Press review: Mining in the South Pacific

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

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Abbreviations in common use:

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

Websites:

Pacific Islands Report: http://pidp.eastwestcenter.org/pireport/graphics.shtml PNG Post-Courier: http://www.postcourier.com.pg

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

Seabed Mining Could Form Plumes: Dust Clouds Formed Within Sea Piyali Roy, Science Times, 30 April 2017



Treasure troves of raw materials are laying on the sea floor and the abundance of these raw materials is driving the rise of deep sea mining, and hurling worries about the ecological effect. The sea covers 66 percent of our planet and offers significantly more potential in discovering profitable raw materials than the land. According to HiTech Days, deep sea mining will also leave a mark on the

planet Earth like any other type of mining. As per a statement from the managing director of Seascape Consultants, the biggest problem for the marine environment is the plumes. Plumes can destroy a part of underwater ecosystems or habitat to any type of marine creature. What are plumes? How are they formed? Plumes are the dust clouds which are formed within the sea and are hung suspended in the water. The dust particles in the plumes can cause harm to the marine environment as they may also contain some kind of toxic chemicals in it.

Mainly, deep sea mining can cause plumes to be formed, that is the main issue arising. After deep sea mining, plumes can spread over a bigger area of seabed causing harmful effects on the marine ecosystems. Phys.org reported that there can be other issues arising up after sea mining other than plume formation, such as loss of habitat over large areas. In light of this, the EU-financed MIDAS look into venture united industry and NGOs to analyze how best to deal with the impacts of deep sea mining. The impacts of deep sea mining were evaluated by carrying out a plume modeling by the MIDAS. Their research affirmed the significance of compelling plumes to avoid critical harm to ecological systems. It's a responsibility for the scientists to find a sustainable technological solution for effective deep sea mining which will have less negative impacts on the marine underwater ecosystems.

Panguna petition proves BCL not welcome and the BCL claim of 'unanimous Landowner consent' is false

One PNG, 28 April 2017



Panguna landowners today presented a petition to the Bougainville Government office of President John Momis, rejecting BCL's application for an exploration licence. The petition is a direct response to reports that President Momis is considering supporting the BCL application because he understood it was supported by local landholders. Philip Miriori and a number of other representatives of SMLOLA met with President Momis in March this year following the misleading statements made suggesting BCL had unanimous consent. Although it was acknowledged at that meeting that President Momis had been misinformed, unfortunately there has been continued support for BCL and the landowners felt it important to demonstrate the overwhelming and heart felt view of the owners of the minerals – BCL will never be accepted on their lands. The Chairman of the SMLOLA, Philip Miriori, said the petition proved President Momis had been misled about the supposed local support for the BCL application.

"We are the landholders who own the land and the minerals beneath the ground at the Panguna minesite," Chairman Miriori said. "We will never accept BCL, as these signatures show," he said.

"We will be explaining the alternative proposal we have developed and presented to the ABG – a proposal that will get the mine back up and running professionally, and far earlier than BCL plans, which represents real benefits for Bougainville and its independent future economic prosperity." The petition presented today includes over 500 signatures – an over whelming majority of the landholders within the Panguna minesite boundary. SMLOLA Chairman Miriori said the petition called on the ABG to reject the BCL renewal application. "President Momis should do what he said he would do and listen to and respect the views of local people, the people the law has now given ownership of the minerals to," he said. "He should be looking at the alternative we have developed, instead of listening to more empty promises from BCL." SMLOLA Chairman Miriori said all of the petition signatories were landholders within the Panguna mining licence area. Many would be attending the community briefing about the SMLOLA alternative proposal in Arawa soon. "For the first step, the grant of an exploration licence, those within that boundary are the only landholders who are relevant and affected by activities. Landholders in surrounding areas will also have a say when the mine takes the next step from exploration to a mining licence if the reopening of the mine needs to expand into those surrounding lands.

"BCL's exploration licence renewal application should be rejected for many reasons but as many feel, the company has failed to address the environmental damage caused when the mine was operating up to 1989. All that was left for us was that environmental damage, division in the community and the loss of our land and many lives. "We believe BCL left terrible damage which it has never tried to repair, it then had 2 years to try and progress the mine, it did nothing and ignored us. Now it expects the Government to give it another licence to return to Panguna. President Momis says BCL do not have a development partner and first need to find a development partner to be able to progress but can't tell us who that is - more empty promises about what it might do in the future. How can we believe them after so many years of nothing. This is not acceptable to us. We will never allow it to happen," Chairman Miriori said. "There is a better way forward. We have a proposal which can deliver a real prospect for Panguna and future prosperity for Bougainville. "Instead of trusting BCL's false claim that it has unanimous landowner consent, the Government should be giving respect to the true local landholders and working with us," he stressed.

