty-three per cent of in-country transactions are with landowner and landowner joint-venture companies. The company said engagement with the Government on the application for a special mining lease (SML) for the Wafi-Golpu project was progressing well.

Porgera landowners frustrated with State

Freddy Mou, Loop PNG, July 31, 2018

The Resource Owners Federation of PNG, a landowner company for the people of Porgera in Enga, are calling on the Government to fulfil its commitment in the MoA signed between the landowners in 1989. The landowners are claiming that breaches in the MOA have caused negative impacts on the social, environmental and economic lives of the Porgera landowners. Chairman of the Resource Owners Federation of PNG, Jonathan Paraia, said the 1988 proposals sought State approval and issuance of a Special Mining Lease (SML) for the mine to construct mining infrastructure that was capable of processing eight thousand tons of crushed ore through its mill over a mine life of twenty years. However, he claimed that the State allowed what was called a "minor variation" after five years of the mine operations to double the processing rate to 17,000 tons per day. "The landowners were deceived by the State since their lodgement of their position statement, failed to address their complaints, resulting in the landowners issuing a Notice of Dispute in April of 2015 which the State also failed to respond to."

Paraia said the landowners are now planning to invoke the arbitration provisions in the MoA. He added that the State's failure to respond to the legal steps being followed by the landowners pursuant to the MoA is unbecoming of a responsible government. Paraia reiterated that State agencies, especially the Mineral Resources Authority, are negligent of their duty to deal with the dispute in an orderly and responsible manner to ensure that the complaints are properly dealt with. He further claimed that the State's continuous ignorance of the issues raised by the landowners will do nothing but increase the frustration and anger of those affected, which could eventually lead to the disruption of yet another resource project in the Highlands region of Papua New Guinea.

PM wants LNG deal before APEC

July 31, 2018, The National Business

Prime Minister Peter O'Neill wants discussions on the Papua LNG Project concluded before global bankers arrive for the Asia-Pacific Economic Cooperation summit in November. He said in a statement to Parliament last week: "Over the next few years, we will be advancing key projects that include the expansion of our current LNG project. "For P'nyang (Western), as indicated, there are increased levels of reserves in the wells that they have explored. Now, the LNG partners are in the final stages of delivering that and we are in the final stages of delivering fiscal terms that are going to be given to these companies to develop this resource. "We are now well advanced in discussion of the Papua LNG project. "It is a good opportunity to do that because most of the global banks and

financial institutions are going to be attending the chief executive officers' summit in November during the Apec meeting.

"We are trying to take advantage of that by making sure that we did in the first LNG, where we went and raised close to US\$19 billion (K61bil) so that we can fund this project. "It is important that when the bankers are present in our country we expose the opportunities in the second LNG and the expansion of the first LNG. "We will also have good discussions around the Wafi-Golpu mining project." Meanwhile, a State negotiating team led by chief secretary Isaac Lupari expects to conclude negotiations on three gas fields soon and enter into final investment decisions (FID) by early 2020. They include Pasca A in Gulf (Twinza Oil), P'nyang (ExxonMobil) and Elk/Antelope in Gulf (Total SA) which are approaching project development. Lupari said two projects, PASCA A in Gulf and P'nyang in Western, had submitted their application for petroleum development licence. He said Total was expected to submit its application next month. The team would prepare and enter into negotiations with each of the project development proposers and establish a gas agreement for each of the projects. LNG expert and Facts Global Energy chairman Dr Fereidun Fersharaki had indicated there was a window of opportunity to enter into FID (for financial close) with the operators by the end next year or early 2020.

Delay in clan-vetting sees K600mil parked in trust accounts

July 30, 2018, The National Business

HELA Governor Philip Undialu says over K600 million in equity and royalty funds from the PNG LNG project are held in trust accounts by Mineral Resource Development Company and the Central Bank. This is due to delays in completing clan-vetting and proper landowner identification processes. Undialu said on Thursday that the funds, which were supposed to be received by provincial governments and resource owners of the PNG LNG Project, were kept in trust accounts and accumulating. He said this was because of failure by the Somare Government and project developer ExxonMobil PNG to complete clan-vetting and proper landowner identification processes before a petroleum development licence (PDL) was issued.

"Under Section 47 of the Oil and Gas Act (OGA), it is a legal requirement for licensee, which in this case is ExxonMobil, to undertake full-scale social mapping and landowner identification studies before a PDL is issued," Undialu said. "They have not done that. This blunder has prevented the release of royalty and equity funds of more than K600 million held in trust accounts by Mineral Resource Development Company and the Central Bank." He said serious fundamental mistakes had been made with the PNG LNG project. Undialu said he needed support from both the Government and the Opposition to correct mistakes made in the PNG LNG project.

Indonesia government asked to recalculate Freeport mine damage

Reuters, 26 July, 2018

Indonesia's parliament has asked the government to recalculate damage to the environment from the giant Grasberg copper mine operated by the local unit of Freeport McMoRan Inc, the environment ministry said. A 2017 report by Indonesia's Supreme Audit Agency (BPK) calculated that Freeport's decades-long operations at the mine in Indonesia's remote easternmost province of Papua had caused environmental damage worth \$13.25 billion. That damage, it said, was largely a result of tailings from the mine that had extended beyond previously agreed limits and which had polluted coastal areas. The audit also said Freeport Indonesia (PT FI) had missed royalty payments, cleared thousands of hectares of protected forest and began mining underground without environmental clearance. The environmental issues have presented problems for Freeport and Indonesia,

whose state-owned mining holding company, PT Inalum, hopes to finalize a \$3.9 billion deal to acquire a majority stake in Grasberg this year. In a meeting with Environment Minister Siti Nurbaya on Tuesday, parliament urged the minister to "ensure that PT FI fulfils governmental administrative penalties" in accordance with the law, the ministry said in a statement late on Tuesday.



FILE PHOTO: Trucks operate in the open-pit mine of PT Freeport's Grasberg copper and gold mine complex near Timika, in the eastern region of Papua, Indonesia on September 19, 2015 in this photo taken by Antara Foto. REU-TERS/Muhammad Adimaja/Antara Foto/File Photo

"Commission VII asks the Environment Minister to calculate the value of environmental losses resulting from damage and pollution from PT FI operations, as per the findings of the BPK," Commission VII chairman Gus Irawan Pasaribu said, according to the statement. Jakarta-based spokesmen for PTFI and Inalum did not immediately respond to a written request for comment. Freeport CEO Richard Adkerson said on a call with analysts on July 12 the company had been "working very closely" with the environment ministry and had "received assurance that we will find a resolution of the environmental issues that will be acceptable for all parties. So we're very encouraged by that." Since then he said Freeport had "entered into very productive discussions with the ministry and are making progress with the ministry does not expect to adversely affect our operations." Parliament also urged the ministry to "conduct environmental risk analysis and environmental audits on a regular basis", and plans to hold meetings with the ministries of mining and the environment on the matter.

A spokesman for the environment ministry declined to comment further on the parliament request or provide and estimate on how long this process could take. Indonesia's mining minister said earlier this month the environmental matters must be resolved before his office could issue a new mining permit for PT-FI up to 2031. Inalum CEO Budi Gunadi Sadikin told parliament on Monday that "regarding the environment, we told Freeport 'the past problems are your sins'. In future we will take responsibility together." Sadikin added the environmental damage from Grasberg was a shared responsibility as the government already held a 9.36 percent stake in the mine. Sadikin said a forestry permit for the mine still needed to be issued, and "the 185 trillion rupiah (\$12.80 billion) from tailings damage still needs to be cleared up" although he was confident that all the environmental problems could be resolved. There are 13 of 48 sanctions related to the environmental audit that have not been met yet, according to the environment ministry. In April, Freeport shares fell to a four-month low after the environment ministry announced tough new rules intended to comply with the BPK audit, just before the company announced its first quarter earnings.

The environmental costs of deep-sea mining

Countries must determine if mining the ocean can be done without harm to the environment Matthew Gianni, Duncan Currie, china dialogue, 26 July 2018



Unique deep-sea hydrothermal vent ecosystems that harbour chemosynthetic life forms such as giant tubeworms. Active mining of vents would destroy these rare ecosystems (Image: NOAA Okeanos Explorer Program)

There is growing interest in opening up the deep-sea to industrial mining for copper, nickel, cobalt, gold, rare earths and other metals. But at what cost? The International Seabed Authority (ISA) is meeting this week to discuss a strategic plan for the development and regulation of mining in the deep ocean beyond national waters. The ISA was established in 1994 under the United Nations (UN) Convention on the Law of the Sea. It is responsible for deciding whether, how and under what conditions, mining could be permitted in the international area of the seabed, an area equal to about a third of the earth's surface. The ISA has already issued 29 contracts to companies and state agencies from China, Korea, Japan, UK, Germany, Belgium, France, Russia, Brazil, India, Poland and a number of South Pacific countries to explore for metals in the Pacific, Atlantic and Indian oceans.

Biodiversity at risk

But the deep-sea is increasingly recognised as one of the largest reservoirs of biodiversity on the planet and critical to supporting planetary ecological systems. This first <u>World Ocean Assessment</u> report, published by the UN in 2016, also concluded that deep-sea ecosystems are already stressed by climate change, pollutants, and other human activities. Even plastics are making their way into the deep ocean. A recent study found <u>plastics</u> in the stomachs of fish in depths of 11,000 metres – the very deepest parts of the ocean. Several scientific papers published in the past year have concluded that if deep-sea mining is allowed then biodiversity loss is inevitable. This is because many deep ocean species are long-lived, and ecosystems will struggle to recover, or may never recover, from mining impacts. Other studies have pointed to the uniqueness of deep-sea hydro-thermal vent ecosystems that harbour chemosynthetic life forms such as giant tubeworms. These recent discoveries have vastly broadened our understanding of how life has evolved on our planet. The vents also form mineral deposits known as polymetallic sulfides. The ISA has issued exploration licenses for these, but if active vents are mined then the life that thrives in these rare ecosystems will be destroyed.

Weighing the risks

Given the role of the deep-sea and the vulnerability of species and ecosystems to long-term and potentially irreversible damage, it is important that we first understand the risks before deciding whether, and under what conditions, deep-sea mining could be permitted to occur. This is the essence of a resolution adopted by the European Parliament in January of this year, which called for a moratorium on deep-sea mining until the risks are fully understood. The Parliament also called for greater transparency by the ISA so that it ensures "effective protection" of the marine environment. This, after all, is its obligation under the Convention on the Law of the Sea. The ISA is also charged with acting for the "benefit of mankind as a whole" as the global steward of the international seabed, referred to in international law as the "common heritage of mankind".

The UN's 2030 Sustainable Development Goals (SDGs), adopted in 2015, commit all countries to rethink their economies, their use of the earth's natural resources, and the protection of our oceans and wider environments in the context of sustainable development. SDG 14 commits all nations to conserve and sustainably use the oceans, seas and marine resources for sustainable development. We need to conserve the ocean and we need to be investing in reusable technologies, recycling, and better product design to ensure we make the best use of the resources we have. SDG 14 also commits nations to protecting and restoring ocean ecosystems and enhancing their resilience to be able to better survive the harmful effects of climate change. The Chinese government has repeatedly told the ISA that it needs to take time for careful consideration and scientific study, while other voices are clamouring for rapid action and adoption of regulations to allow deep-sea mining.

China Ocean Mineral Resources Research and Development Association (COMRA) recently held a workshop in Qingdao to start development of a Regional Environmental Management Plan (REMP) for an area of the western Pacific where China, Russia, Japan and Korea have exploration claims for cobalt crust mining on seamounts. REMPs are essential environmental tools to assess the regional characteristics and environmental needs. Countries must seriously weigh whether deep-sea mining is consistent with the Sustainable Development Goals and their obligations under international law. Is it worth the risk of significant biodiversity loss and the degradation of deep ocean ecosystems? This is a debate that should occur this week at the ISA and within the broader internation-al community of nations as a whole. The future of our oceans is at stake.

New group wants mining on French Polynesia's Makatea

Radio New Zealand, 26 July 2018

A new group has been formed in French Polynesia which has spoken out in favour of resuming phosphate mining on Makatea atoll. An Australian company Avenir Makatea is awaiting government approval to restart mining, but the project is being resisted by environmental organisations, including landowners now living elsewhere. The new group, led by the mayor's son, Tahirivairau Mai, has told a news conference that both environmental conservation and phosphate mining can be pursued at the same time. The group, which is called Makatea Association Acting for Biodiversity, says it wants to develop the atoll and that it differed from other organisations as it represented people still living on Makatea. Avenir Makatea is seeking a government license to mine 600 hectares in the hope of extracting about 35,000 tonnes of phosphate a year. A year ago, a government delegation visited the atoll and said it was planning a survey to find out what people thought about the project. It is not known when a decision will be made on whether to grant a mining licence.

Pynang, Papua and Pasca LNG trains set for 2020

Post-Courier, July 26, 2018

The State expects to conclude negotiations for three new LNG projects- Pynang, Papua and Pasca by early next year (2019) and enter into final investment decisions (FIDs) well before 2020. Team leader of the State's negotiating team, Chief Secretary Issac Lupari confidently announced this yesterday in Port Moresby and said they are on track. Pynang is in the Western Province which is led by ExxonMobil, Papua will be undertaken by Total and Pasca by Twinza Oil and Gas. Papua and

Pasca are both located in the Gulf of Papua. "We have been working to put a team together to support the negotiating team to prepare for the three projects, " said Mr Lupari. "Since our establishment up until now, we have presentations from the three companies interms of the work they have done for us to understand where they are- and whether they are ready for us to commence negotiations which also looks at the technical work, the drilling and so forth." Mr Lupari said one of the main concerns that they have conveyed to all three companies is to provide all relevant information that is required under the Oil and Gas Act.

"They have done that so far and I need to report to the nation that ExxonMobil has submitted their application that they term as the APTF- that is the document that the State team will use to do its assessment." According to him, Twinza has also submitted its APTF and Total will be submitting theirs in August. Lupari said besides that, the State team has also been looking at the project matrixes, which is like the term sheets of the negotiation team. Mr Lupari also said part of thr exercise is to engage with legal and financial advisors to develop workable technical and economic models for application in the three projects. "So all that work is in progress as we speak," he said, adding; "The window of opportunity is between now and 2020 and if don't get the projects to the final investment decisions (FIDs) by then, we will miss the opportunity".

International oil and gas market specialist Dr Fedeidun Fesaraki, who was guest speaker at the recent Petroleum and Mining Summit in Port Mroesby, said the key issue now for PNG to expand its LNG potential is timing. "Basically Papua New Guinea has very good conditions. Prices are low, trends are good, costs are very reasonable and the environment is perfect for the two new trains of LNG and an additional one for the PNG LNG. "It's even more urgent than few months ago because many projects are preceding the equity financing which means that they don't need to wait til they find customers, they will go foward and do it with their own money because their are so confident that the LNG market is going to be so good," Dr Fesaraki said. Dr Fesaraki also attributed the enthusiasm of the developers for the new projects to the successful delivery of the PNG LNG ahead of schedule and within budget.

OK Tedi makes K3.3 billion revenue

By GORETHY KENNETH, Post-Courier, July 25, 2018

OK TEDI has delivered the best lost time injury frequency rate for 18 years with a revenue of K3.3 billion and K581million cash on hand in the 2017 financial year. Prime Minister Peter O'Neill tabled in Parliament yesterday the 2017 annual review of OK Tedi Mining Limited, singling out that costs were contained well within the best quartile of international copper producers, and that the actual was within the 12th percentile with a profit after tax of K848 million, or US\$266 million. "This is now in excess of \$2 billion with identified further value opportunities. Importantly, mine costs are now internationally competitive. "Ok Tedi has ample reserves, a clear business strategy, a committed workforce and strong management," O'Neill said.

This is further enhanced through strong support from the communities within which it operates. "This is ensuring the mine can operate successfully through inevitable commodity price cycles. This is a notable achievement. It was not so many years ago that the mine was facing imminent closure. "Battling against higher copper and gold prices, with higher copper and gold grade in the mine but with uncompetitive costs, the end of the operation was in sight. Mr O'Neill summarised the results for Ok Tedi as:

– The mine has delivered the best lost time injury frequency rate for 18 years – this is all about Ok Tedi keeping Papua New Guineans safe in their place of work;

- The mine has delivered a revenue of K3.3 billion Kina, or \$US1 billion - this is up 57 per cent

from 2016;

- Costs were contained to well within the best quartile of international copper producers – the actual is within the 12th percentile;

- Profit after tax of K848 million, or \$266m;
- Ok Tedi has cash on hand at yearend of K581 million, or \$180m;
- Ok Tedi has paid a dividend of K380 million, or \$119m; and
- Importantly, Ok Tedi has no debt.

"I note that under the Chairmanship of Sir Moi Avei, this majority State Owned Entity recorded strong results for 2017. Ok Tedi Mine now has in place clear business strategies, and operating plans, which have significantly enhanced the value of the business," Mr O'Neill said.