Candidates not to politicise PNG Sustainable Development Program

Post-Courier, April 28, 2017

Leaders from the special mining lease area in the Star Mountains of Western Province have called on candidate not to politicise the PNG Sustainable Development Program issue. They said the beneficiary landowners of the Ok Tedi mine along the corridors of the Fly River not to get involved. "We are making this call now that the people of Western Province through their recognized representatives have signed the heads of agreement relating to the assignment and transfer of 33 percent of shares in OTML to their respective companies on Monday, April 24. "Once the share certificates are handed over, the people of Western Province will be shareholders in OTML," said SML area core group chairman Joel Dangkim. The road to acquiring the shareholding in OTML has been long and challenging.

The shareholding in OTML is only proper given the years the people have suffered from the impacts of the operation of the project while only being entitled to a beneficial interest. However, now that we are becoming shareholders, it is important that the other benefit created by as a direct result of the project, which is the PNG Sustainable Development Program, must be applied in Western Province. "Since the closure of the Panguna Mine in the AROB, the OTML run mining operations in the Star Mountains have been supporting the rest of the country. "It is now time that OTML and the PNGSDP start paying more attention and delivering some real tangible and impact infrastructure projects within Western Province to improve the lives of the people," Mr Dangkim said. He added that this should be done as matter of course, without any political consideration. "We particularly are very concerned that the matter of the tong-term Fund under the PNGSDP has been used as an issue for people with vested interests to score political mileage at the expense of the very people who are entitled to benefit from this fund," he said. Another landowner group chairman, Richard Zumoi, has called for the immediate resignation of Sir Mekere Morauta as chairman of the board of PNGSDP to immediately remove all possible political interference and influence on the Program because he should not be politicising the issue of PNGSDP in the general election.

'Oil spill will not have environmental impact'

Post-Courier, April 28, 2017

BY MELISHA YAFOI

PUMA Energy has assured that an oil spill incident yesterday will not have any environmental impacts on the coastal communities in Port Moresby. Country manager Jim Collings told a media conference the spill came from a subsea pipeline that feeds into the Kanudi Power station just outside Port Moresby. Mr Collings said they had noticed this about two days ago when small amounts of the product, about one to two cubic of fuel oil, which is lighter than water was released into the sea and had reached shorelines. He said that this incident did not happen during their operation of pipelines however believes that something must have trigged the leakage and Puma is conducting an internal investigation to establish the cause. "We as an organisation take any spill of water extremely seriously. And it doesn't matter to us whether it is small or large we'd deploy the same protocols to that so what we did is we have deployed our emergency response team so the whole purpose of that is to contain and manage the product on the water.

"The leaks have been actually contained and we have extracted products from the water in majority of instances and then there has been a small amount that has reached the land particularly down at Kilakila to Gabutu area which we have teams on the ground now actually cleaning that up. We want to reassure people that this is a product that has been cleaned up and we're actually managing that and we do take this seriously and we have contained and control the issue," he said. Mr Collings added that as part of the company's safety protocols, they have also engaged international advisors who are helping them with advice. "We'll continue to work to ensure that any impact on this on the shoreline are cleaned up and to turn the environment to a state that it should so we have no issues with that.

"The damage to the marine life happens when you have a major leak might have been blocking oxygen and sunlight to the undersea environment. "This is not the case with this particular matter this is a very small amount of product which has moved across the water and is now being contained and cleaned up. It is important to know that this is not about the contamination of fish but we continue to work with authorities. We expect to see heavy emphasis on this over the next three to four days just as a precautionary matter but we will see a flowery movement of activity continue because we are deploying all the acids that we need to ensure that we get this done and resolve as quickly as possible," he said.

Nautilus awareness program

Post-Courier, April 28, 2017

A SENIOR executive with Nautilus Minerals says it has an ongoing awareness program in place. The executive was responding to question raised on the awareness program in light of concerns relating to the Solwara One project which the firm will be developing off the west coast of Namatanai district, New Ireland province. PNG community and social responsibility and security manager Stanley Komunt said the program was initiated some years back and basically targets the people from the area. Mr Komunt said it covers wards two, three, four, five and six in Namtanai Rural local level government (LLG) and Wards 15 and 16 Central New Ireland Rural LLG. "We normally run biannual community project updates for the CAB. This program can take up to a week and is done ward by ward. "This is an ongoing program and has been going on for years in the past," Mr Komunt said.

He said the awareness is headed by Nautilus's vice president PNG operations- Adam Wright who while based in Australia continues to make time to personally conduct this program. "During this program we talk about the project timeline, mining equipment built status and more importantly on the environment operations and management. The communities do ask a lot of questions and we always provide answers. "We have Provincial Government officers and officers from Mineral Resources Authority (MRA) and Conservation and Environment Protection Authority (CEPA) accompanying us most times as well ensuring the villagers are well informed," he said. Mr Komunt said these exercises are also carried out in East New Britain more specifically Watom and Duke of York Island adding that the same briefing is also provided to the provincial governments, national government agencies around the same time to ensure everyone is given the same information.

Lion One Will Be The Next Gold Mine In Fiji

Fabio Herrero, Seeking Alpha, April 27 2017

Summary

- The Tuvatu gold project sports an after tax \$86.5m NPV5 with an IRR of 52.3% and a payback of 1.5 years. Moreover there is high-grade exploration potential nearby..
- Management is experienced and is gearing up for construction by adding new capable mine builders.
- Project construction will be easily financed and the company has cash on hand to pursue both development and exploration.

Lion One Metals Ltd. owns 100% of the fully permitted Tuvatu Gold Project on the island of Viti Levu in the Republic of Fiji. This project is currently in development and the company is in the financing stage. I am convinced that Lion One is undervalued and could rise substantially in a flat or rising gold environment. This article will be structured as follows: first, a detailed analysis of the Tuvatu Gold Projec, before mentioning current exploration efforts and the other assets in the company portfolio. This is will represent the core part of our valuation. In the second part of the article we will have specific chapters dedicated to management, capital structure and Fiji as a mining jurisdiction in order to help us get the big picture surrounding the company. Finally, a valuation chapter will provide an out-of-the-envelope valuation of Lion One Metals, before the conclusion that will consist of a buy recommendation and a short cautionary statement about the risk of investing in small caps -always a good exercise before deciding to trade.

The Tuvatu Gold Project

Tuvatu Gold Project is located on Viti Levu, the main island of the Republic of Fiji, and is only 17 km from the Nadi International Airport. The project is in a caldera setting, and it is located along the ring of fire, that stretches from Japan to The Philippines to Fiji. It is along trend with the caldera-situated Vatukoula gold mine, which has produced 7m oz Au in the last 82 years and is owned by Vatukoula Gold Mines. Incidentally, this is also one of the ten largest epithermal gold systems ever discovered according to a 2012 report by WH Ireland Research.

New Ireland Provincial Government helps landowners as mining projects loom

April 27, 2017 The National Business

THE New Ireland government (NIPG) has been working with local landowners who are expected to host three mining projects, according to an official. NIPG mining, lands and commerce director Brian Hosea said the provincial government was aware of the importance of local participation in the projects. The province has Newcrest's Lihir gold mining project and St Barbara's Simberi operation. Nautilus Minerals is now working on developing the first seabed mining project in the province. "We are looking to go into partnership with these companies basically to service the communities mainly in terms of education and in health – that is the big drive that the governor and administrator are pushing for," Hosea said. "Basically, we have realised that we need to get them (land-owners) involved in terms of the manpower side of things, just facilitate and have a team in place to guide them along.

"I think in terms of landowners and everything else, the other two mining operations (Lihir and Simberi), as you may be aware, do have landowner associations, like they actually look after them. "Our role in the New Ireland government and administration is to ensure that there are representatives of the whole community that's been affected by the mining operation. "We also work in partnership with them (representatives) and the local level governments within those operations. "To do with daily operations, they (landowners) facilitate everything themselves through their landowner groups and we are there to work in partnership with them in terms of investment ventures that they are going into. "We are involved with the landowners or the community aspect of the operation. "We are also in partnership in the institutions, mainly the landowner groups, plus the local level government, playing a facilitative role and funding as well."

New Ireland govt aware of environmental issues

April 27, 2017 The National Business

THE New Ireland government (NIPG) is aware of the environmental concerns raised by environmental groups, non-governmental organisations and others, regarding the Solwara 1 project in the province, an official said. NIPG mining, lands and commerce director Brian Hosea said the provincial government was working with the operator of the project, Nautilus Minerals, and the national government as well, to ensure that the project met environmental standards given the nature of the seabed project. "The provincial government obviously is very concerned about that (environmental issues). We are constantly looking at that in consultation with Nautilus," Hosea said.

"We basically are looking at every step of the progression of the operation, making sure the environmental management and monitoring plan is (being done accordingly). "There are experts around the world dealing with different aspects of the operation. "We basically try to consult and make sure the developer also consults with them before anything further or if we can progress this. "We are in full participation with the steps leading up to it, so we make sure we have a say in it. "We make sure we check all the boxes. We make sure we have technical aspects there, understand the engineering aspect as well, and the environmental aspects and potential implications before we make any further decision on it. "The project is expected to commence in 2019 so we still have two more years to refine whatever that needs to be done. "The engineering aspects of it need to be understood very clearly, as well as the environmental."