News Release

Oceans Face Ultimate Threat from Deep Sea Mining Urgent Need for Moratorium on Deep Sea Mining Exploration and Exploitation MiningWatch Canada, 24 July 2018

Our international waters - known as the "common heritage of (human)kind" - are under a new, imminent, and most deadly threat from the deep sea mining industry. The International Seabed Authority (ISA), a UN agency which has not received much public scrutiny until now, meets in Kingston, Jamaica this week to discuss how to open up the deep sea bed to mining. Scientists, academics, and non-governmental organizations unite in a joint letter to raise alarm over this ultimate threat to our oceans.^[1] Nnimmo Bassey, Director, HOMEF foundation and Alternative Nobel Prize recipient stated, "Oceans play a critical role in maintaining life on the planet. However, the ISA continues to ignore the profound lack of scientific understanding of the immediate and long-term ecological costs of digging up the sea floor. "It is evident that large private and state-owned conglomerates have succeeded in shifting the ISA's regulatory discussions toward outcomes favourable to corporate-directed industrial development."^[2]

"Our joint letter is a call from civil society globally to protect our common heritage." Renowned marine biologists, including Cindy Van Dover and colleagues, have recently pointed out that deepsea mining would impact both the seabed and the water column, such that biodiversity loss would be both "unavoidable" and "likely to last forever on human timescales."^[3] "The world's seas are already on the brink of catastrophe from overfishing, pollution, such as from plastics and chemicals, destruction of critical habitat such as mangroves and coral reefs, global warming and acidification" said Catherine Coumans of MiningWatch Canada. "The oceans cannot survive wide scale destruction of the sea bed by the same irresponsible industry that mines on land."

The signers of the joint letter noted: "This is not the time to move forward with an extractive regime; there are far too many uncertainties. International leadership at the ISA is required to prevent recklessly proceeding with deep-sea mining." The ISA has already issued numerous exploration contracts in international waters to mining interests supported by member states of the ISA. As these exploration contracts come to an end, the ISA is considering implementing a regime to allow extraction. Raj Patel, Activist, New York Times best-selling author and Research Professor, University of Texas claimed, "When the Law of the Sea was written and the idea of 'common inheritance' first framed, I'm certain that corporations weren't intended to inherit the seabed. There's little evidence that corporate stewardship is compatible with the continued, sustained health of these under-studied ecosystems." "The seabed is everyone's common inheritance, and we need broad, transnational and formal public consultation to learn and then decide how best to ensure its survival for those who will inherit it from us." Rather than permitting deep sea mining the ISA must declare a moratorium on deep sea mining before irreparable damage is done to the health of the world's oceans. Link letter: <u>http://ourcommonheritage.org/wp-content/uploads/2018/07/Our-Common-Heritage_Joint-Letter-to-ISA.pdf</u>

Ok Tedi pays out K100 million in dividend

Post-Courier, July 24, 2018

The Ok Tedi Mining Limited (OTML) board paid out K100 million as dividend to its shareholders last week Friday. In announcing the payout, OTML board chairman Sir Moi Avei also cautioned shareholders not to have high expectations heading into the second half of 2018. He said the company had showed its resilience to bounce back from the effects of February's 7.5 magnitude earth-quake which affected the province and the mine, including four other provinces in the southern and highlands regions of the country. "While the performance of the business was adversely affected following the earthquake in February, production and profitability have progressively returned to more normal levels," Sir Moi said. "Allowing the company to make a K50 million contribution to the earthquake appeal in March 2018 and now fund an interim dividend (of K100 million)."

He thanked employees and contractors for their efforts in recovering from the effects of the earthquake while pointing out that the second half outlook, while positive, required care on the part of the recent fall in copper prices and major infrastructure development. "While the outlook for the second half of 2018 remains positive, the recent decline in copper price and the ongoing cash requirement to complete the replacement and relocation of the in-pit crusher meant that the board continued to exercise prudence," Sir Moi said. Following the transfer of additional equity from the State to Western Province entities in April 2018, K67 million of the dividend was paid to the State, with the balance of K33 million paid to the Fly River Provincial Government, CMCA and Mine communities.

Nauru in deep sea mining venture

Radio New Zealand, 23 July 2018

Nauru's government has partnered with a deep sea mining company which is exploring the country's waters for valuable resources on the seafloor. Technicians from the Canadian company DeepGreen Resources have been carrying out a two-month survey at sea and plan to conduct four more campaigns. The company harvests metal rich nodules which it claims offer a sustainable energy alternative. Nauru President Baron Waqa said the partnership with DeepGreen will provide new revenue for the country. "This venture with DeepGreen will ensure that our revenue will be well diversified for our children and their children well into the future," he said in a statement.

LNG contract with Total to be signed after clan vetted

July 20, 2018, The National

THE Government will only sign gas agreements with Total, the developer of the Papua LNG project, after proper clan-vetting and landowner identification process are completed, Petroleum Minister Dr Fabian Pok says. Pok's comments came in response to questions from Karimui MP Geoffrey Kama who wanted to know if gas agreements for the Papua LNG project had been signed by the State, landowners and developers and if not, what was the progress. Kama said the project would affect Kikori, in Gulf, and Karimui, in Chimbu, and it was important the Simbu government was also consulted on any negotiation and project agreements. Pok said the government had not signed any agreement with the developer yet. "We are hoping to have the agreement signed in November during the Apec (Asia-Pacific Economic Cooperation) summit here in Port Moresby because the president and vice-president of Total will be coming," he said.

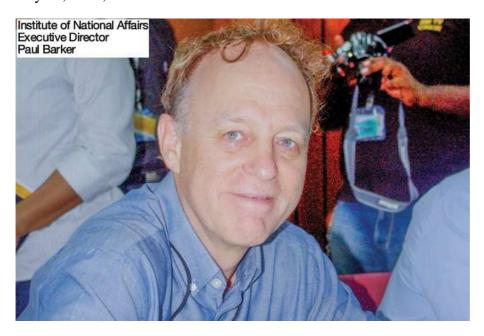
"But the agreement will only be signed after the proper clan-vetting process and landowner identification are completed by the developer Total." Pok said the government had learnt from its past mistakes and would not repeat it again as in the PNG LNG project in which proper landowner identification and clan-vetting were not done and that resulted in landowners not receiving their rightful benefits. "So Total was tasked to carry our proper clan-vetting and landowner identification and is currently in the process of doing that," he said. "So Total will have to do clan-vetting and identify proper landowners first before we could enter into any agreements."

Hospital in PNG's Western Province on verge of closure

Radio New Zealand, 20 July 2018

Daru General Hospital in Papua New Guinea's Western Province is on the verge of shutting down due to critical shortage of medical supplies. The hospital serves a province of over 200,000 people, where the capital Daru has a high number of people with tuberculosis. Reports from Daru indicate TB patients are likely to be among those affected the most by the hospital's closure, with few other sources of treatment available to them. Many of Western's rural health centres are closed, but patients being sent to the hospital in Daru are being told they cannot be treated because there is no medicine.

Barker wants more transparency in govt involvement in extractive sector July 19, 2018, The National Business



THE accuracy of economic forecasts are undermined due to a lack of transparency surrounding State involvement in the extractive sector, says Institute of National Affairs executive-director Paul Barker. Barker, pictured, told The National that this was caused by a change from how Government used to regulate past resource projects. "The general principle of a sound fiscal regime for resource project investment entails a mix of tax on profits, combined with some royalties or 'productionsharing' arrangements," Barker said. "These enable the State, which owns the resource, including provincial authorities and the identified landowners or project affected communities, to receive some revenue up front." "This is associated with production, even ahead of profits being earned, but not on an unduly onerous basis that would impose an excessive investment disincentive."

Barker said unfortunately, unlike earlier resource projects, PNG's more recent generation of resource projects had included generous tax and related concessions and incentives, as well as major direct public investment in the resource projects themselves. "These have tended to defer the receipt of revenue and deflected public expenditure, as well as enabling foreign exchange to be retained offshore, rather than being promptly remitted back to the source country of the exports. "Clearly, the apparent lack of transparency in the process, and its agreements, has tended to add to the uncertainty. This has undermined the capacity, even of PNG's fiscal and other financial institutions, to forecast and and to provide the needed assurance and actual revenue and foreign exchange required by the wider market to stimulate the market, economic activity and broader-based investment."

PNG urged to use history to deal with mine waste

July 18, 2018 The National Business

PAPUA New Guinea has lessons to learn from Fly River in Western when working on the Mine Waste Management Policy framework, according to Department of Mineral Policy and Geohazard Management. Asavi Kendua from the department says the mine waste management plan should indicate mine waste avoidance, reduction and mitigation strategies. In his presentation during a seminar on capacity development in mine waste management in PNG, Kendua said treatment of mine waste, including mine waste water, had to be done in accordance with the Environment Act 2000. He said it also had to abide by any codes of practice developed by the Conservation and Environment Protection Authority. Proper monitoring systems should take into account health and safety aspects of the environment and surrounding communities. "Riverine tailings disposal shall not be an option for mine waste disposal for new mining leases that will be granted from the date of the en-actment of Revised Mining Act," Kendua said.

He said mine inspectors should ensure proper inspections were done on mine waste treatment facilities before the expiry of mining leases. "Where a mining lease or lease for mining purposes is granted, it shall be granted on the condition that the tenement holder complies with mine waste management plan," Kendua said. "The holder of a mining lease for mining purposes shall periodically update its mine waste management plan. "The holder shall ensure that the integrity and safety of mine waste storage, treatment and dischange facilities are constantly maintained with adequate emergency response mechanisms in place." The mine waste management plan takes into account closure aspects of a mining project with respect to operational and post-closure monitoring, rehabilitation of disturbed and contaminated sites, stabilisation of waste rock dumps, stockpiles and acid rock drainage mitigation.

WGJV Wafi-Golpu Joint Venture spends K30mil on environment study

By JUNIOR UKAHA, July 18, 2018 The National Business

Wafi-Golpu Joint Venture (WGJV), developer of the multi-billion-kina Wafi-Goplu mine in Morobe, has spent K30 million to compile an environment impact statement (EIS). Spokesperson Dr Graham Hancock clarified this last week at a forum in Lae. This was after Bulolo MP Sam Basil raised questions about the impact of mining on the environment in the special mining lease, pipeline and waste dumping areas. Basil said environmental problems experienced at Hidden Valley in Bulolo and other mines around the country should not be repeated at Wafi-Golpu. Hancock, who is also general manager (social performance) of Newcrest Mining, said WGJV had done a detailed study into the environment as required by the Conservation Environment and Protection Authority (Cepa).

"We have submitted our EIS to Cepa and they are currently reviewing that statement," he said. "To give you an understanding of how detailed that statement is, it is 6800 pages long. "We have spent K30 million on our studies." Hancock said most of the money was spent on studying the oceanog-raphy and intricacies of the ocean environment near Wagang where mining wastes would be discharged. "There are always environmental impacts of every (mining) project," he said. "It is inevitable. "Our job, however, is to minimise that so that it does not affect the lives of the people."

Hancock assured Basil that WGJV was doing things "right". "We are putting a huge amount of effort to ensure that our environmental impacts are not repeating the mistakes of the past," he said. "Cepa will go through the statement and convene a meeting for people to review the statement. "It is separate process, a separate forum. "Cepa has already engaged internationally-recognised consultants to review and critique our EIS. "They have engaged some of the world's best scientists to tell them whether we are telling the truth or not. "We have put a lot of efforts into that study. You can be assured that we have done it right."

O'Neill clears air on K200m mine fund

July 18, 2018, The National

PRIME Minister Peter O'Neill told Parliament yesterday that well over K200 million from OK Tedi Mine is currently accumulating in the Community Mine Continuation Agreement (CMCA) and non-CMCA trust accounts for the people of Western. He said this in response to questions from Middle Fly MP James Donald on why Government had made a decision to transfer money in the CMCA and the non-CMCA trust accounts to Mineral Resource Development Company (MRDC). Donald said he was very concerned because MRDC was a "milking cow" for people in Waigani. "I asked the prime minister earlier on and he had given me and the people of Western province assurance that the funds were in safe hands," he said. "An NEC decision in June 2017 has stated that after the audits of the CMCA and the non-CMCA trust accounts, the balance of the funds, will be transferred to MRDC.

"I am very concerned that the prime minister has lied to me and the people of Western. "MRDC is a milking cow for Waigani people and the funds are now in the wrong hands." O'Neill said what the Government tried to do was to correct gross mismanagement and misuse of funds in the CMCA and non-CMCA trust accounts over the past years. He said hundreds of millions of kina belonging to Western people under CMCA and non-CMCA trust accounts had been mismanaged over the years. "Those funds have never reached the people," O'Neill said. "That's why we are trying to correct and stop this nonsense going on. "The government has put a ban on the CMCA and non-CMCA trust accounts and conducted an audit."

Royalty payments to be released after proper clan-vetting process done July 18, 2018, The National

PRIME Minister Peter O'Neill says royalty payments for landowners of the PNG LNG project will only be released after proper landowner identification is completed through the clan-vetting process. O'Neill said this in Parliament yesterday when responding to questions from Sinasina-Yongomugl MP Kerenga Kua. Kua said the Government had not honoured most of its landowner commitments under the umbrella benefit sharing agreement (UBSA). That included non-payment of royalties and equities, infrastructure development grants, business development grants and the seven per cent equity participation. Kua asked O'Neill whether Government had delivered all these commitments to the people of Hela and Southern Highlands. The prime minister said his Government was committed to honour all commitments made by previous governments, "some of which are very misleading to landowners".

Deep sea mining company sinking in deep water

Post-Courier, July 18, 2018

Nautilus Minerals, developer of PNG's offshore Solwara 1 mine, once again faced challenges at its AGM held in Vancouver, Canada, late last month. Even with its latest US\$34 million (K111.97 million) loan financing by Deep Sea Mining Finance earlier this month, Nautilus' dreams to undertake the world's first experimental deep sea mine, looks ever more distant. Nautilus has been hit hard by the divestment of Anglo American who announced their break with the company just before their own AGM in May this year. Andy Whitmore of the Deep Sea Mining campaign stressed that Anglo's decision to divest, on top of Nautilus's myriad problems, proves the company is running out of both credit and credibility. "It is not just the company that is sinking, but the project – and the concept of deep sea mining itself – that is going down with it," Whitmore said.

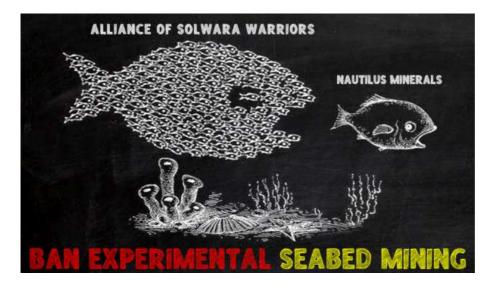
PNG, through Kumul Petroleum Holdings Limited (KPHL), formerly Petromin, also holds 15 per cent interest in the project worth K113.7 million that now hangs in the balance. As reported Nautilus is now propped up by two shareholders – Russian miner Metalloinvest and Middle-Eastern oil and gas company Omani Conglomerate MB Holdings, both of whom are lending significant amounts of money in bridging loans at 8 per cent interest. "Nautilus is increasingly controlled by these two entities, which in the case of Metalloinvest opens up serious worries that it could be hit by further US sanctions against Russian oligarchs," said Whitmore.

"The company is in a parlous state with its finances. Even if Nautilus was to become bankrupt and someone else took over the project, they would face the same social and legal – let alone environmental – risks." The reluctance of investors was ascribed by a recent article to "the unknown feasibility of this type of activity and concern that they could potentially be deemed to be complicit in environmental degradation." Growing local opposition in PNG has also seen communities come out in force at formal hearings to oppose the granting of Nautilus's exploration licences and a legal challenge regarding Solwara 1 has been lodged.

Nautilus' stock plummets as deep sea mining litigation proceeds

Deep Sea Mining Campaign, 17 July 2018

Today Nautilus Minerals Solwara 1 deep sea mine project will be at the centre of a court hearing in Papua New Guinea as local communities seek to enforce their legal rights to full information about the project. [1] Andy Whitmore, Finance campaigner from the <u>Deep Sea Mining campaign</u> said, "We were informed that Nautilus told its shareholders at their AGM that the legal case bought by local communities in PNG to stop the Solwara 1 project had been dismissed on June 18." "It is also alleged that Nautilus stated to shareholders they believed the government of PNG was going after community for cost recovery because it was a spurious lawsuit." "This is misinformation from Nautilus!" claimed Jonathan Mesulam from the <u>Alliance of Solwara Warriors</u>[2], a local community leader whose village is located 25km from the Solwara 1 project. "There is still a legal case registered at Waigani National Court House. The case, which was adjourned on June 18, will be heard today."[3]



"The real question is this: why is the government trying to dismiss this case? Why would government resources be invested in blocking this case over the constitutional right of all PNG citizens to Freedom of Information?" Nautilus stock fell by 19% this month after a string of bad news stories. These include the contract with their shipbuilding supplier had been canceled,[4] major mining company Anglo American divesting its' shares from the company[5] and that the majority of the local community in New Ireland province oppose the renewal of Nautilus' exploration license. "Local community around the Community Beneficiary Area (CBA) have all objected to the renewal of Exploration License 1196 through written objection which was lodged at the Mineral Resources Authority (MRA) in March this year. There was also strong objection during the Warden hearing in April" continued Mr. Mesulam.[6] "New Irelanders are now well informed of the potential impact of Nautilus Minerals and their experimental seabed mining project. They are giving their undivided support to ensure the project is stopped at all cost."

Australian miners in firing line of PNG law shake-up

Jewel Topsfield, Sydney Morning Herald, 17 July 2018



The streets of Sydney are paved with Papua New Guinea's gold

Major Australian mining companies face the prospect of higher royalties, tough restrictions on flyin fly-out workers and the potential nationalisation of assets under reforms under consideration by the cash-strapped Papua New Guinea government. The proposed law changes have sparked warnings from the country's peak mining body that they would pose "significant deterrents" to investment in future projects and "threaten the existing operations of current mines". Several Australian Securities Exchange listed companies including Newcrest, Highlands Pacific and St Barbara Limited operate mines in Papua New Guinea, which has significant resources including gas, gold, copper, cobalt and nickel.



Mineral exploration in Papua New Guinea

The PNG Chamber of Mines and Petroleum says the proposed changes to the Mining Act could clamp down on international fly-in fly-out workers, impose a right for the state to compulsorily acquire mining projects (on commercial terms) after 24 years and result in an increase in royalties. It says some of the proposed changes – which have been under discussion for years – would have "severe negative impacts in the immediate and long term on both existing operations and proposed projects". But the Resource Owners Federation of Papua New Guinea claims existing laws are "primitive, unjust and self-harming", and mining companies continue to reap benefits while keeping the landowners and citizens who own the resources poor. PNG Deputy Prime Minister Charles Abel told Fairfax Media the government was concerned about a number of factors including increasing the share of benefits to landowners.



The Papua New Guinea resource industry is responsible for just 20,000 jobs in nation of over 8 million people.

"Any proposed amendment must address the underlying concerns and keep PNG competitive as an investment destination," he said. New copper and gold projects including the Newcrest-led Wafi-Golpu mine and PanAust's Frieda River mine are currently awaiting special mining leases from the PNG government. At an update last month Mr Abel said the PNG government was bringing on Wafi-Golpu, the expansion of a ExxonMobil-operated PNG liquefied natural gas plant and Papua LNG "under an improved fiscal template". The Wafi-Golpu project, a joint venture between New-

crest and Harmony Gold, is a key part of Newcrest's future and is considered the company's top growth asset.

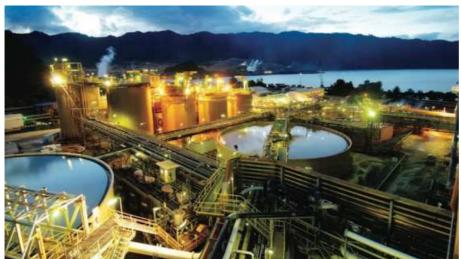


Newcrest's Wafi-Golpu joint venture mine in PNG.

Australian company PanAust holds an 80 per cent interest in the Frieda River copper-gold project, which has an estimated initial mine life of 18 years. PNG Chamber of Mines and Petroleum executive director Albert Mellam said some of the proposed changes had undermined investor confidence in PNG. "We are concerned that some of the draft amendments are internationally uncompetitive, are a serious deterrent to investment in future mining projects in PNG and will threaten the existing operations of current mines in the country," he said. Dr Mellam said the transitional arrangements were inadequate to protect existing operations and could affect permit applications that already been submitted. He also said businesses would have to wear increased royalties, fees and levies and "unreasonable penalties". He said the passing of legislation in February – which removed industry representation on the Mineral Resources Authority Board and doubled the production levy rate from 0.25 per cent to 0.5 per cent – had already created a "great deal of uncertainty in the minerals sector and for international investors watching PNG".

"The industry has already observed a gradual decline of investment into mineral exploration over the past two years." Mr Abel, who is both the Treasurer and Deputy Prime Minister of PNG, told Fairfax Media the current system had yielded good returns to government from mining projects in the past but a number of circumstances had combined to greatly reduce these flows as a share of government revenue. These included projects approaching maturation, tax concessions, low prices, PNG LNG and Lihir, the gold mine owned by Newcrest, accessing accelerated depreciation provisions and greater use of the tax credit scheme. "The state is not necessarily seeking to increase its take but wants earlier returns and smoother flows at lower cost," Mr Abel said.

"This may necessitate a tax regime that is more production based rather than profit, has longer depreciation periods, has an element of free carry equity and simpler, more transparent structural arrangements and doing away with tax concessions." Mr Abel said PMG also wanted to minimise international fly-in fly-out operations to retain more benefits in Papua New Guinea. The proposal to reduce maximum mining licenses from 40 to 25 years was "still under consideration". Mr Abel said the government was determined to deliver Wafi-Golpu, the PNG LNG expansion and Papua LNG to early works and final investment decision by 2019. "These and other imminent projects should be based on the current legal framework with negotiated terms to meet some of the requirements I mentioned." The Resource Owners Federation of Papua New Guinea said the Mining Act should be reviewed in its entirety, so the ownership of minerals was retained by customary landowners. "Minerals can still be mined only after development agreements are reached between the landowners and mining companies," it said in a statement. "All parties then benefit from a project, in contrast to Papua New Guinea in the past and today, where the landowners are the ultimate losers." According to the <u>2018 PNG economic survey</u> by the Australian National University and University of PNG, the country is experiencing an "urgent economic crisis" and a shortage of foreign exchange is worsening. The economy is dependent on the resource sector, which makes up 30 per cent of GDP, but much of it is foreign owned and a large share of the benefits flow offshore. "Since 2015, resources revenue (corporate taxes and dividends from mining and petroleum) have been at their lowest level since 1992," the economic survey says. It says accelerated depreciation and tax holidays meant new projects paid no or virtually no resource revenue but it was surprising that even older projects were paying very little revenue.



The gold processing plant on Lihir Island in PNG. Photo: Reuters

"On the one hand there are genuine concerns in PNG that the country and landowners haven't been getting a good deal from resource projects and change is needed," said Professor Stephen Howes, the director of the Development Policy Centre at ANU. "On the other hand the economy is in a very precarious state and the government is desperately looking for stimulus from new resource projects. That's the tension ... I think the government is in a difficult position." Professor Howes said he did not believe big new projects would go ahead until the uncertainty was resolved. "They want clarity on these issues because they are long-term investments and these issues are seen as very important." Austmine, the leading industry body for the Australian Mining Equipment, Technology and Services sector, said current macroeconomic conditions and mining regulations in PNG had proven to be "considerable roadblocks to investment, creating uncertainty and stifling exploration".

Morobe government eyeing 20pc stake in Wafi-Golpu mine

Junior Ukaha, The National, 16 July 2018

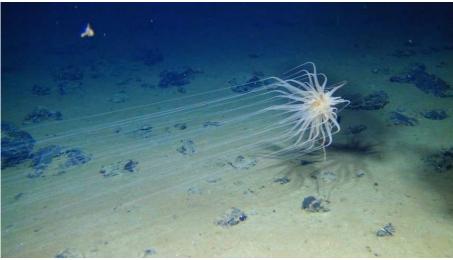


THE Morobe government wants an equity of no less than 20 per cent in the Wafi-Golpu Mine. Governor Ginson Saonu made this known last Wednesday during a two-day stakeholder forum in Lae regarding development of the proposed mine. He said the Morobe government wanted to be an active partner in mine development. "Apart from the legislated 2 per cent royalties, my government and people need better and attractive incentives in the form of equity," Saonu said. "We have made our position clear and have requested the National Government to acquire extra equity on top of the 5 per cent free carry. "We are prepared to assist the Government to acquire this equity ourselves. We expect no less than 20 per cent equity in the project.

"We want to be a major partner with the Wafi-Golpu Joint Venture in the construction and operation phase of the project." Saonu also asked the Government to uplift the curfew on the tax credit scheme (TCS) programme so that money could be used to fund infrastructure projects in mineimpacted communities. "In this case, we request that over 50 per cent of the TCS be used in Morobe alone and a further 20 per cent to be used in the SML areas of landowners and impacted communities," he said. He said the Morobe government remained committed to see this project get off the ground during this term of government. Saonu thanked the project area and pipeline landowners for giving their land for the project.

Rohstoffe für Smartphones Umweltschützer warnen vorm Schürfen in der Tiefsee

Für Smartphones brauchen Hersteller Kupfer, Aluminium und Kobalt. Die Rohstoffe könnten bald aus der Tiefsee kommen, auch Deutschland hat Abbaulizenzen. Doch Umweltschützer sind besorgt. SPIEGEL Online, 16. Juli 2018



Smith und Amon/ABYSSLINE Project/University of Hawaii at Manoa /dpa Seeanemone der Gattung Relicanthus an einer Bruchzone im Zentralpazifik

Bereits in wenigen Jahren soll die Tiefsee als Abbaugebiet für Rohstoffe genutzt werden. Dadurch drohe jedoch schwerer Schaden für die Meereslebewesen, warnt die Weltnaturschutzunion (IUCN). Den Ozeanboden mit Maschinen aufzureißen komme dem Abholzen von Wäldern gleich, schreibt die Organisation in einem <u>am Montag veröffentlichten Bericht</u> zum Abbau von Tiefseerohstoffen. Die Tiefsee umfasst Regionen mit mehr als 200 Metern Wassertiefe - nach IUCN-Angaben etwa 65 Prozent der Erdoberfläche. Dort gibt es unter anderem Kupfer, Aluminium und Kobalt.

Der Bedarf an den Metallen wächst. Die Hightech-Industrie braucht sie für Produkte wie Smartphones. Auch "grüne Technologien" befeuern den Bedarf, etwa für Speicherbatterien. Die 1994 gegründete Internationale Meeresbodenbehörde (ISA) will an ihrem Sitz in Jamaika einen <u>Verhaltenskodex ausarbeiten</u>. Die IUCM warnt jedoch: "Die Regeln, die gerade zum Management des Rohstoffabbaus in der Tiefsee entwickelt werden, reichen nicht aus, um unwiderruflichen Schaden von den Ökosystemen der <u>Meere</u> und den Verlust einzigartiger Arten abzuwenden."

Abbau ab 2025

Der kommerzielle Abbau von Rohstoffen aus der Tiefsee soll etwa 2025 beginnen. Dabei geht es unter anderem um bestimmte schwefelhaltige Salze (Sulfide). Die Meeresbodenbehörde ISA hat nach eigenen Angaben bereits 29 Vertragspartnern Lizenzen für die Suche nach polymetallischen Sulfiden und kobaltreichen Krusten erteilt - darunter auch an der mehr als 20.000 Kilometer langen Gebirgskette Mittelatlantischer Rücken im <u>Atlantik</u>. Auch Deutschland hat <u>seit 2015 eine Lizenz</u>. Die Bundesanstalt für Geowissenschaften und Rohstoffe (BGR) will Sulfide im Indischen Ozean südöstlich von Madagaskar bis in eine Tiefe von 3000 Metern erforschen.

Sie enthalten nach BGR-Angaben neben Schwefel auch Blei, Kupfer, Zink, Gold und Silber sowie <u>Spurenelemente</u> wie Kobalt, Nickel und Selen. Wenn Sedimente am Meeresboden aufgewirbelt werden, kann das laut IUCN einige Tiere ersticken und anderen die Orientierung nehmen. Lebewesen würden zudem gestört durch Lärm, Vibrationen, Licht und Schiffe. Außerdem bestehe die Gefahr, dass giftige Stoffe durch Lecks ins Meereswasser gelangen. Dringend nötig seien mehr Studien, weil die tiefen Meeresregionen bislang gar nicht genug erforscht seien.

"Artenreiche Leben in der Tiefsee für immer zerstören."

"Was wir bislang wissen, reicht nicht, um Meeresflora und -fauna vor Bergbauaktivitäten effektiv zu schützen", sagt Carl Gustaf Lundin, Direktor der IUCN-Abteilung für Meeres- und Polargebiete. "Rohstoffe mit den Technologien, die heute zur Verfügung stehen, aus dem Meeresboden zu holen, könnte das artenreiche Leben in der Tiefsee für immer zerstören." Die IUCN ist das weltweit größte Netzwerk staatlicher und nichtstaatlicher Umweltorganisationen. Unter den mehr als 1300 Mitgliedern sind etwa die Umweltstiftung WWF und die Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ).

Draft mining regulations insufficient to protect the deep sea - IUCN report

Regulations under development at the International Seabed Authority (ISA) to manage deep-sea mining are insufficient to prevent irrevocable damage to marine ecosystems and a loss of unique species – many yet to be discovered, an IUCN report warns. IUCN, 16 July 2018



The report, *Deep seabed mining: a rising environmental challenge*, provides a comprehensive overview of deep-sea mining and its potential environmental impacts. The report was launched today,

coinciding with the 24th session of the ISA, whose aim is to agree on a 'mining code' to regulate the exploitation of the deep seabed. According to the report, an effective regulatory framework is needed to avoid lasting harm to the marine environment, based on high-quality environmental impact assessments and mitigation strategies. These, in turn, must be based on comprehensive baseline studies to improve the understanding of the deep sea, which remains understudied and poorly understood. The mining code currently under development lacks sufficient knowledge of the deep sea and a thorough assessment of environmental impacts of mining operations that are necessary to ensure effective protection of deep-sea life, according to IUCN experts.

"We are operating in the dark," says Carl Gustaf Lundin, Director of IUCN's Global Marine and Polar Programme. "Our current understanding of the deep sea does not allow us to effectively protect marine life from mining operations. And yet, exploration contracts are being granted even for those areas that host highly unique species. Exploitation of minerals using current technologies could potentially destroy the rich deep-sea life forever, benefitting only a few, and disregarding future generations."

There is growing commercial interest in deep-sea mineral deposits as a result of projected rising demand for copper, aluminium, cobalt and other metals. These resources are used to produce high-tech applications, such as smartphones, and green technologies, such as electric storage batteries. Though there is little empirical evidence of the impacts of deep-sea mining, the potential impacts are worrying. These include direct physical damage to marine habitats due to the scraping of the ocean floor by machines – similar to clearcutting a forest – and the stirring up of fine sediments on the seafloor that can smother animals and cloud the water. Additional impacts include toxic pollution due to leaks and spills, noise, vibrations and light pollution from mining equipment and surface vessels.

By May 2018, the ISA – which has the dual mandate of promoting the development of deep-sea minerals whilst ensuring that this development is not harmful to the environment – had issued 29 contracts for the exploration of the deep sea. Commercial mining in international waters is expected to begin no earlier than 2025. Exploratory mining in the national waters of Japan started in 2017, and commercial mining is predicted to occur in Papua New Guinea by 2020.

"With regulations for commercial deep-sea mining currently under development, we are facing a unique window of opportunity to ensure that potential impacts of these operations are properly assessed, understood and publically discussed," says Kristina Gjerde, IUCN's Global Marine and Polar Programme senior advisor on the high seas. "Stringent precautionary measures to protect the marine environment should be a core part of any mining regulations, yet these remain missing in action. In addition to this, the ISA's challenging and conflicting mandate will require improved oversight by the international community to ensure marine life is adequately protected."

Deep-sea mining is the process of retrieving mineral deposits from the deep sea – the area of the ocean below 200 m. The area covers about 65% of the Earth's surface and harbours a rich diversity of species – many unknown to science – which are uniquely adapted to harsh environmental conditions. It also includes unique geological features, including the Mariana Trench – the greatest depth registered in the ocean. The 24th session of the ISA is taking place from 2 to 27 July in Kingston, Jamaica.

Report link: <u>https://www.iucn.org/news/secretariat/201807/draft-mining-regulations-insufficient-protect-deep-sea-%E2%80%93-iucn-report</u>

Exxon's Papua New Guinea Gas Project Is Dead In The Water

Tim Daiss, Oilprice, 16 July 2018

As liquefied natural gas (LNG) markets mature, trying to establish itself against decades of crude oil dominance, developments far removed from most of the action are taking unusual turns that could in time impact the entire LNG value chain. Until recently, tiny Papua New Guinea (PNG) was the envy of the world's LNG producers. Not only did its PNG LNG export project come online without much delay but it also avoided the quandary, affecting nearby Australia whose LNG development has been marred by budget over runs running into the billions, continual project start delays and industry troubling feuds between worker groups and project developers.