Locals told sea resources not theirs

April 27, 2017 The National Business

MINING Minister and Namatanai MP Byron Chan has told his people in the district that they are not owners of whatever is in or under the sea. Chan spoke on Monday during an event at West Coast Namatanai. The district will play host to the first seabed mining project, Solwara 1. "People of West Coast and Namatanai, those of you who are here now, the machines will start operations in the seas you said you own. But I would like to tell you that you are not the real landowners. You are not the landowners," Chan said. "You are now hearing this directly from the minister for mining who is also your local member of parliament. "I'm sorry to say this but Papua New Guinea's law is in place which says that the person who owns the sea is the Government of Papua New Guinea – which is the State. "It only recognises the local level government and the province. "Under the law, you are not the landowner. You will not have shares in this."

However, he highlighted that the West Coast area of Namatanai now has an agreement in place for the project. "For the past five years, you may have been seeing Nautilus and Mineral Resources Authority and the Department of Mineral Policy and Geo-hazards Management who have been paying visits to this area – I've been sending them. "Memorandum of agreement (MoA) for the seabed mining for the West Coast is ready. "But the only problem is, I can sign this MoA today but advice from experts in the industry is that if I sign this MoA now, I will be signing up to the current commodity price which is very low. "So I have to wait till when the price is up again. "However, if we gain autonomy, whatever that is on land and in the seas, you will own them. I would like to stress that autonomy is the way forward for us, the people of New Ireland."

Deep sea mining approved by the government

Post-Courier, April 27, 2017

MINING Minister Byron Chan says the deep sea mining prospect, proposed for development in New Ireland province, has already been approved by government. Mr Chan said as such he has no powers to revoke the license that has already been issued to the developer-Candian mining firm Nautilus Minerals. Mr Chan was speaking at the opening of the Pubanom bridge early this week which had been funded by Nautilus Minerals Inc at a cost of K3.1 million. Mr Chan said while a lot of concerns had been raised over the Solwara-1 project, which will be developed in Namatanai's west coast area, however as minister responsible his hands are tied. "Lots of concerns have been raised on the project but as minister I cannot revoke the license because the government had already issued this and for another reason Nautilus has not done anything wrong.

"I cannot remove Nautilus so I have to work with them. I have told the governor (Sir Julius Chan) and we have agreed that in the absence of government funded projects, this is the way to go to deliver benefits to our people. "The company has also come in a big way delivering projects, one of them is this bridge for which we are here to open." "In saying this I must emphasis that this infrastructure is not a national government initiated project. This bridge is a result of the agreement that the Nautilus has signed with the New Ireland Provincial Government. "We (people of Namatanai's west coast) have the company and the provincial government to thank for this project others that have and continue to deliver including the water and sanitation project and roads." In saying this he had thanked Nautilus in particular the firm's PNG Corporate Social Responsibility and Security Manager Stanley Komunt who has been the face of the company on the ground deliverying these projects

Chan raises concern over deep sea mining

Post-Courier, April 27, 2017

THE New Ireland provincial government has expressed some reservations about the impact that the world's first ever deep sea mine will have on the future of the people and the province. However, it acknowledges that this is a national government project. It is now opting to take a neutral stance on this project and in doing so to work with the project developer and Canadian miner to ensure there are benefits for those who will be impacted and the province at large. These sentiments were expressed by New Ireland governor Sir Julius Chan during the opening of the Pubanom Bridge project opening at Rabehan village, West Coast Namatanai, early this week. Sir Julius told guests and the villagers of the west coast and Central New Ireland who had attended this event that he had from the start not agreed to this project.

He said this is for the simple reason that the sea remained the mainstay for the people of island province. He said given that this project was the first of its kind not just for PNG but the world and he feared the sea which he termed as 'the people's garden' may be destroyed by the mining activities. However, he said as the leader of the province he was faced with a dilemma. "As the head of the province the question that hangs in the balance is? What if this project is good for the future generation and for the province and in taking the hardline on the project I stop this and close the door on it. "In retrospect what if the project is bad and in saying yes I kill the future of our young generation and our province? I am at a crossroad as the head of this province.