PNG LNG project loses its shine

The ExxonMobil-led \$19 billion PNG project came online in mid-2014 and started shipping LNG to markets in the Asia-Pacific region, which accounts for 72 percent of all global LNG demand. By 2017, the project was producing some 8.3 million tonnes of LNG, an increase of 20 percent from the original design specification of 6.9 million tonnes per annum (mtpa). By last year, ExxonMobil's PNG project looked as if its success would be endless. However, that storied beginning has crashed and burned. The first crack appeared just after a destructive 7.5 magnitude eartquake struck the country's oil and gas rich interior, triggering landslides and flattening buildings, killing at least 100 people, prompting the PNG government to declare a state of emergency. The quake also caused PNG LNG operators to stop operations to perform safety checks and repair damaged project infrastructure, which also impacted LNG markets in Asia at the time, particularly spot prices for the fuel.

PNG LNG swung back into operation by mid-April, but not without damage to the project partners' reputation among villagers in the area which blamed gas drilling as either the main cause of the massive quake or at least as one of its main contributors. The region was also hit with a number of severe tremors in the weeks after the original earthquake. PNG straddles the geologically active Pacific Ring of Fire, known for its geological volatility and earthquakes. Project partners, along with geologists, disputed the claims, but the goodwill that had been carefully won more than a decade ago has been lost and will be hard to win back, which has also leads to another point of contention.

Local angst

PNG government officials are now claiming that they received an unfair deal ten years ago when negotiating the terms of the PNG LNG project, and have vowed that any new projects going forward would not suffer the same fate. Peter Koim, head of the country's Gas Project Coordinating Office and a member of the original negotiating team, said "there is a general view that Papua New Guinea gave away too much for the first LNG project. For the next round the country will not away concessions as was the case in the PNG LNG project." Continuing the fallout, on July 5 Exxon Mobil said that it had stopped construction in late June on its Angore gas pipeline in the country's strife-hit highlands, after building sites were vandalized. "All work at the Angore well pads and pipeline construction has been suspended and all impacted personnel are in the process of being demobilized or reassigned," an ExxonMobil PNG spokeswoman said. The 7-mile (11 km) pipeline is being built to connect the gas field with the Hides gas conditioning plant, and the stop work does not affect production there, she added.

Radio New Zealand also recently reported that Angore Tiddl Appa Landowners (a PNG landowners group) has advised the government that it must resolve a dispute over unpaid LNG gas project royalties by July 18 or the venture would be "closed permanently". The association is demanding from the government an "infrastructure development grant" of (\$9.6 mn) 32 million-kina, equity shareholder certificates for traditional landowners, 2 percent royalties every month, and for the government to complete official clan vetting for the PNG LNG project. The government has already offered 20 million kina to the land-owners and ordered the group to halt the protesting and unrest in

Angore. The landowners, however, say that if their demands aren't met they will permanently close the LNG project by blockades and destruction of its pipeline and other infrastructure.

The danger for ExxonMobil is not only how it will handle immense PR damage in the country, but also that local unrest and demands could spill over into future LNG development projects there. If PNG landowners can forge ahead and set a precedent, local landowners in other turbulent locations even globally, particularly in Mozambique, could follow, creating more difficult negotiations for affected oil majors and their projects. In fact, not only do Western oil majors have to contend with landowners and decades of government bureaucracy and corruption in gas rich but still undeveloped Mozambique, casting doubt over the future of the country's fledgling LNG sector, but Islamic militants are also striking back.

<u>The U.S. embassy in the country in late June said</u> Americans should consider leaving a northeastern district close to a major gas field as imminent attacks are likely after suspected Islamist militants beheaded 10 people and killed seven others since May. More than \$30 billion is expected to be invested in Mozambique's natural gas sector to build capacity to produce 20 million tonnes per year of LNG, with the first exports from the fields discovered seven years ago due to start after 2021.

LNG weekly exports valued at K127 million

Post-Courier, July 16, 2018

On average, three LNG cargoes are exported each week and each worth an average of US\$55 million (K176 million). This means 12 LNG tankers are moving a total of 12 cargoes worth US\$660 million (K1.9 billion) a month, and not US\$300 million a month as reported on paper. This is from Hela Governor Philip Undialu who presented his paper at the Madang governors' conference last week singling out that based on these calculations, the project makes an average annual gross revenue of US\$7.9 billion. "Again, based on these numbers, the project could have made about US32 billion in the past four years, enough to recoup the US\$19 billion project capex," he said. "However, based on the operator's reports, the monthly average gross revenue of U\$300 million would have generated a total revenue of US\$14.4 billion in the past four years, which is less than the total project capex of US\$19 billion.

"In my best estimate, the recoverable gas reserves in the current LNG fields are worth more than 15 TCF and not 12.5 TCF as announced by the project in late 2016 after upgrading the gas reserves from the initial 10.5 TCF to 12.5 TCF. About 1.5 TCF of gas have already been produced and exported as LNG. This is about 10 per cent. It is estimated that over US\$30 billion was earned in the last four years. The project has more than 90 per cent of gas reserves still in the ground. Potential revenue for this resource yet to be produced and exported is worth over US\$270 billion based on conservative figures. The State owns 19.4 per cent equity in the project, which is about US52 billion, but with the operational cost reductions and other factors, it will be worth less," he said.

LNG project close to recouping US\$19b

Post-Courier, July 16, 2018

The PNG LNG Project has almost successfully recouped the entire US\$19 billion (K60 billion) capital cost by producing and exporting less than 10 per cent of the known gas reserves. And the project would have paid first income tax revenue in April if the 7.5-magnitude earthquake had not disrupted the operations of the project. What this means is that, the project would have achieved positive cash flow in April 2018, and this would have triggered the payment of income tax to the State. Unfortunately, these revenues will now be pushed back by at least three months. "Further, can you imagine that US\$19 billion capex of the PNG LNG Project has been recouped in less than four years? This fact alone confirms that there is a lot of cream in the PNG LNG Project. PNG stands to have all its wealth in the project eroded in the next 50 plus years if the Gas Agreement is not reviewed."

This is from Hela Governor Philip Undialu, who presented his paper titled "A narrative in a nutshell about PNG's Oil and Gas Industry" last Friday at the governors' conference in Madang. "In less than four years, the LNG Project has almost successfully recouped the entire US\$19 billion capital cost by producing and export less than 10 per cent of the known gas reserves," Mr Undialu said. "The project will be producing natural gas and exporting LNG for more than 30 years based on the project open book economic model, but based on my objective judgment, the project has an economic lifespan of more than 50 years as the upside potential is huge.

"The existing fields tied to the LNG Project have complex and intriguing structures and substructures where potential for additional oil and gas reserves is high." "I make the above point with great confidence because the gas-water contact in the Hides gas field is yet to be determined, which means the actual geological structure or the size of the pool and reserves size are yet to be determined. "Gas-water contact is the lowest elevation at which mobile hydrocarbons occur, and below which water occurs. It's the boundary between water and hydrocarbons. This is key to understanding the size of the reserves. ExxonMobil is yet to define this boundary."

Fly-In-Fly-Out Causing Economic Loss

Post Courier, July 15, 2018



The PNG Resource Owners Federation has countered assertions made by the Chamber of Mines and Petroleum that the fly-in-fly-out employee commuter-based system employed by mining and petroleum projects in PNG is economically "balanced", compared to the alternative of living on site. According to the Chamber of Mines and Petroleum, FIFO provides the best balance of shared benefits to communities throughout PNG, not confined to host rural communities. However, the PNG Resource Owners Federation maintains that it denies host rural communities of much need social and economic benefits. Citing a 1997 study conducted by National Research Institute (NRI) on the economic impact of the FIFO of expatriate staff of one mining project in PNG, Federation president Jonathan Paraia said using the national income accounting equation, it is estimated that on average, the annual loss of national income is between K5.2 million and K13 million. And considering the multiplier effect, the annual loss must be approximately K11 million and K29 million. Mr Paraia said continuation of the FIFO system for a decade will cost the economy, including the multiplier effect, between K110 million and K300 million. Mr Paraia said the economic benefits that could have been derived from a live-on-site arrangement would be employment in the informal sector, disposable income from FIFO employees, GST and other rates, taxes and fees, banking and financial services and trading, commerce and general business activity at all levels. "The report further found that it was economically viable to build a township to accommodate the FIFO workers from this particular mine instead of the FIFO system. "In that time, using the report's formula, the country must have now lost between K253 million and K690 million over the period of the life of this particular project. "The number would clearly run into many billions if all projects that practice the FIFO in the country are taken into account," Mr Paraia said.

IS BOUGAINVILLE ON THE BRINK OF WAR?

MOST OF THE NEWS COMING OUT OF PAPUA NEW GUINEA TODAY IS ABOUT THE REFUGEE CRISIS ON MANUS ISLAND. BUT 1,000KM SOUTHEAST OF MANUS ON BOUGAINVILLE ISLAND, A LITTLE-KNOWN STORY ABOUT THE BLOOD-SOAKED 40-YEAR-LONG INDEPENDENCE STRUGGLE OF A QUARTER OF A MILLION PEOPLE IS APPROACHING AN ENDGAME.

Ian Lloyd Neubauer, Penthouse Australia, 13 July 2018



Cut from the pages of a glossy travel brochure and just smaller than Hawaii's Big Island, Bougainville is blessed with incredible natural resources: sugar-white beaches, fisheries, hyper-fertile soil and one of the largest untapped mineral deposits on the planet – copper, silver, gold and uranium estimated to be worth hundreds of billions of dollars. The largest known concentration of minerals lies in Panguna Mine, a vast hole in the ground in the Guava Mountains of central Bougainville. Between 1972 and 1989 it provided nearly half of PNG's GDP and made billions in profit for its operator, Bougainville Copper Limited (BCL), a former subsidiary of Rio Tinto. But while less than one per cent of those profits were reinvested in Bougainville, hundreds of millions of tonnes of tailings – the toxic by-product of industrial mining – were dumped straight into rivers, turning vast tracts of once-fertile farming and hunting grounds into barren, moonlike wastelands.

In the late 1970s, a landowner group led by Francis Ona presented BCL with a multi-billion dollar cleaning bill. BCL, however, claimed it was in compliance with the law while concurrently insisting it had not damaged the environment. It continued to dump tailings into the rivers like a careless tourist might drop a cigarette butt on the beach. In 1988, push finally came to shove. Ona and his

mob broke into BCL's storerooms, stole a bunch of explosives and blew up Panguna's power lines. The event marked the start of the longest conflict in the South Pacific since WWII and the world's first successful eco-revolution – an episode of military history that has drawn parallels with the 2009 James Cameron film Avatar. PNG sent in its army to crush the rebels, pitting Australian-supplied helicopter gunships and gunboats against a ragtag militia armed with slingshots and homemade rifles. When that failed, soldiers trained their sights on the general population, burning down villages, using rape as a weapon and executing alleged collaborators en masse. And when that failed PNG applied a cruel Australian-backed naval blockade, depriving the entire island of fuel, medicine and all contact with the outside world.

By the time a lasting peace agreement was signed in 2001, 15,000 to 20,000 Bougainvilleans – 10 per cent of the population – had been killed or succumbed to illnesses. For its woes, Bougainville was granted autonomy and tacit control of its fantastic mineral wealth, including the US\$50 billion worth of copper and gold left at Panguna. Now, a new-look independently listed BCL is plotting its return to Panguna, promising jobs and prosperity for all – despite not lifting a finger to clean the mess it left behind. Astonishingly, the Autonomous Government of Bougainville is courting the proposal because it desperately needs cash for an independence referendum scheduled for June 2019 and the prospect of running the world's newest country the following year. But many Bougainvilleans hold serious grudges against BCL and warn if the company returns, war will follow.



HAPPY VALLEY

During the 'good times' of the 1970s and 1980s, Arawa and its port Kieta, an hour's drive from Panguna, was the second richest town in PNG. Hotels, restaurants and banks lined Happy Valley, Kieta's dreamy beachfront strip, while cruise boats and sail craft crowded around the old yacht club. All that remains of Kieta today are ruins overgrown with jungle and the wrecks of two small steamships at the end of a pier where Queen Elizabeth II and her royal entourage disembarked during a state visit in 1974. Arawa hasn't fared much better; its wide boulevards lined with overgrown fields, stain-coloured apartment blocks and abandoned gas stations. In Arawa I meet Philip Miriori, former private cabinet secretary of rebel leader Francis Ona, who died in 2005. Today Miriori is chairman of the Special Mine Lease Osikaiyang Landowners Association (SMLOLA), a group of 2,000-odd landowners who under the new Bougainville Mining Act hold rights not only to the topsoil but also the minerals underground. That makes Miriori one of the most powerful men in Bougainville and his opinion of BCL a matter of concern.

"BCL does not have any compassionate feelings. I have seen what they are capable of," he says. "One night during the war, the PNGDF (PNG Defence Force) woke up everyone in my village and made us stand in a line while they burnt all our houses. I hold BCL directly accountable for what happened that night because BCL provided the soldiers with funding, logistics and shelter. Not as long as I am alive will I ever accept BCL coming back." Allegations of BCL's complicity in Bougainville's war stem back decades and have been corroborated by the highest level of government. In 2011, SBS's Dateline unearthed an affidavit signed by former PNG Prime Minister Michael Somare that reads: "Because of Rio Tinto's financial influence in PNG, the company controlled the government." In a separate affidavit, former PNGDF general Jerry Singirok said the army "functioned as the corporation's personal security force and were ordered by BCL to take action to reopen the mine – by any means necessary".

BCL refused to comment for this story. But in a shareholder update released in October, the company claims it "has always maintained positive relationships in Bougainville" and "continues to respectfully build relationships with a range of stakeholders, including project area landowners". Yet in the very same document, the company scolds Miriori for "attack[ing] BCL through the media by using the title of SMLOLA chairman to convey the misleading impression that there is a united view of opposition to BCL". The notice also refers to a SMLOLA leadership dispute between Miriori and his cousin Lawrence Daveona, whose relationship with BCL stems back decades. Daveona was once president of the Bougainville Development Corporation, a purported BCL development fund that was run like a Fortune 500 company with interests in engineering, logistics and even mining. He was also a former director and secretary of BCL's Roads Mine Tailings Lease Trust Fund – a body set up to administer compensation payments to Panguna landowners.

Daveona refused comment, citing ongoing court proceedings with Miriori. But he pointed out Miriori has a corporate sponsor of his own: RTG Mining, a Perth-based consortium that operates seven mines in five countries and is challenging BCL's bid to reboot Panguna. Miriori acknowledges he's on RTG's payroll but says his support for the company is based the award-winning environmental and social policies it has demonstrated at Masbate, the largest operating gold mine in the Philippines. "RTG will work well with the community," he opines, adding: "If this story doesn't go well, you will not be welcome back in Bougainville."



LEGACY PIT

In BCL's October shareholder notice the company claims it is "increasing its presence in central Bougainville through the engagement activities of our local team". Yet BCL has no official pres-

ence in Arawa. And it's hard to imagine how a car with BCL logos could get past Alex Dakamari, a crusty old rebel with hangdog features who controls Morgan's Crossing Checkpoint – a roadblock set up by Ona in the early 1990s on the only carriageway leading up to the mine. "BCL are wasting their time. If they come back, we will fight," Dakamari scowls. "We don't want the mine reopened – full stop! Otherwise, all our money will go to white people like in the past. We were the owners and they turned us into beggars. They can't get away with it again!" Before it closed, Panguna was the largest open-cut mine in the world – 2.5 kilometres wide and half a kilometre deep. On one side of this titanic-size eyesore, a wall of untreated tailings hundreds of metres high marches slowly down a ravine. Millions of litres of opal-blue water rush from pit water drains on either side of this wall, forming waterfalls of the damned that lay waste to all life in the valley far below.

Dapera is a village that once sat right on top of the mine. In the early 1970s, BCL moved Dapera's residents to a squatter settlement built on a plateau of crushed rock not far from the ore-sorting plant. A desolate collection of hardscrabble shacks, Dapera II is now home to a few hundred impoverished landowner descendants like Jayden Frankie. "You can see the destruction BCL did to this community," he says. "Before my father had good land. This is not good land. We can't grow crops and when heavy rain falls, rocks in the ground turn blue and green." His friend, Richard Onio, voices similar sentiments. "To find good land for farming we have to walk up to those hills," he says, pointing to a steep ridge. "But it's dangerous in heavy rains because of landslides." What do they think about the idea of a BCL comeback?

"They would not be welcome," says villager Freddy Bernora. "We would send them off. They stole billions of dollars from us and I do not see how this company has changed." Frankie says he wants RTG to reopen the mine: "We have seen some pictures of how RTG works in the Philippines, how people there live side-by-side with mining. They showed us how they produce benefits for land-owners. They seem to respect landowners." "For me," says Onio, "I am with neither RTG or BCL. I am neutral. I want to see if they meet our terms and conditions. I am not convinced by either side yet."

CAESAR'S PALACE

On another plateau above the pit lies a small city where BCL housed more than 2,000 employees during the 'good times'. Today, around 8,000 landowners and squatters reside in the concrete skeletons of residential towers Ona and his mob set fire to after BCL withdrew. Masked in heavy fog, carpeted in moss and spattered with graffiti, it has the look and feel of a set from the Planet of the Apes. Philip Takaung, Ona's 77-year-old half-brother and Miriori's deputy, is Caesar of this post-apocalyptic world. With the frame of a silverback gorilla and a crushing handshake to match, he makes an intimidating presence when I find him congregated with family and friends on the top floor of the tallest tower.

"When BCL came here and started polluting our land, we didn't know anything about minerals. We had no education so they took advantage of us," he says. "When we asked them to clean up the rivers, they did a feasibility study and said there was nothing poisonous in the water. We said NO! Our crops, our rivers, everything is dead! But they ignored us. They ignored us for 10 years until we took action. I was on that team with Ona that blew up the power lines." Takaung shows me his weapon of choice during the conflict: a nine-foot-long pole with a Y-shaped head known as the 'Rambo Stick' – a slingshot so powerful it can puncture a hole in a car, or take off somebody's head. "This weapon is very good because it makes very little noise," he says. "When you fire it, the enemy has no idea where you are. Then you can fire again."

I ask Takaung how many soldiers he killed during the war. He looks at two small children in the room who are glued to his every word, decides against answering and continues with his sermon:

"BCL burnt our villages. They tortured our people. They cut off people's hands and threw them from helicopters. They raped our women, the young children, the men and old ladies! They put the machete in between women's legs! I saw it! They slaughtered people like they were animals!" On the way back to Arawa I stop at Anewa Bay, home to Bougainville's modern port facilities.. There I meet port worker Francis Baubake, a withered old man in his fifties with a wooden leg and a terrible story to tell. "In 1996, the PNGDF got a new mortar bomb that was untested. So they tested it on my family, "he says. "We were in church in a refugee camp in Buin in the south when it hit us. My daughters Brenda and Alvina, seven and 12, and my wife Sicilia were instantly killed. I lost my leg," he says, tapping his wooden stump. I ask Baubake who he holds accountable for his loss. He stares numbly into the middle distance and thinks for a while before mumbling: "The PNGDF. The PNGDF and BCL." But when I ask what might happen if BCL returns to Bougainville, he answers without pause. "War," he says, grinding his teeth. "War."

THE NO-MINING VOTE

On my fourth day in Bougainville, I am struck with malaria and spend the next 24 hours shivering in bed, my joints and lower back burning with pain. The fever dissipates the next day but the experience makes me ponder the fate of an estimated 5,000 Bougainvilleans who succumbed to malaria during the blockade of the 1990s, and the poor state of health of most islanders today. In a squatter settlement next to my guesthouse, I find a man in his twenties with a cancer the size of a football growing from his heel.



More than half of all adults here are obese, while alcoholism is endemic.

"The war took everything out of everybody here and the trauma has been passed onto this generation," says Geoff McAndrews, a Californian who recently opened Bougainville's first surf camp. "There are no jobs. The only thing they have for entertainment is volleyball and homebrew." Over the next few days, I learn a significant minority are pro-BCL. "If BCL comes back, they can fix the environmental issues because they know all about them," says accountant Lindsay Kalio. "I don't think any other company can do this as we have no relationship with them." Yet more than half of all islanders I speak to oppose any kind of industrial mining. "Our previous experience with mining was pollution and violence so I don't want mining to come back," says Alex Takena, a fisherman in Kieta. "We should focus on sustainable industries like copra (coconut) and cocoa farming."

Lawrence Robert, a carpenter in Arawa, agrees. "I don't think Panguna should reopen because our island is tiny and if miners come back, they'll tear it to pieces. We should have tourism instead to promote our culture and heritage." Adds John Boscoe, a subsistence farmer from Oemah village in the island's south: "Mining did not benefit any of us in in the past but we all lost our homes. If it happens again, the Panguna landowners will drink milk and honey and we will get nothing." The SMLOLA discounts anti-mining sentiment. "These people have to look at the bigger picture," Miriori says. "Mining is the right choice for Bougainville because we need the revenue if we want to become an independent nation and generate employment and security. Panguna will reopen, whether they like it or not."

BETTER THE DEVIL YOU OWN

A week passes until I regain enough strength to make the bone-jarring four-hour drive from Arawa to the capital Buka, which is as fly-blown as a place can possibly be. When I arrive the city has been under a total electricity blackout for close to a week for reasons no one can explain. When I visit Bougainville's House of Representatives in the middle of the day to make an appointment with President John Monis, no one is there. Ditto at the Ministry for Mineral and Energy Resources and BCL's little office. Later in the day, news breaks that the SMLOLA leadership dispute has ended and Miriori has emerged victorious. It sees RTG's share price soar 83 per cent in a single day and the inking of a "historic" deal between the consortium and the SMLOLA. "The Chairman and Mr Daveona have also pledged support for RTG as the preferred development partner," RTG says in a statement. "This is a historic and important step for the landowners, with RTG being the first mining company that has been endorsed by the SMLOLA in 30 years."

But the victory is short-lived. Bougainville Minister for Minerals and Energy Raymond Masono accuses RTG of trying to sneak into Panguna through the back door. "The Autonomous Bougainville Government rejects companies that think they can bribe their way into people's resources by giving certain individuals money to gain landowner consent," he says. RTG rigorously denies it has bribed landowners even though Miriori admitted to me that he is on their payroll. However BCL has been busy handing out money to landowners, too. In March of last year, BCL distributed US\$1.5 million in compensation to landowners at a public ceremony in Buka attended by Masono. "It is not the devil that we used to know, but it's now the devil that we own," Masono said at the ceremony, adding that it would be foolish go out looking for other developers. Masono's comment about "the devil that we own" refers to Rio Tinto's June 2016 decision to finally call it quits on Bougainville – and its subsequent donation of its majority shareholdings in BCL to the governments of Bougainville and PNG.

RTG chairman Michael Carrick says the move was in part an attempt by Rio Tinto to stack the deck in BCL's favour. But the cards had already been stacked in a very big way by the authors of the 2015 Bougainville Mining Act, who gave BCL the first right of refusal to redevelop Panguna. RTG's Carrick insists the Act no longer applies. "BCL 'claims' it has first right to the exploration license under the mining act," he says. "But our legal advice is that the renewal application for extension of the term of their licence is invalid because it was submitted out of time and was incomplete." For his part Masono remains nonplussed, insisting BCL is still in the box seat and RTG doesn't even have a seat on the table. "Right now, the only legal applicant on the exploration tenement is BCL," he says. "Until that process is completed, there are no other applicants or applications over the same tenement. That's the position of the government."

THE PRESIDENT SPEAKS

On my last day in Bougainville, I score an interview with President John Momis at Buka's tin-pot airport. Right from the get-go he contradicts Masono's position and corresponding claims by BCL that its proposal has the support of the Autonomous Government of Bougainville. "Currently we do not have a preferred partner. We will ask people who are interested to submit their applications and we will scrutinise their applications quite stringently," the President says. "We are open to discussions with BCL but there's whole new dimension today. They need to win the support of landowners who own the resources." I ask him what he thinks about RTG's competing bid to redevelop Panguna, and of rumours that China is eyeing the mine. "We are not sure about RTG," he says. "They have to convince us first. I don't know if they are in a strong position. As for the Chinese, they are not in the picture right now. But we are open for business." And so the race for Panguna's riches continues with no clear frontrunner. But no matter which company wins, three things seem certain.

First, the bulk of Panguna's riches will inevitably end up in the pockets of oligarchs, shareholders and hopelessly corrupt officials instead of a sovereign wealth fund where it belongs. This prediction is drawn from the 'resource curse', which dictates countries with lots of minerals tend to have less economic growth and democracy than countries with fewer natural resources. Hundreds of studies have been undertaken to prove the theory, though one need look no further to Hela Province on PNG's mainland to see it happening in real time. There, ExxonMobil's A\$24 billion Liquefied Natural Gas (LNG) project has failed to deliver any significant development outcomes for landowners. "In fact, it has, in important ways, made life worse for the majority of people living in the project area," says Michael Main, an Australian National University doctoral student conducting fieldwork in the area.

Which leads to prediction number two: if Panguna reopens, there will be blood. According to the World Bank study 'Natural Resources and Violent Conflict', countries that export around five per cent of GDP have a six per cent risk of conflict. But when exports reach 25 per cent of GDP, the probability of conflict climbs to 33 per cent. If Panguna reopens, exports of minerals will account for close to 100 per cent of Bougainville's GDP. That doesn't bode well under the World Bank's formula. And despite reassuring me the plans to reboot Panguna's will definitely go ahead, a fortnight after I leave Bougainville he changes his mind, announcing an indefinite moratorium. "We will not allow this project once again to reignite the wounds of the Bougainville crisis and distract our focus for restoring peace and our preparation for our referendum in 2019," he told New Zealand's Asia Pacific Report.

The decision is a breath of fresh air and a rare example of a politician in PNG making an unpopular and unprofitable decision that is beyond a shadow of a doubt in the best interest of constituents. My final prediction for Bougainville? That the people will overwhelmingly vote in favour of selfdetermination when they go to the polls in 2019. "We in Bougainville have a huge passionate ambition," Monis told me before I left, mirroring the thoughts of every Bougainvillean I interviewed on the subject. "And that ambition is to liberate ourselves from all kinds of transgressors, evil and marginalisation so there will be unity to affect the kind of changes we need to truly become free."

Freeport-McMoRan divests of Papua operation

The mining company Freeport-McMoRan has signed an agreement to proceed with divestment of its lucrative mine operations in Indonesia's Papua province. Radio New Zealand, July 13, 2018



Freeport's Grasberg mine in Papua, Indonesia. Photo: AFP

Under the agreement, state-owned company Inalum would pay US\$3.85 billion to increase Indonesia's stake in Freeport's mine to 51 percent from just over 9 percent now. Furthermore, according to the *Antara* news agency, the provincial government of Papua and the district government of Mimika, would be given a 10 percent share of the ownership of the Grasberg mine. The deal is part of negotiations that would see Rio Tinto Group cash out on its interest for US\$3.5 billion, leaving Freeport's share of the payment at \$350 million. According to *Bloomberg*, Freeport made it clear that there are still unresolved issues. They include finalising the company's long-term rights in Indonesia until 2041, negotiating terms that would allow Freeport to maintain operational control once it's no longer the biggest stakeholder. It also includes coming to an agreement on environment matters, including Freeport's treatment of tailings waste.

Te Atiawa and Taranaki Iwi fundamentally opposed to seabed mining activity

Te Atiawi iwi, 13 July 2018



In addition to endangered Māui dolphins, other marine mammals, including fur seals, common dolphins, and orcas (killer whales) can be found in the Marine Park boundaries.

Te Kotahitanga o Te Atiawa Trust and Te Kāhui o Taranaki Trust are fundamentally opposed to seabed mining activities within their tribal rohe. Te Kotahitanga o Te Atiawa Trust and Te Kāhui o Taranaki Trust were notified of the exploration permit application by Ironsands Offshore Mining Ltd in 2016 and each iwi made a submission opposing the application back in September 2016. Both Iwi organisations were informed of the granting of the permit on 8 June 2018, a month after the permit had been granted by New Zealand Petroleum and Minerals on 8 May 2018. Te Kotahitanga o Te Atiawa Trust Chairperson Liana Poutu is concerned that the permit area includes a Marine Mammal Sanctuary. "The permit has been granted inside a Marine Mammal Sanctuary which is administered and managed by the Department of Conservation.

"We find it difficult to understand how one arm of government, New Zealand Petroleum and Minerals, can cut across another arm of government and make these kinds of decisions without engagement on the issue. "The permit area also sits inside a mineral mining exclusion zone, so although it's only exploration at this stage the implication is that if exploration is successful there is an expectation that a mining permit will be granted in an area that excludes this activity. "Fundamentally, the iwi and hapū of Te Atiawa are opposed to this activity," she says. Te Kāhui o Taranaki Trust Chairperson Leanne Horo says that the protection of our environment is a focus for Taranaki Iwi.

"Taranaki Iwi's focus is on protecting, enhancing and sustaining the mouri of Tangaroa ki Tai. "The Ngā Motu/Sugar Loaf Island Marine Protected Area and Tapuae Marine Reserve sit within the Te Atiawa tribal rohe and our Taranaki Iwi tribal rohe so it's concerning to us that the permit has been granted in close proximity to these areas. "We are launching our environmental management plan, Taiao Taiora, in the coming week which outlines our position on environmental issues. "Taranaki Iwi is fundamentally opposed to any new mining or prospecting activity taking place within our rohe," she says. The permit area at its closest is 2.8km from shore, and sits almost entirely in the West Coast North Island Marine Mammal Sanctuary established in 2008. The permit area at its closest is 0.45km from the Ngā Motu/Sugar Loaf Island Marine Protected Area and at its closest is 1km from the Tapuae Marine Reserve. The permit area overlaps the Mineral Mining Exclusion Zone in two places.

Basil wants mine not to repeat past mistakes

By JUNIOR UKAHA, July 13, 2018 The National Business

BULOLO MP Sam Basil says he does not want to see a repeat of problems faced by landowners of the Hidden Valley Mine to happen at Wafi-Golpu. The Mineral Resources Authority, however, countered that the fault was with the landowners themselves. Basil was speaking yesterday during the second day of the Wafi-Golpu Project Development Forum in Lae. Basil, whose district hosts Hidden Valley Mine, said despite the mine operating for a number of years, living standards of the mine-area landowners had not improved. He said the Biangai and the Watut people, traditional landowners of Hidden Valley, had not seen any tangible developments and benefits from the mine. "We have not fixed the problems of Hidden Valley and now we are talking about Wafi," Basil said. "These two same companies that have mined Hidden Valley now want to mine Wafi. Are they willing to admit the mistakes they have done up at Hidden Valley?

"Is the Mineral Resources Authority willing to shoulder the blame so that we can forge a new way forward? "Our landowners in Biangai and Watut are still walking around without money. "They have not been given much." Basil said there was also the issue of environmental damage at Hidden Valley, which is now before the courts. He said the two per cent royalty given to mine landowners was not enough and should be increased to five per cent. "Before you present this document to us, you have to tell us the failures of the past mines," Basil said. "MRA needs to outline them and find a way forward. "The benefits of the past projects, you have to tell us now? "What steps are we going to take from here on?" Basil urged landowners not to quickly sign the mine memorandum of agreement (MoA) but ensure they understood how it would affect their lives and those of their children.

Sean Ngansia, MRA's executive manager of development coordination, said the problem was not with the authority but the landowner leaders. Ngansia said Basil was referring to how royalties from Hidden Valley had been managed. "We don't necessarily manage royalties on landowners' behalf," he said. "It (royalties) is usually given directly to the landowners through their landowner associations. "The issue now is really about how these monies are managed. "You will find that in Hidden Valley and all the other mines, the landowner association leaders are not managing their royalties well. "There's a lot of misuse and mismanagement. These leaders also do not report to their people and that's where the problem is."

Developer eyes sustainable mine

July 13, 2018, The National Business

THE developer of the proposed Wafi-Golpu Mine in Morobe wants to develop a "sustainable mine" that will benefit all stakeholders involved. This was made known by Dr Graham Hancock, the general manager (social performance) of Newcrest Mining, one of two development partners of the mine. Hancock said the developer wanted a sustainable outcome for the mine that would benefit every stakeholder and not just a few people. The US\$5.4 billion (K17.8 billion) gold and copper mine, located 70km south-west of Lae, will be developed jointly by Newcrest (50 per cent) and Harmony Gold (50 per cent) through the Wafi-Golpu Joint Venture.

"How can we do it right so that we end up with a sustainable outcome?" Hancock said. "One of the things that is important is that if we end up with a very small group of people with all the money, and everybody else feeling that they are being left out, that is not sustainable. "Everybody must feel that they have a part to play and must benefit from this project. "That is the outcome we want because we want it to be sustainable. "We want the arrangements to last for the whole of the life of the mine. The benefits should be fairly distributed to all who are affected by the project. The benefits should reflect the level of development in the project area."

Next consultation forum to address key stakeholders

Post-Courier, July 13, 2018

The Government and State team will address key stakeholders of the projected US\$5.4 billion Wafi-Golpu gold mine prospect at the end of the month (July) at a second development forum. Vice minister for Mining Bari Palma, closed the first forum with key stakeholders yesterday, with a projected US\$2.8 billion initial capital injection for the world-class Wafi-Golpu prospect. Ending on a high note, Palma said the outcome of the first forum is the start of consultations to come ahead in progressing a wealthy and massive mine that must be of equal benefits to the landowners, the developer, the provincial and national government and the people of Papua New Guinea. It was agreed that the State team take the findings away, assess, and return to present to the key stakeholders on various strands of concerns relating to the Wafi-Golpu project.