"The future is unpredictable and we cannot predict it so I am strongly urging the developer that it must help me and my people and in doing so we must work together to ensure that if this project goes ahead that we do not destroy the future of this province," the governor said. Sir Julius had acknowledged the concerns by Cardinal John Ribat on the project however, at the same time had acknowledged also that there was new technology, science and know how also available and this could not stop the project from going ahead. "I have chosen to be neutral so if they can convince us that it is good then let us be the first but there with the agreement signed and because we will be the first of other similar projects we must ensure some benefits come back to the province," Sir Julius said.

Seabed Mining Company Nautilus Minerals Unveils New Bridge In PNG's New Ireland

Miner yet to begin seabed mining in the Bismarck Sea off New Ireland coast

By Rosalyn Albaniel

PORT MORESBY, Papua New Guinea (PNG Post-Courier, April 27, 2017) – Canadian miner-Nautilus Minerals, this week delivered to the people of West Coast of New Ireland province, an all weather bridge worth K3.1million [US\$953,000]. The Pubanom bridge spans 30 metres and has the capacity to take up to 40 tonnes at any one time. This vital link, situated in ward six along the west coast of Namatanai at Rabehen village, was officially opened by Mining Minister and Namatanai Open MP Byron Chan on Monday. Those also set to benefit from this bridge are the people of Central New Ireland as well. Among the dignitaries that had attended this event were New Ireland Governor Sir Julius Chan, Nautilus Minerals PNG Social and Corporate Responsibility and Security Manager Stanley Komunt, acting Provincial Works Manager Solomon Pela, the managing director Aloga #42, Geraldine Gee, Ward six member Raphael Los. Mr Komunt had stood in for the chief executive officer Mike Johnston at this event. He had from the outset conveyed Mr Johnston's apologies for not being able to attend this important event.



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He said the CEO was in England attending a board meeting relating to financing matters pertaining to the Solwara 1 project. He said this event was an important one for the company and had come about as a result of an agreement which Mr Johnston and Sir Julius had signed off back in July 2013. Mr Komunt said under the agreement, the parties had agreed that the first bridge would be delivered immediately after the signing while a further two after the company had begun production. He had on behalf of the company, apologised that this had not happened and that this project was now being delivered four years on. Nevertheless he said he was happy that this project had been completed on time and on budget and would be long lasting long lasting. Both the New Ireland governor and mining minister had thanked Nautilus for this and the other projects the company has delivered especially at a time when the company had not yet commenced its operations in the prov-ince and is yet to make a return.

Fiji gold mine awaits full audit report

Repeka Nasiko, The Fiji Times, April 25, 2017



VATUKOULA Gold Mine Ltd will wait on the outcome of the full audit carried out by the Department of Mineral Resources before deciding on the next course of action. Company's corporate services manager Dinny Laufenboeck said the company's underground operations would remain closed until the audit was completed. "Since all three incidents occurred in Vatukoula's underground workings, the only competent authority to conduct an investigation and to whom all reporting is made, is the Mineral Resources Department," she said. "Work in the particular area (Smith Shaft) where the fatality occurred was suspended (and remains suspended). That is standard practice. "Vatukoula's underground workings are very extensive with outlying areas some kilometres away from where the fatality occurred and at varying depth. "Since the subsequent two rock fall injuries occurred in another shaft (Philip Shaft), the MRD clearly deemed it timely to suspend operations mine wide and conduct an audit to determine what, if any, the contributory causes may have been."

Ms Laufenboeck said the onus would also be on VGML on how it would satisfy the Mineral Resources Department audit team. She said the Mineral Resources Department was the only authority licensed to inspect mines. "Because the mining situation is dynamic, it is constantly changing and unlike a surface building which, once made safe, remains that way until something breaks or changes dramatically, we make the underground situation safe to work in but then make it unsafe by blasting with explosives to break the rock to produce gold and then make it safe again to bring out the rock. "The Mineral Resources Department is the only authority with inspectors professionally trained for inspections in an underground environment," she said. Last week, Minister for Lands Faiyaz Koya suspended all underground operations at the mine pending a full audit of the company resulting in about 500 employees being sent home. Mr Koya had said there was no set timeline on the audit.