The second forum will facilitate presentations and discussions relating to the Wafi-Golpu project, including the conservation authority (CEPA) who were unavailable in the forum yesterday. The developer confirmed having submitted the Environmental Impact Studies (EIS) to CEPA on June 25, and expects a response by the end of the month. Other highlighted areas of the coming second forum include sharing experiences of other mines in PNG, benefit distribution options, business de-

velopment presentation by Department of Commerce, training and employment presentation by the Labor Department. The developer- Wafi-Golpu JV Limited also requested to include in the second forum their agenda to propose the establishment of the Wafi-Golpu Foundation.

Pacific Islands complete draft agreement on deep sea mining

Radio New Zealand, July, 12, 2018

Pacific Island Countries and Territories have completed a draft regional agreement on Deep-Sea Minerals to support responsible management of seabed resources across the region. The draft agreement was refined at the Pacific Regional Deep-Sea Minerals Workshop held by the Pacifc Community in Nadi last week. The draft agreement includes the development of legislative frameworks to support sustainable evidence-based approaches to deep sea mining. To date, Nauru and Tonga have sponsored foreign companies to secure exploration tenements in their jurisdiction, whilst Kiribati and the Cook Islands have established state-owned-enterprises to explore deep sea mining. Canadian company Nautilus Minerals recently said it had secured finance to advance its controversial Solwara 1 project in Papua New Guines's Bismarck Sea. Final consultations on the draft agreement are expected to be completed by October - with the final agreement to be tabled to Pacific leaders in 2019.

PLANNED MINE PIPELINE THROUGH LAE UNDER ATTACK

Gabriel Lahoc, NBC News, 12 July 2018



The planned Wafi-Golpu mine pipeline, which will run out from the mine site from the borders of Bulolo and Huon Gulf districts, across the Markham river and ending in the industrial hub of Lae, has come under attack. Leaders from the Ahi tribe, notably from Butibam village, and the Wafi-Golpu Mine Area Landowners Association, surprised the organisers and the guests when they interjected at the closing of the Wafi-Golpu mine project development forum yesterday at the Sir Ignati-us Kilage stadium in Lae. Chairman of the Wafi-Golpu Mine Area Landowners Association, Holmes Kissing, faced the guests, which included Mining Minister Johnson Tuke Morobe Governor Ginson Saonu, Communications and Energy Minister and Bulolo MP Sam Basil, Huon Gulf MP Ross Seymour, Menyamya MP Thomas Pelika, Tewai-Siassi MP Dr Kobby Bomareo, Mineral Resources Authority Executive Manager Sean Ngansia, Wafi-Golpu Joint Venture senior executives and the chairmen of the three primary landowners groups, Yanta, Hengambu and Babuaf, and expressed the people's disappointment in their handling of the negotiations relating to the project.

This first ever forum is where all stakeholders were supposed to meet together and participate in discussions, but according to the frustated Ahi and other mine affected communities, not all stakeholder groups were ever consulted or invited to express themselves. Mr Kissing, who is also from

Butibam, shouted down the master of ceremony who was closing the first day open session, and was allowed by Minister Tuke, to air their grievances. Mr Kissing, pointed out Morobe Deputy Provincial Administrator Masayat Moat, for failing in his leadership to get as many and all concerned parties together in the negotiations and discussions leading to the forum. He told the national leaders and Wafi-Golpu JV executives that there were several outstanding issues as the planned pipeline will run through traditional land of several tribes and communities from outside and within Lae city and the fact that the state has not yet compensated the rightful landowners for the Lae Tidal Basin port and Lae city and that only one Ahi village of Wagang, where the pipe will end, was included as a stakeholder.

Reflecting on the mistakes of Hidden Valley mine, Mr Kissing warned that the livelihood of the people in and around the mine area, to those along the rivers and along the nearby coastline will be affected, and the frustrated locals will rise up against the developer and the government if they ignore these issues and concerns and sign any agreements and deals. Mr Seymour and Mr Basil, admitted that the majority of the affected people are not yet ready for the mine and vowed to task the provincial administration to help identify affected communities and involve them. Minister Tuke welcomed these concerns and promised to have responsible agencies address them in the right processes, however in his speech he called to have the mine agreement formalized before the November APEC meeting, a time frame which seems unreal given the outstanding issues of identifying other affected landowner groups and addressing their concerns.

Govt positive Wafi-Golpu will be a world-class project

July 12, 2018, The National Business



THE Government is committed to seeing a world-class Wafi-Golpu Mine project get off the ground, says Mining Minister Johnson Tuke. Tuke said was speaking yesterday during a consultative conference in Lae for stakeholders of the mine. The meeting was attended by a number of Cabinet ministers, landowners, government department representatives, politicians, public servants and the mine developer. Tuke said the US\$5.4 billion (K16.7bil) gold and copper mine will boost the country's economy. "The government is committed in providing the regulatory assessment and approvals for the Wafi-Golpu mine project in an effective and efficient manner," Tuke said.

"It has been over 30 years since the first discovery of mineral resources at Wafi-Golpu," Tuke said. "This venture will inject an initial capital investment of US\$ 2.8 billion (over K8bil)," he said. Tuke said that once operational, the mine would process an ore reserve that was estimated to contain 5.4 million ounces of gold and 2.8 million tonnes of copper for the next 33 years. "We are all here to participate, share ideas and contribute to move this important project to another level," Tuke said. "The purpose of this forum is firstly to update all stakeholders and interested parties on the progress of this exciting project," he said. Tuke said a Special Mining Lease would be given to the developer if it met all the conditions and requirements of the government.

"The government, after critically reviewing and evaluation all the documents submitted by Wafi-Golpu Joint Venture, is prepared to back this project," Tuke said. "I am prepared to ask the head of state to grant the development licence once the State is satisfied with all the necessary steps taken to convince the government," Tuke said. "The state is currently putting together a set of conditions for the development licence for this project. "The commencement of the project will prove significant from the country as it will boost our economy and foreign exchange. "It will give confidence to other international investors trying to come into the country and invest," he said.

Alluvial mining lease deal clarified

July 12, 2018, The National Business

CITIZENS are required to have a majority stake in all joint-venture projects that have mining leases for alluvial purposes, according to Mineral Resources Authority (MRA). It said this when explaining the distinctions between its leases and relevant laws these were based on. Mining lease for alluvial purposes can also be held by citizens. This may be of a term of up to 20 years and can be extended for 10 years. Joint ventures or citizens are required to operate over an area under 60 square kilometres in a rectangular or polygonal shape which has been marked out or surveyed. Applicants for this lease will also have to submit proposals for development. They have to prove a resource to support the term, area and operation while also stating their technical and financial capacity. They will also have to secure a permit from the Conservation and Environmental Protection Agency while being subjected to do monthly production and royalty reporting.

The mining lease comes before a large-scale alluvial mining operation and could be subjected to a development forum and benefit-sharing agreement, at the mining minister's discretion. This lease is for a larger-scale operation and is more highly regulated then mining carried out under the alluvial mining lease. It is also worth noting that the Mining Act allows for non-mechanised alluvial mining which is the least-regulated form of alluvial mining. Said MRA: "Non-mechanised alluvial mining accounts for the greatest number of persons involved in the sector. Alluvial mining is undertaken in most areas of Papua New Guinea, of 10 isolated rural areas. Those operating under the Section 9 (MRA Act) reservation do not require to be regulated by any formal process, unless they breach the simple requirements."

Canadian firm eyeing K360mil Ramu project deal

July 12, 2018, The National Business

A shareholder in the Ramu Nickel Cobalt Mine in Madang is close to completing a nickel and cobalt streaming transaction with Canadian company Cobalt 27 Capital Corp. Highlands Pacific Ltd reached a C\$145 million (K362.5 million) deal with Cobalt 27 in May 2018 for Cobalt 27 to buy cobalt and nickel from the mine. Highlands announced to the Port Moresby Stock Exchange (Pom-Sox) last week that the substantive outstanding condition was the execution of a clarification agreement between MCC Ramu NiCo Ltd (MCC), Mineral Resources Ramu Ltd and Mineral Resources Madang Ltd. Mineral Resources Madang Ltd is Highlands' joint venture partners in the Ramu project. According to a Reuters report, the transaction would see Cobalt 27 buy 55 per cent of Highlands' share of cobalt production and 27.5 per cent of its share of nickel output from the mine. This will result in Cobalt 27 receiving an estimated 450,000 pounds (204116.4kg) of cobalt and 2.25 million pounds of nickel in concentrate every year. This will result in Highlands' ownership of the mine increase to 11.3 per cent from 8.56 per cent. According to Cobalt 27, the transaction is the world's first cobalt-nickel streaming deal on a producing mine. Streaming is a type of alternative finance that allows an investor to make an upfront payment in exchange for future production at a discounted price. Cobalt 27 is a Canadian electric metals investment company in the electric vehicle and battery energy storage markets.

PNG Economy is decreasing

Post-Courier, July 11, 2018

The national economy contracted noticeably in 2015 following the completion of the construction of the US\$19 billion PNG LNG Project in the Hela Province in 2014. As reported by the Treasury Department in its 2018 Budget estimates, it contracted by 10.5 per cent but later in March this year, the National Statistical Office (NSO) came out with another estimate of 5.3 per cent. This was revealed by the 2018 PNG Economic Survey jointly undertaken by the Australian National University (ANU) and the University of Papua New Guinea (ANU-UPNG). "As we suggested back in 2016, it is hardly surprising that non-resource GDP growth was negative in 2015. After all, construction for the mega PNG LNG Project finished the year before. That construction, which was carried out over 3-4 years, valued at US\$19 billion, is about equivalent to PNG's GDP.

The survey states that the removal of that stimulus would have placed significant downward pressure on the GDP, both direct and indirect. In addition, 2014 was the year in which government revenue peaked, with revenue falling partly due to economic contraction but also due to a drop in commodity prices. The resulting fiscal contraction would have also caused a contraction in nonresource GDP. "In addition, and again as we noted in 2016, there were several signs of negative growth, not only falling tax revenue, but plummeting import demand, falling employment, and accounts by businesses themselves. "What is more surprising is that this contraction in GDP has taken so long to be recognized in government statistics.

It is a very unusual situation to have such a drastic revision to GDP growth numbers. The downgrading of GDP growth from 10 per cent to 5 per cent is not due to a rebasing. "In fact, it is not clear what the source for the difference is, other than that one estimate comes from NSO and one from Treasury. However, given that NSO receives support from ABS, the NSO estimates are more credible. The survey also stated that the IMF, the World Bank and the ADB also missed the nonresource recession that is now shown in the official data. "The ADB does not report non-resource GDP growth. The IMF and the World Bank do, and their latest figure did deviate slightly from Treasury estimates. Whereas the Treasury had a figure of 0.7 per cent for real non-resource GDP growth in 2015, the World Bank and IMF had growth rates of about -0.2 per cent which were relatively closer to Treasury estimates than the new NSO estimates."

Alluvial gold exports expect K410 million for country

July 11, 2018, The National Business

Alluvial gold exports are expected to generate K410 million for the country this year, Mineral Resources Authority (MRA) predicts. The forecast for this year, subject to steady production and commodity prices, is 97,000 ounces compared to 93,080oz in 2017. Alluvial gold exports through licensed gold exporters, regulated by the Bank of PNG, totaled K365 million last year. Top three li-

censed gold export companies were Italpreziosi SPL, Golden Valley Enterprises and Gold Exports Ltd. Small-scale mining branch of MRA has now certified 4583 alluvial miners through its training programmes since 2009. Last year, 420 were certified, with 337 certificates issued for level 1 training. With the exception of tenement information, MRA holds no reliable data on the number of people participating in the alluvial sector in PNG.



This is especially given the rural and remote locations of many of these community-based, nonmechanised operations. In a paid advertisement yesterday, MRA said: "We do know from our training initiatives, tenement regulation, convention presentations, regional activities and local knowledge that numbers run into the many thousands. "Until a comprehensive database of such information can be established, these numbers will remain purely conjectural and largely unknown." Outreach training programmes have been conducted in East Sepik over the past 12 months. The next is scheduled for Eastern Highlands for third quarter of this year.

There are 24 mining leases (for alluvial purposes) active as at May 2018, of which eight have tribute agreements, and 13 alluvial leases under new or extension application. There are 102 alluvial mining lease tenements active, of which 56 have a tribute agreement registered. Eleven alluvial mining leases and 122 mining lease conversion tenements await completion of assessment for grant under the Mining Act 1992. These are historic pre-1992 alluvial tenements whose tenement and mining rights have been preserved under transitional provisions. Therefore, active alluvial mining tenements make up approximately 40 per cent of total active mining or exploration tenements in the country. There are 64 registered tribute agreements, which support the financial capacity and operational requirements of alluvial tenements.

Banking Giant Standard Chartered Takes Stand Against Mine Waste Dumping

Earthworks, 10 July 2018

Standard Chartered has announced a full prohibition of financial services for clients practicing marine and riverine mine waste dumping. Standard Chartered adopted their policy shortly after the launch of the Ditch Ocean Dumping campaign, joining Citigroup, which has also confirmed that it will no longer finance submarine mine waste disposal. "We have long held the view that marine or riverine tailings disposal is not good industry practice, and we are proud to add it to our prohibited activities list," said Amit Puri, Managing Director and Global Head of Environmental and Social Risk Management at Standard Chartered. "We applaud Standard Chartered for taking a leadership role in ending ocean mine waste dumping. It's dirty, unnecessary and wrong," said Ellen Moore of Earthworks, a nonprofit organization which is coordinating the campaign. "Banks and financial institutions must actively take steps to ensure that they are not bankrolling the destruction of our oceans. I hope other banks follow the example set by Standard Chartered and Citigroup." The Ditch Ocean Dumping campaign, which includes 40 groups in 17 countries, is calling on financial institutions to divest from any project or company that employs aqueous tailings disposal. Mining companies dump 220 million tonnes of mine waste directly into oceans, rivers and lakes every year: more waste than the United States puts into its land-fills.

While the outdated practice has been phased out in many parts of the world, new mining proposals in Papua New Guinea and Norway signal ocean mine waste dumping is being ramped up, not phased out. By drawing a clear line in the sand against aqueous mine waste dumping, Citi and Standard Chartered are joining a growing movement of governments, companies, mine-impacted communities, and civil society organizations calling for an end to the practice. At the 2016 conference of the International Union for Conservation of Nature, 51 of the 53 participating countries voted in favor of an international ban on ocean mine waste dumping and to develop a plan to stop ongoing dumping due to the irreparable destruction and degradation of marine environments.

Pacific experts press for sustainable deep-sea mining

SPC, Scoop NZ, 9 July 2018



SPC has yet to explain how these giant machines be used sustainably...

Pacific Island Countries and Territories have committed to long-term sustainable management of Deep-Sea Minerals (DSM) and ocean governance through the refinement of a draft regional agreement in Fiji. The Agreement establishes cooperation among Pacific Island countries and territories to support responsible deep-sea mineral management across the region. This is work led by the Pacific Community (SPC) through the development of critical legislative frameworks and support to countries to ensure effective & sustainable evidence based approaches to the use of these resources. Dr Andrew Jones, Director of SPC's Geoscience, Energy and Maritime Division (GEM) said many PICTs have great potential to access deep-sea minerals but he highlighted the need to ensure this is done sustainably

"DSM exploration is already happening in the region and this agreement will ensure countries are effectively legislated and protected whilst ensuring sustainable practices are used to extract any resources. To date, Nauru and Tonga have sponsored foreign companies to secure exploration tenements in their jurisdiction, whilst Kiribati and Cook Islands have established state-owned-enterprises to explore DSM extraction," he said. This draft agreement was refined at the recent Pacific Regional Deep-Sea Minerals Workshop in Nadi (2-4 July) supported by representatives of Pacific nations. Final consultations will now be held expected to be completed by October with the final agreement to be tabled to Pacific Leaders and representatives in 2019. The workshop was coordinated by SPC in collaboration with financial and technical assistance from the PEW Charitable Trusts and the Commonwealth Secretariat.

PORGERA MINE DISPUTE UNRESOLVED

Resource Owners Federation of Papua New Guinea Inc, 9 JULY 2018



Although the Porgera Joint Venture has recently applied for the renewal of their Special Mining Lease, a majority of the landowners whose lands are the subject of the mining lease, are maintaining a dispute for breaches of various agreements, laws and the constitution of PNG under the previous lease. On 13th December 2013, the Porgera Special Mining Lease area landowners presented a position statement to the former Minister for Mining, Hon. Byron Chan, after Australian lawyers conducted a review in relation to the compliance of their Memorandum of Agreement (MOA) dated 12th May 1989, with the Independent State of Papua New Guinea. The statement claimed that the landowners were owed more than four billion United States dollars (US\$4billion) worth of unfulfilled contractual undertakings by the State.

The position statement claimed that the breaches of the MOA, has caused negative impacts on the social, environmental and economic lives of the Porgera landowners. They claimed that in the period 1994 – 1995, the State allowed the mine to vary its original proposals for development of 1988. The 1988 proposals sought State approval and issuance of a Special Mining Lease (SML) for the mine to construct mining infrastructure that was capable of processing eight thousand tonnes of crushed ore through its mill over a mine life of twenty years. Underground mining was to cease after seven years of operations. Only five years later the State allowed what was called a "minor variation" to the approved proposals to double the processing rate to 17,000 tonnes per day. This meant that the amount of ore mined daily and the waste material produced were also doubled, resulting in the waste dumps which were originally designed to hold less materials, bursting into the river systems causing massive landslides which destroyed homes and gardens owned by the landowners. The mine failed to resettle the landowners from within the Special Mining Lease to unaffected area, even when experts found the need to do so in 1996.

The landowners claim that the State has since the lodgement of their position statement, failed to address their complaints, resulting in the landowners issuing a Notice of Dispute in April of 2015. The State has also failed to respond to the Notice of Dispute which may then force the landowners to then invoke the arbitration provisions in the MOA. The State's failure to respond to the legal steps being followed by the landowners pursuant to the MOA, is unbecoming of a responsible government. It is clear that State agencies are negligent of their duty to deal with the dispute in an orderly and responsible manner to ensure that the complaints are properly dealt with. The State's continuous ignorance of the issues raised by the landowners will do nothing but increase the frustration and anger of those affected landowners which could eventually lead to the disruption of yet another resource project in the Highlands region of Papua New Guinea.

Violence forces Exxon to stop project

July 9, 2018, The National Business

EXXONMOBIL PNG Ltd (EMPNG) has suspended all work at Angore project area including well pads and pipeline of the multi-billion kina PNG LNG project in Hela. This is after disgruntled land-owners vandalised and destroyed significant project assets. A spokesperson from EMPNG, operator of the project, said the company was taking recent incidents of vandalism of assets associated with the Angore pipeline tie-in construction project very seriously as it involved significant assets. Frus-trated landowners from the Angore PDL 8 wellhead area destroyed several plant and machinery equipment at the Angore project site and well pads after making claims of outstanding demands. ExxonMobil PNG spokesperson said safety of their staff and the community was their first priority and they were taking the issue very seriously. "We are taking very seriously the incidents which involved the recent significant vandalism of assets associated with the Angore pipeline tie-in construction project. All work at the Angore well pads and pipeline has been suspended. All impacted personnel are in the process of being demobilised or reassigned," the spokesman said.

Madang landowners get K25m payment

BY DOROTHY MARK, July 9, 2018, The National Business



Landowners of the Ramu nickel and cobalt mine in Madang receive their royalty payment of more than K25.5 million on Friday. The payment was part of more than K80 million from Ramu exports last year. The payment was made available by Department of Mining last week and presented at the People's Labour Party Oval in Madang on Friday. Landowners from Bundi mining area and Raicoast processing plant witnessed the cheque presentations of K25,537,210.13 by Ramu Nickel president Yongxue Gao to Mining Minister Johnson Tuke. Tuke presented two separate cheques to landowners and Madang provincial government. Of the K25,537,210.13: Tuke presented K17,620,674.99 to the landowners and K7,916,535.14 to Madang Governor Peter Yama for the provincial government.

This was received by Kurumbukari Landowners' Association chairman Tobby Bare, Coastal Pipeline Association chairman Steven Saud, Inland Pipeline Association chairman Peter Tai and Basamuk Landowners' Association Sama Mellombo. Yama encouraged project landowners to invest their payment in business that would grow their money. The same sentiments were shared by Tuke, Minister assisting the Prime Minister William Samb, Usino-Bundi MP Jimmy Uguro and Raicoast MP Peter Sapia. Uguro was the mine's liaison officer at the provincial government and served under John Bivi, who at that time was the Ramu Nickel project coordinator. He is now MP of Usino-Bundi while Bivi is acting provincial administrator. Yama was Usino-Bundi MP when the Ramu Nickel mining development contract was signed in Beijing, China.

Basamuk people threaten to shut down refinery

By JAYNE SAFIHAO, Post-Courier, July 6, 2018

While deputy Prime Minister, Charles Abel and a large team of government officers arrived yesterday in Madang for the much anticipated royalty payment to those affected in the Ramu Nico project, neglected Basamuk landowners have threatened to shut down the Basamuk refinery on Monday. The threat was issued to the Ramu Nico management yesterday by executives of the Basamuk Landowners Association, in what was a 'strained meeting'. Spokesman and activist in the fight against having the deep sea tailings placement in Basamuk, Sama Mellombo, spoke strongly against the Mining Resource Authority (MRA), saying it had no legitimate powers to negotiate royalty payments. He said that the Lands Department made an Improvement Inspection Report in 1999 which stated that the land should be forfeited and given back to customary landowners to improve. Mr Mellombo said this was before the Mining Lease 42 was granted, "as described as to the depth of 30metre below the natural surface of land situated near Basamuk".

"Basamuk land is exempted from compulsory acquisition. Since the first Lands Titles Commission hearing in 2011 there has been no decision made over the land title. So after two LTC hearings no one can claim the land. We've had to go to the National Court to sort ownership issues but the courts say they are not the proper authority to decide who owns the land. It's been a volley between the courts and LTC since," he said. "Now who has given MCC, the Chinese developer, the Basamuk land?" MCC spokesperson, who did not want to be named, confirmed the meeting with Mr Mellombo's team saying that the issue of Basamuk landownership was an "in-house dispute" between factions of landowners which has been prolonged and has put the company in an awkward position.

"The company can go ahead and pay them outstanding land use payments and such but this is hindering us. We recognize Mellombo as an LOA chairman though," he said. Mr Mellombo when asked if this was an in-house dispute, scoffed the idea saying: "There is no in-house matter because according to MOA review of 2013, doesn't allow two associations in one area. The company and the government are playing games and interfering with LOA affairs which they have no right to." The recognised groups within the project area to benefit today are Maigari Inland pipeline, Coastal pipeline and Kurumbukari LOA groups excluding the Rai Coast people in Basamuk. It seems while the in-house matter is yet to be sorted out and LTC, yet to decide land ownership, the Chinese have somewhat put a refinery and Deep Sea Tailings Placement.

Permanent shut down of PNG LNG project threatened

Radio New Zealand, July 6, 2018



LNG Project facility, Hela Province, Papua New Guinea Photo: RNZI / Johnny Blades

This comes after a spate of attacks on the ExxonMobil-led LNG Project's infrastructure at Angore in the Highlands province of Hela last month. According to Mongabay, in recent days, the Angore Tiddl Appa Landowners Association travelled to Port Moresby to negotiate with Prime Minister Peter O'Neill. Negotiations with the government failed to ease tensions, and all of the projects wellheads have reportedly been closed down by the landowners. A spokesperson from Exxon said all impacted personnel were in the process of being demobilised or reassigned. The association is demanding from the government an "infrastructure development grant" of 32 million kina, equity shareholder certificates for traditional landowners, 2 percent royalties every month, and for the government to complete official clan vetting for the PNG LNG project.

The long drawn-out clan vetting process was what the government had previously said needed to be completed before outstanding royalties and benefits could be paid to the landowners. The government offered 20 million kina to the landowers who it told to halt the protesting and unrest in Angore. However, the landowners are still threatening to permanently close the LNG Project by blockades and destruction of its pipeline and other infrastructure, if their demands aren't met. It's expected government representatives will travel to Hela in the next two weeks to negotiate further with the aggrieved landowners.

Nautilus Minerals tanks on shipbuilding contract cancellation

Cecilia Jamasmie, Mining.com, 5 July 2018

Shares in Canada's Nautilus Minerals, one of the world's first seafloor miners, were hit hard on Wednesday after the owner of the shipyard where the company's support vessel is being made <u>said</u> <u>it had cancelled the contract with the supplier chosen by Nautilus</u> to build its ships. The Torontobased company, which is in the last stages of developing its Solwara 1 gold, copper and silver project, off the coast of Papua Guinea, said Fujian Mawei Shipbuilding's decision was in response to the shipbuilder failing to pay the third instalment of the contract price — \$18 million before interest. The company's stock fell almost 19% in Toronto on the news, hitting 15 Canadian cents at 12:21 PM local time, but between the average range it's traded so far this year. In the last seven years, however, Nautilus' shares have sunk around 90% and is now valued at just over Cdn \$111 million.



Nautilus' floating base.

The miner, which also is developing another underwater project, off the coast of Mexico, secured last month \$34 million from lender Deep Sea Mining Finance, to finish its Solwara 1 project. However, it lost Anglo American's support, as the mining giant said in May it was in the process of divesting its 4%-stake in the company. Environmental groups have criticized the project, which will use three robotic machines weighing up to 310 tonnes to mine copper and gold from extinct hydrothermal vents on the ocean floor. Nautilus plans to then mix the ore with seawater to create a slurry, which can be drawn to the surface, stored and then put on other ships for transport. The extracted seawater is then pumped back to the seabed.



The company's seafloor production machines, each the size of a small house, are equipped with massive rock-crushing teeth. The Canadian firm is not the only one hoping to start mining the bottom of the ocean. It's estimated that the United Nations' International Seabed Authority (ISA),

which is in charge of issuing exploration licences to both governments and companies has granted 26 such permits since it first opened up massive underwater regions to mining companies. Countries including New Zealand, Namibia, Fiji, Tonga, Vanuatu and Solomon Islands have also granted permits for seabed mineral exploration. The Cook Islands has even undertaken a minerals exploration tender process, but PNG is the only country in the region to have granted a licence for ocean floor mining.

Resource owners get 'peanuts' says top doctor

Loop PNG, July 4, 2018



Locals in Morobe Province

Resources owners in this country are the people of PNG but yet, when it comes to harvest sales, the country and the landowners get 'peanuts', says the National Doctors Association president. Dr. James Naipao, as a concerned citizen, says Papua New Guinea has lost a lot and will continue to do so. "Harvesters of our resources, who are foreign owned companies and corporations, are also given the majority of the harvesting and sales cuts, resulting in giving less than two percent of the profit or sales return to the resource owners who have been custodians to these resources for thousands, if not millions, of years. "This is a mammoth slap and defeat in the eyes of everyone, and truly, it is an act of thievery. There must be an urgent reversal of these decisions and declarations," stated Dr Naipao. "The rape and siphoning of our all renewable and nonrenewable resources since the 1800s up to now by colonizers and developers have had a long lasting negative impact in this country. "PNG has lost billions of dollars, and if not trillions, since the 1800s to the present day. "The country is now experiencing the negative side of it and it has been worsening in the last ten years."

The doctor said to make matters worse, the influx of Chinese and Indo-Asians ashore to be employed in jobs and run simple businesses that Papua New Guineans can do is a huge slap in the face. "Why is the Immigration Department and Work Permit Division in the Labour Department allowing this uncontrollable influx that is having an eventful unsatisfactory outcome for national workers and businesses? "And, to further make matters even very challenging for the young nation, PNG is now experiencing being colonized for the second time in our short history, and this time being colonized by the 'Chinese Money', and that, it will on the long run have a catastrophic effect. Antagonists will think otherwise. "China might own the economy of Papua New Guinea one day. Papua New Guinea must be cautious of this avoidable outcome. Africa and Sri Lanka have sadly felt this," added Dr Naipao. "For our depleting resources, with the least of the returns, we alone can change the course of that for a better tomorrow."

He said landowners must have automatic equity in the resources development even if they do not contribute cash. "Their cash is the resource their have. They should have 20-30 percent ownership of projects. "PNG Government and provincial government can share the 30-40 percent and the developer to get 40-50 percent. Is the distribution wrong? No, it is not. "We own the resource(s). And, why are resources owners crying every now and then? The answer is right in front of us, yet we feel it is complicated and undoable. The resource owners' pain, sufferings and cries will be reflected in the talk and actions, yet we are blind. "Why is the Panguna Mine closed? Why are roads being dug and big machines burnt in Hela Province? "Why are the landowners in New Ireland Province worrying about the first ever undersea mining in the world, and its seabed used as a guinea pig? "This nation needs good leadership that puts people first, fears people, accepts defeat and admits wrongs. "The country does not need leaders that are reckless, corrupt and falsely glorify God. "Leaders who believe in the abilities of Papua New Guinea are caring leaders."

New Ireland elders urged to clarify stance on experimental seabed mining Loop PNG, 3 July 2018



The Chief of Kono village is one of the few who are protesting against seabed mining – Picture: Alliance of Solwara Warriors

A challenge has been issued to the New Ireland Council of Elders to clarify their stance on seabed mining. During World Ocean Day last month, the Alliance of Solwara Warriors reiterated that the development of new ocean industries, such as deep seabed mining, is a shared concern and responsibility. "It will be very interesting to see which side they support. Are they going to be concerned about our culture, customs and traditions? "Their leadership as custodians of our natural resources is very important," said the Alliance in a statement. "Can they see beyond their noses and expose their true colour of leadership or are they politically bestowed the titles of chief? "The people of New Ireland are watching."

Papua New Guinea's mining sector concerned about revised Mining Act

David James, Business Advantage, 3 July 2018

There are concerns in Papua New Guinea's mining industry that proposed changes to the *Mining Act* may discourage investment in the sector. The Executive Director of the PNG Chamber of Mines and Petroleum, Professor Albert Mellam, has said the mining sector is 'strongly opposed' to the revised Act. Since 1992, Papua New Guinea's Mining Act has provided the main regulatory framework for the mining sector. While a revision of the Act has been mooted for several years, the industry is expressing concerns at current proposed revisions. Speaking in Brisbane recently at a

business event, the PNG Chamber of Mines' Executive Director Albert Mellam pointed to several 'issues' with the proposed revision.

One is that the maximum term of a mining lease be reduced from 40 years to 25 years and the renewal period for a mining licence be reduced from a maximum of 20 years to 10 years. He questioned proposals that the state be given the right to compulsorily acquire the mine upon expiry of the first term of the mining lease. He described this as 'expropriation'. Mellam further queried proposals to limit the state's exposure to sunk costs (expenses that cannot be recovered). 'There are also no grandfathering provisions (phasing in of the new laws),' he said. 'Existing mines would be required to comply within 12 months, and any changes to government policy take precedence over the mining development contract (MDC).'

Fly in, fly out

Mellam also targeted proposals to regulate fly-in-fly-out (FIFO) activities undertaken by mining companies. 'The powers of authorising officers are excessive and in some cases open to abuse. 'The definition of "offshore" will lead to confusion with existing projects.' 'Penalties are excessive and punitive. For example, a person engaging in FIFO—which is not defined—could be locked up for 15 years.' He added that failing to provide information to the authorities could lead to a jail term of two years. 'The definition of "offshore" will lead to confusion with existing projects that are on-shore/offshore,' he added.

Mellam did find some positives with the proposed revisions, however, pointing to the extension of exploration leases from two years to five years. Also beneficial would be improvements to documentation, with plans required for community engagement, employment and training and rehabilitation. Feasibility studies and waste management methods would also be required. Mellam was also critical of a proposal in the *MRA Act* to increase the production levy from 0.25 per cent to 0.5 per cent of gross production. He pointed to the removal of any 'direct or indirect representation' for the industry on the Mineral Resource Authority's (MRA's) board.

Choice

Craig Jones, Executive General Manager for the proposed Wafi-Golpu gold-copper mine in Morobe Province, also speaking in Brisbane, said the PNG authorities must embrace one of two choices in revising the legislation. 'The first is to ensure the continuation of stable fiscal and regulatory policies which have underwritten past successes of the resources sector in Papua New Guinea. 'There is a great deal of uncertainty and nervousness created by the proposed amendments.' '(The second is) to grasp at legislative and taxation changes that will shake investor confidence and repel further investment in PNG. 'But there is a great deal of uncertainty and nervousness created by the proposed amendments to the new *Mining Act*—the changes recently made to the MRA and changes to the taxation regime introduced in the 2017 Budget.'

Gas

Mellam was more positive on proposed natural gas policy, arguing for an investment framework that 'properly supports a third party access regime for gas pipelines and related infrastructure'. He regarded in a favourable light the requirement to meet domestic market obligations by providing up to 15 per cent of production for local use. The requirement to use locally sourced labour he likewise considered to be a positive. But he remained concerned about the future of the *Mining Act*, which he described as 'critical to future investments in mineral exploration and development.'

Cepa enforces mercury law against mining, industrial sectors

July 3, 2018 The National Business

THE Conservation and Environment Promotion Authority (Cepa) has implemented a law to address the use of mercury by mining and industrial sectors after health and environment concerns were raised, an official from Cepa said. The Minamata Convention was a globally bound agreement and so far signed by 128 countries and ratified by 12 of them. The main agreed actions of the convention include a ban on primary mercury mining, phase-out of mercury-added products, introduction of control measures on air emissions and regulation of artisanal and small-scale gold mining. Cepa national project coordinator of the Minamata initial assessment on mercury in PNG, Patricia Torea, presented her findings during a workshop held by Cepa last week.