Mining violence survivors demand justice in Toronto

Elizabeth McSheffrey, National Observer, April 25th 2017



Everlyn Gaupe, a survivor of sexual violence at the Porgera mine in Papua New Guinea, speaks with protesters outside Barrick Gold's annual general meeting on Tues. April 25, 2017 in downtown Toronto. Photo by Riley Sparks

Everlyn Gaupe says she could have outrun their attackers but her little sister could not. She stayed behind. Both girls were beaten and gang raped. Their assailants were security guards hired to patrol a gold mine in her community of Porgera in Papua New Guinea. Gaupe was 18 years old. But time has not healed, and though the vicious attack was nearly 20 years ago, the experience brings her to tears today. Gaupe flew from Papua New Guinea to share the difficult memory with Barrick Gold — the Canadian mining giant that owns nearly 50 per cent of the Porgera gold mine. She and an-

other survivor of the violence at the mine, Joycelyn Mandi, attended the company's annual general meeting with shareholders on Wednesday to demand justice for more than 100 other women who have experienced similar trauma at the hands of Porgera's security guards. But they were denied the opportunity to speak by a member of Barrick Gold's staff, as a protest against its operations was underway on the streets of downtown Toronto. In an interview with *National Observer*, Barrick Gold's senior vice-president of communications, Andy Lloyd, said it appears there was a problem with their arrangement to speak at the meeting through a proxy shareholder — a practice regularly used by activists to participate in such meetings, and permitted by the company.

Barrick Gold regrets the "misunderstanding," he said, and despite the protocol mishap, Lloyd said the women should still have been able to ask questions at the meeting. Barrick has offered to meet with Gaupe and Mandi privately to hear their concerns while they're still in Canada. Everlyn Guape and Jocelyn Mandi travelled from Papua New Guinea to Canada to tell Barrick Gold shareholders about violence they suffered at the hands of security guards at one of the company's mines. But the company wouldn't let them speak. Video by Riley Sparks Catherine Coumans of MiningWatch Canada accompanied Gaupe and Mandi at the shareholder's meeting and read their statements for them as they watched quietly, unable to speak. She equated the rejection of their proxy request — which she says was completed on time — to taking "away their voice." "We've been doing this year after year, using this forum to allow people to have a voice in Canada and talk to the shareholders and directors directly," she told National Observer. "This year, they rejected almost all the proxies, and there was no reason given. The first thing that came to my mind is, 'silence is violence'... This is how you silence people."

A history of violence at Porgera mine

Gaupe and Mandi, who left Papua New Guinea for the first time in their lives just to make this presentation, were devastated. "It's not only us," said Mandi, standing at the heart of a small protest outside the meeting. "We are representing the majority back home. It's not about us." The Porgera gold mine in western Papua New Guinea has been the notorious site of gang rape, beatings, and other atrocities since it started operating in 1990. Detailed reports by Human Rights Watch and other industry watchdog groups describe disturbing cases of extreme violence at the hands of mine security personnel, some of whom threatened victims with arrest if they tried to complain to other authorities. Most of the victims are villagers who scavenge for low-grade ore discarded in the company's waste rock piles, said Coumans of MiningWatch Canada, or women and girls who are crossing mine property to get to school, their jobs, or the market.

"This mine dumps all of its tailings and waste rock directly into the river valleys all around the pit," she told Barrick's shareholders, reading the presentation Gaupe intended to make. "Our villages are surrounded by mine waste. We have to cross this waste just to get from one village to another, or to go to our vegetable gardens or schools." The mine is a joint venture of Barrick Gold, a Chinese producer called Zijin Mining Group, and Mineral Resources Enga, which divides its five-per-cent interest between the local provincial government and landowners. Barrick, the largest gold producer in the world, acquired its interest in the mine in 2006, which means much of the documented violence occurred before it became involved in the project. Reports from the ground however, indicate that the company's efforts to contain violence at the hands of mine security guards since 2006 have failed: Beatings, rapes and attacks are still common, reports MiningWatch Canada. In March, a local human rights organization — the Akali Tange Association — also said a police raid on a village within the mine's lease destroyed 150 houses, and that villagers were beaten and gang raped.

In a letter to the Akali Tange Association, Barrick Gold acknowledged encouraged that the raid took place, but said no mine personnel were involved, nor were they aware the raid would take place. The company disputed the organization's numbers, encouraged it to present evidence to support a full investigation into the incident, and said the mine's operators would consider all requests

for humanitarian assistance arising from the police operation. "It's an extremely complex environment, one of the most challenging environments to operate a mine in the world," said Lloyd of ongoing violence at the mine. "The mine and its owners will not be able to solve these challenges on its own. We need the government to be at the table, we need community leaders to be at the table." Gender-based violence is an issue across Papua New Guinea, he added, not just at the mine site. To help with the problem, the company has brought in a global human rights training program for all of its employees that includes a focus on gender-based violence. "Nobody, as far as I'm aware is calling for the mine to be closed, so the challenge is, how do we actually address some of these persistent issues that have been there for 20 years? They're not new and they're not easy to solve."



The Toronto-based mining giant, Barrick Gold, owns roughly 50 per cent of the Porgera Mine in Papua New Guinea, pictured here. Photo courtesy of Barrick Gold.

Dispute over compensation for survivors

According to Gaupe and Mandi, there's a simple solution to Barrick's conundrum. "Maybe they should return to Canada and stay in Canada," said Mandi in an interview. "I think it is best to stop this big Canadian gold miner, Barrick, from mining in our home country." Mandi, who was a school girl when she was raped by a group of Porgera mine security guards, is one of an untold number of women who have never received compensation from Barrick for their suffering. Ashamed of what had happened to her, she fled her village after the attack, she told *National Observer*. She never heard that in 2012, the company launched a formal remediation program for female victims of sexual violence in the Porgera Valley. The first of its kind, it offered the women PGK50,000 (roughly \$21,000) in compensation, and a promise that school fees and medical support would be provided for their children over the next three years.

But much of the latter has not been delivered, says Gaupe — one of 119 who did hear about the package and accepted it. When her husband found out that she had been raped, he abandoned her, leaving her alone to raise their children. She is now struggling to keep them healthy and in school, she says, as a single mother of four. The remediation program has been widely criticized by industry watchdogs, who say many of the women didn't understand the documents they were signing, and were led to believe that if they didn't sign, they would get nothing. In accepting the package, the women also signed a controversial legal waiver that forfeited their rights to sue the company or seek further compensation for the same grievance. In 2015, 11 survivors of sexual assault at the mine settled out of court with Barrick, for what was reportedly a much larger sum than was provided through the remediation package. In November last year, Gaupe — along with the other women who took that package — signed a letter seeking intervention from the officials at the UN Forum on Business and Human Rights in Geneva in their quest to receive compensation to match the sum re-

ceived by the women who settled out of court. Those sums have been kept confidential and *National Observer* could not confirm the numbers.

No plans to re-open remediation program

On Wednesday, at the shareholder's meeting, Coumans of MiningWatch Canada demanded on their behalf that Barrick release them from the legal waiver preventing them from suing or seeking extra cash. "Then at least the women can consider whether they have legal options," she said. "I don't think it's good enough for Barrick to say, 'This is a difficult environment.' They are mining there, so they have a responsibility." Lloyd said the company has given the women who accepted its remediation package a cash "top up" since 2012, but has no plans to reopen the program. He acknow-ledged that Barrick's own consultants identified problems with the program and how it was carried out, and that the violence experienced by the women is "completely unacceptable."

Broadly speaking however, he said the Porgera mine is a "very positive contributor to the community." It employs more than 2,000 people, and since Barrick Gold acquired its interest in 2006, the company has made substantial contributions to the Porgera District Women's Association and the family and sexual violence unit of the local police, and has provided funds for new women's welfare liaison officers, which provide an alternative avenue for women to report cases of abuse. The efforts are of little comfort to Gaupe and Mandi. Mandi, who filed her complaint about her assault to the grievance office in Porgera and received a case number, hasn't heard from a mining official in a year. "I should tell Canadians that Barrick is a bad company and it should stop mining," she said. "No matter how long it takes, I will still keep on fighting until justice has been made," added Gaupe.

Incidents plague Barrick mines around the world

Barrick Gold reported weaker-than-expected quarterly earnings on Monday, the day before the shareholder's meeting. It also slashed its forecast for output and raised costs at its gold mine in Argentina, where a local judge is contemplating an order to shut it down. The company had its third cyanide solution spill in 18 months at the Veladero mine in San Juan last month. Responding to that incident, Lloyd said the company is confident it can operate the mine safely in the future and that the incident is "very disappointing." The company has committed to "completely overhauling" its operations there, he added, to ensure "world class" oversight.

The Toronto-based company has previously been hit with a record US\$16.4-million penalty in Chile, where it was found guilty of 23 violations of its environmental impact agreement at the Pascua Lama gold project on the Chile-Argentine border. The convictions included building earthworks without approval, failing to prevent runoff from mineral acid, and failing to tell the whole truth when it came to such operational failures. The North Mara mine in Tanzania, 64 per cent owned by Barrick, has also suffered from steady violence by security guards, similar to the Porgera mine. Last year, a Tanzanian government inquiry found that at least 65 people have been killed and 270 have been injured at that operation since 2006.

Panguna Landowners "100% Opposed" To Return Of Bougainville Cooper Limited

WELLINGTON, New Zealand (Radio New Zealand International, April 25, 2017) – Panguna landowners say they are opposed to the plans of the Papua New Guinea and Bougainville governments to revive the Panguna mine. This followed reports that the PNG government was in favour of the formerly Rio Tinto-linked company BCL being given exploration rights at the Panguna site. The President of the Special Mining Lease Landowners Association Philip Miriori said his group was 100 percent opposed and that many other Bougainvillians shared this view. Mr Miriori said his group owned the land and the mineral rights for the minesite and nothing could happen on the site without the landowners' permission. He said they would never accept BCL as it was the same company that caused turmoil in Bougainville which lasted more than 10 years.