She said that in terms of trade and supply, the law would not allow new primary mercury mining in the country and phase out existing primary mercury mining within 15 years of operation. She said it would also prevent the import and use of mercury from primary mining for small-scale gold mining. "The convention will not allow the use of mercury or mercury compounds in manufacturing processes and restrict the use of mercury in the processes," Torea said. "It will stop new facilities from using mercury and discourage uses of mercury in industrial processes."

Letter to the editor

Bringing in development for Western

Post-Courier, July 3, 2018

Geographically, Western Province has a big land mass and is the biggest province in the country, but is mostly covered with swamp and wetlands and is one of the least developed provinces. There are no volcanic threats, deep valleys or steep mountains to climb especially in the Middle Fly and South Fly electorates. Why is it so hard to bring in development to this parts of the province? Even though the province is richly blessed with the Ok Tedi mine which is in the North Fly electorate, which contributes a lot to the building of this nation. Why are our two leaders of these electorates not working together with Ok Tedi to bring tangible development to the people? The only development or changes taking place is in the North Fly electorate where the mine is situated. Ok Tedi mine assisted the latest quake victims in Southern Highlands with K50 million, while one wonders how much potion of that money was spent on its own people along the Fly delta who also suffered from the effects of the earthquake.

Current Member for Middle Fly is no exception. This is now his third term in parliament, but Middle Fly still lack basic services as well as South Fly. Building of roads and bridges to link people in the lower plains of Western Province will bring with it changes. People living in these rural areas just need basic services delivered to their door steps. Building of new hospitals and upgrading of currently running aid posts and schools will greatly improve well-being of the rural population and improve education standards. Air services is another setback in the province. Airports and airstrips in the province need to be upgraded. At one time there were mission run airstrips in the rural areas which are no longer in operation. Why can't the services be brought back into operations to help the remote rural population who greatly miss out on basic services? Skeibies, Nio-Obo

Government to transfer Bougainville shares to landowners

Post-Courier, July 3, 2018

THE National Government does not wish to hold any shares in Bougainville Copper Limited, Prime Minister Peter O'Neill has told the people of Bougainville. He said the National Government is going to transfer shares on BCL to the landowners where the mine is located at Panguna, Central Bougainville. "We have transferred 17.4 per cent out of Rio Tinto shares, National Government does not wish to hold on to those shares and we believe it rightfully belongs to the landowners where the mine is," Mr O'Neill said in a statement yesterday. He said the other issue relating to the state-owned shares that is about 19 per cent would continue to have discussions with the Autonomous Bougainville Government and relevant stakeholders as to how these shares could be disposed in the new future.

"But let me stressed very clearly that we have obligation, both ABG and National Government and the landowners of Panguna, we have an obligation to the minority shareholders of BCL who have trusted us and have bought shares in this company many years ago, they are simply mums and dads who have invested in the future of Bougainville and we have to resolve these issues with them in an amicable arrangement where they can be able to easily dispose their shares either to ABG or land-owners," Mr O'Neill said. According to the 2017 BCL annual report, the Bougainville Government is the major shareholder – its Bougainville Minerals Ltd holding 36.45 per cent, or 146,175,449 shares in the mine. It is followed by the State which has 76,430,809 shares or 19.06 per cent of BCL.

The third biggest shareholder is state-owned enterprise Eda Minerals Limited which has 69,744,640 shares or 17.39 per cent followed by JP Morgan Nominees Australia Limited which has 59,264,812 share or 14.78 per cent of BCL. BCL announced at its annual general meeting in Port Moresby in May that there would be no dividends paid to both national and international shareholders for the 2017 financial year on top of a recorded consolidated K7.30 million loss after tax. Company chairman Sir Mel Togolo also reported BCL's consolidated income for the year at K7.63 million which included K5.23 million in interest and dividends and realised gains on the sale of investments of K2.39 million for the year. "Operating expenses for the year were K14.83 million compared with K11.52 million in 2016 and were under budget. "The company has sufficient funds to meet recurrent expenditure under the current work plan and remains debt free. "BCL will not pay a dividend," Sir Mel said. He said the K7.30 million loss was against a budgeted loss of K15.2 million and consolidated loss of K3.78 million in 2016

PNG's Enga province feels spillover unrest from Hela

Radio New Zealand, June 2, 2018

According to the MP for Laigap-Porgera, Tomait Kapili, a build-up of illegal weapons in Hela is having spillover effects throughout the Highlands region. In recent months, Hela has been plagued by deadly tribal violence and attacks on the LNG gas Project. Meanwhile, a state of emergency was declared this month in Southern Highlands due to politically driven unrest.

Mr Kapili said Enga province, struggling since last year with its own deadly election-related violence, has not been immune from the recent trouble. "There has been some tribal fighting within the Paiela area, getting into the Porgera township. There's been a number of murders around the place. Yeah,it's all coming in from Hela. There's an arms build-up and all that coming out of Hela," Mr Kapili said.



A building burns in Mendi during a period of political unrest. Photo: RNZ Pacific/ Melvin Levongo



Police vehicle burnt in PNG's Enga province in deadly violence between Amala and Teremanda villagers, May 2018. Photo: Supplied

Call for more security at Porgera



Porgera mine. Photo: wikicommons / Richard Farbellini

The Laigap-Porgera MP also voiced frustration at the lack of security forces available to protect a major mine in his district. Operated by Canadian miner Barrick Gold, the Porgera gold mine has been plagued by lawlessness for many years. According to Mr Kapili, there had been recent trouble at the large gold mine. "And you have armed men going into the mine area. There was (recently) some exchanges of fire without any casualties. We've asked the government to send some people out, especially to the mine site. They haven't. Barrick's own security personnel are protecting and guarding the area," Mr Kapili said. Tomait Kapili said that despite provisions for an extra deployment of Defence Force troops under the state of emergency in the region after February's 7.5 magnitude earthquake in Hela, the extra security help hadn't fully materialised.

A very deep trouble

Ramaharitha Pusarla, The Hans India, 1 July 2018



Seabed mining

Almost 44 years ago, on July 4, 1974, CIA launched a covert sea operation with an aim of stealing Russian submarine, K-129 a ballistic nuclear missile carrier, almost 2,500 km from north-west of Hawaii, six years ago. To divert the attention of Russian spies and give the operation a deliberate spin, CIA under the garb of harvesting rocks in the seabed launched an operation-Project Azorian. Nature has been a source of incredible wealth. From times immemorial, mankind greedily plundered nature for material gains. Breaching yet another pristine frontier, countries are making plans to ransack deep blue seas. Termed as Deep-Sea Mining (DSM), employing advanced technology, at breath-taking pace nations are vying to harvest nodules and rocks that constitutes the seabed. DSM entails extraction of minerals located 400 to 6,000 metres below the sea level.

Outwardly, while the vessel was fitted with all the machinery needed for excavating the seabed, Hughes Glomar Explorer housed a monstrous capture vehicle with a giant set of claws to retrieve the submarine and keep it hidden. By July 30, away from the prying eyes of the world, Americans located the submarine. But the capture vehicle suffered a damage while lifting the submarine. The giant claw broke under immense strain midway and most of the submarine slipped back. In the runup to the operation, CIA sent scientists for conferences on ocean mining and roped in billionaire inventor, Howard Hughes, to build a vessel for scientific exploration. The great PR strategy of CIA stuck chord with the US universities, that mulled introducing specific courses on deep sea mining. Even UN jumped in and offered to provide a rules-based approach to determine rights to ocean minerals.

The team managed to recover only the front portion. Despite the difficulties and the huge costs involved in carrying out the project, American desperately wanted to steal the submarine for obvious military reasons. To get hold of Russian nuclear missiles and to penetrate their naval communications, unmindful of the consequences, CIA went ahead with this cost prohibitive exercise. When CIA broke the details of the project after a year, mining companies who made extensive plans of mining seas were crestfallen and the stocks tumbled. However, CIA's success proved that with sophisticated engineering techniques and lavish funds, DSM can be possible. Ever since companies invested heavily in research expeditions to probe the seabed for minerals.

For the first time, scientists abroad, Royal Naval Ship, HMS Challenger found that deep seabed contains huge mineral deposits. First dredging exercise revealed the presence of nodules rich in manganese, nickel and iron in the ocean beds of Indian and Pacific Ocean. Soon scientists confirmed that a tonne of the seabed is 10 times richer in mineral content than mines on land. Independent investigations by different teams confirmed this fact who declared sea beds as treasure houses of minerals and Rare Earth Elements (REE). By 1960s, scientists floated the idea that oceans should be used for peaceful purposes and their mineral wealth should be shared equally by the humanity. While the issue of ocean mining hardly evinced any interest in countries then, extensive use of mobile phones, solar panels, batteries, wind vanes, electric cars and other gadgets increased demand for indispensable REE.

Nations are now competing for the scarce REE's in the earth's core. Owing to the rapid scale of sophistication appetite for Lithium, Cobalt, Copper has surged to phenomenal levels. Pitched battles are witnessed between nations for the limited supply of Cobalt. Republic of Congo, which currently has 60 per cent of global resources has now become a den for corruption, human rights abuse. Responding to Amnesty International's report that sought a solution for exploitative mining and alleged dominance of smuggling mafia in Congo, Michael Lodge, Chairman of ISA, International Seabed Authority called for a relook at deep sea mining. To streamline various activities related to it. Intergovernmental body, ISA, came into existence in 1994 with headquarters at Kingston. It formulates rules and regulations for mineral-related activities in the international seabed region, the area beyond the limits of the jurisdiction of individual countries.

ISA, which has observer status to UN has divided the ocean bed into blocks and 29 exploration areas. Companies from 19 countries have purchased mineral prospecting licences for 15 years as of now. ISA proposed three types of mining – Polymetallic manganese nodules, Cobalt-rich ferromanganese crusts and polymetallic sulphide mining at hydrothermal vents. For the first time, a venture Nautilus Minerals commenced its exploration in Exclusive Economic Zone (EEZ) of Papua New Guinea, Tonga and Fiji after negotiations with respective governments of the Bismarck Sea. While the mining hasn't started yet, all the preparations for rock breaking are going at frenetic pace. The stretch identified in the seabed is covered by hydrothermal vents, which are shelters for vast communities of extremely rare marine life like shrimps, snails and tubeworms.

Use of gargantuan machinery during mining is bound to damage the marine habitat of the region, poverty-stricken countries lured by the attraction of money have accepted the deal. Though the mining company has undermined the fears of residents whose lives and livelihoods are irretrievably linked with sea waters. Disturbed by the impact of the exploratory phase that led to sharp decline in sharks, citizens of Tonga, Papua New Guinea have launched protests and campaigns against DSM. After Japan's successful attempt to mine ore deposits in 2017, which included – Zinc, Copper, Gold and Lead off the coast of Okinawa close to hydrothermal vents, there is a global rush for DSM. Elucidating the impacts of such mad rush, a paper published in Harvard Environmental Law Review warned nations of the adverse impacts of DSM on the environment, lives of indigenous people and the biodiversity of marine habitat.

Hydrothermal vents act as environmental sinks with microorganisms in the vicinity sequestering huge amounts of carbon and methane (Greenhouse Gases). Recently, researchers discovered over 300 animal species endemic to vents making each vent unique. They now hypothesize that perhaps life must have evolved from hydrothermal vents, which can thrive even higher temperatures of up to

113C. Destruction of the vents might lead to the release of sequestered methane triggering a doomsday climatic event. Latest scientific breakthroughs revealed that deep seas absorb the excess heat generated by Greenhouse Gases. Oceans have been instrumental in mitigating the climatic change impacts. DSM, which involves the use of heavy machinery that would chip, scrap and break the rocks. All these events invariably disturb the seabed, generate large sediment plumes and discharge wastes into seas.

Till now, mankind irreversibly damaged the oceans and seas through deep-sea oil and gas extraction, discharge of wastes including nuclear wastes, dumping plastics, leakage of oils from vessels, etc. Scientists claim unlike surfaces of Moon, Mars or Venus, which were meticulously mapped, the invaluable diversity of marine life is largely unknown. Mariners are just beginning to understand the climatic role of hydrothermal vents. These geographical formations hold a key to unravel the secrets of evolution and adaptation of life on earth. At this juncture, dishevelling the deep seabed for commercial purposes may be counterproductive and tragic.

China looking under the sea for opportunities in the Pacific

Denghua Zhang*, East Asia Forum, 30 June 2018



China has hunted globally for land-based mineral deposits to fuel its economic development since the 1990s. Now, Beijing is devoting growing attention to seabed mining. As China's *Five-Year Plan on Mineral Resources (2016–2020)* states, 'China will actively participate in international surveys on deep sea mining and accelerate the exploration and development of ocean minerals'. In the Pacific islands region, most countries are small in land area but have huge maritime exclusive economic zones (EEZs). Chinese enterprises have invested in <u>seven land-based mining projects</u> in Papua New Guinea (PNG), Fiji, New Caledonia and the Solomon Islands and have been interested in mining the Pacific's seabed minerals since 2001. China's engagement with the Pacific on seabed mining started with research activities that have mainly been carried out by the China Ocean Mineral Resources Research and Development Association (COMRA). COMRA is affiliated with the former State Oceanic Administration, which was absorbed into the new Ministry of Natural Resources in March 2018.

The Qingdao Institute of Marine Geology has conducted many of COMRA's research projects in the Pacific. Between 2001 and 2010, the Institute completed two research projects on China's bilat-

eral cooperation in ocean resources exploration and on seabed mineral resources in the South Pacific. Their <u>research</u> categorised marine areas as prospective sources of polymetallic nodules, cobalt nodules and hydrothermal sulphide deposits, and also compiled a seabed mining resources map of the Pacific. The research team suggested that China should incorporate seabed mining into its aid plans for Pacific states and use concessional loans to support exploration projects. Based on these research activities, Chinese government agencies have directly reached out to their Pacific counterparts. In April 2013, a joint delegation comprised of officials from COMRA and Chinese mining institutions <u>visited</u> the Cook Islands, Fiji and Samoa and expressed their strong interest in exploring seabed mining in the three countries. In August 2014, Chen Lianzeng, Deputy Director of the China State Oceanic Administration, visited Vanuatu and Fiji and <u>proposed</u> that China and the two countries should strengthen cooperation on maritime resources exploration and development. Vanuatu's then-prime minister Joe Natuman and Naipote Katonitabua, the acting permanent secretary of Fiji's Office of the Prime Minister, <u>responded positively</u> to China's suggestions.

China's state-owned enterprises (SOEs) are also involved in seabed mining. Mawei Shipbuilding Limited, a Chinese SOE located in Fujian Province, is building a US\$18 million seafloor production support vessel for Toronto-based Nautilus Minerals. The vessel was launched in March 2018, with approximately 75 per cent of it completed. It will be used for the Solwara 1 project — the world's first seabed mining project, located in the Bismarck Sea off PNG. The three seafloor production tools to be used in the Solwara 1 project were designed and built by the UK-based Soil Machine Dynamics Ltd. In April 2015, Soil Machine Dynamics Ltd was sold to Zhuzhou CRRC Times Electric Co, Ltd, which is an SOE ultimately owned by the State Council of China. The products from Solwara 1 will be processed by Tongling Nonferrous Metals Group — another Chinese SOE. In May 2017, China Minmetals Corporation and the International Seabed Authority (ISA) signed a 15-year contract that allows China to search for polymetallic nodules in the 72,745 square kilometres of the Clarion–Clipperton Fracture Zone in the Pacific Ocean.

Seabed mining in the Pacific is attracting interest from other foreign players. For example, Japan and Russia have brokered <u>ISA contracts</u> to explore cobalt-rich crust resources in sites close to the EEZs of the Marshall Islands and the Federated States of Micronesia. Seabed mining is both an emerging field and one that is in a considerable state of flux. As shown by the proposed Solwara 1 Project, this new industry faces unprecedented <u>financial</u>, <u>environmental</u> and <u>social</u> challenges. There are also notable gaps in the international and national laws that govern seabed mining. The International Seabed Authority is still in the process of developing a '<u>Mining Code</u>' to regulate the prospecting, exploration and exploitation of seabed minerals. As of late 2015, only four of the 14 Pacific states (Palau, Tonga, Tuvalu and Nauru) have <u>legislation</u> that covers seabed mining issues. The PNG government is still developing a draft offshore mining policy.

Greater China–Pacific engagement on seabed mining has upsides and downsides. Pacific states have flagged seabed mining as a new potential driving force of economic growth. PNG, Fiji, Tonga and the Solomon Islands are among the <u>first</u> countries in the world to issue <u>exploration licenses</u> for seabed mining in their EEZs, and Pacific states might be able to seek more financial and technical assistance from China to develop this new industry. But any such project needs to consider the environmental and social impacts of seabed mining and must fully comply with international and national laws. Looking into the future, China is expected to engage actively with Pacific states on seabed mining and focus on exploration and establishing official contacts. But China is unlikely to commit substantial resources to seabed mining projects before the industry becomes more commercially and environmentally viable. **Denghua Zhang is a Research Fellow at the Department of Pacific Affairs, The Australian National University*.