OTML to increase revenue, Sir Moi says

April 25, 2017, The National Business

THE Ok Tedi Mining Limited is confident of increasing revenue this year in comparison to last year's figures, according to chairman Sir Moi Avei. Sir Moi told The National that the company had set aside K50 million from last year's dividends for landowner groups. It is with the Government. He said the signing of the heads of agreement yesterday between the State and landowner group leaders was the formalisation of Prime Minister Peter O'Neill's commitment in 2014. "We had declared a K150 million dividend with K100 million for the State and K50 million for the landowners," he said. "I can't give a figure for this year but can say that we are on target to do better than last year. We still have a long way to go and we do not know about the weather. "This year should be good compared to the performance of last year with the setbacks. "We are confident of making more money for our shareholders – the landowners and the government. "Ok Tedi is operating because of the social licence from the landowners of the mine villages – the CMCs and the Fly government." He said Ok Tedi board had put aside the K50 million and given the cheque to the prime minister (O'Neill) as the trustee shareholder.

K50 million dividends paid to Ok Tedi landowners of Western Province

Post-Courier, April 25, 2017

PRIME Minister Peter O'Neill has presented a cheque of K50 million in dividends to the OK Tedi landowners of Western Province. Mr O'Neill made this presentation following the heads of agreement signing for the transfer of 33 percent equity interest in OTML to the Western Province group yesterday. He also clarified at the signing that his government has always had the best interest of the people and it was their initial desire to give back the mine to the people including all funds that belong to them. He said the story of the mine and the people of Western Province is a sad story because the people have been let down by many developers and previous governments. He said that was why the current government has taken a bold step in correcting all those mistakes and one step was to have full custody of the mine. "I have made a commitment in 2013 with a desire to return ownership of the mine therefore the heads of agreement signing is the conclusion of this commitment.

This is the time to develop resources and maximise it and there is no doubt that we still need developers however we still need to fix issues that has been prolonged for a very long time such as having all the funds fixed and returned to the people. All funds from the sustainable development program are still parked and this government has not approved one project under these funds as they are before the court therefore we have not utilised a toea of those funds," he said. "I am satisfied with the agreement that is being signed because, the mine can now be managed by the landowners and this has achieved our desire as government to return ownership back to the people. "We want to give benefits back to the rightful owners, transfer of CMCA back to people, see conclusion of court cases and give money back to the people as well as turning the mine into a profitable project for the benefit of everyone," he said.

State and Ok Tedi landowners sign HoA share transfer

Post-Courier, April 25, 2017

LANDOWNERS from the giant Ok Tedi mine area and the people of Western Province now formally own a 33 percent stake in its operations. This follows yesterday's signing of a heads of agreement in Port Moresby with the national government effecting the transfer of the interest to them under Ok Tedi Mining Limited. A total of 38 representatives witnessed the signing on behalf of the special mining lease area villages, Community Mine Continuation Agreement region villages, Mineral Resources Star Mountains and the Fly River Provincial Government. Prime Minister Peter O'Neill signed on behalf of the government. The event marks a significant milestone where the Government has given project area landowners and the provincial government more than 30 percent equity in a major resource development project.

The Government also approved the signing of the Equity Benefit Sharing Memorandum of Agreement (MoA) in Alotau in January this year. The MoA provides the framework for how the proceeds of dividend payments will be applied, from cash payments to the beneficiaries, long term investments and community investments in infrastructure in important areas of health and education. This arrangement is captured under a Trust Deeds which sets out the governance framework for the application of the trust assets and disbursement of funds. The signing of the heads of agreement (HoA) and MoA is a culmination of negotiations between the Western Province people and the National Government which commenced back in 2014 in which the National Executive Council (NEC) made a decision granting the free equity.

The MoA and HoA will now provide the momentum to conclude the transferring of shares in OTML to the people. The final step will be for the handing over of share certificates to MROT2, MRSM and Mineral Resources CMCA Holdings Limited. The shares will be held by the three MRDC subsidiaries in trust for the beneficiaries. The significance of the transfer is that once that is done then OTML dividends will be paid directly to the beneficiaries through the trust companies, unlike before when the Fly River Provincial Government and the SML landowners received dividends on the basis of a direction from the Department of Treasury. The landowners acknowledged and thanked the O'Neil Government for keeping their word since 2013 to see this process through.

MEDIA RELEASE Deep Sea Mining Campaign 24th April 2017

Anglo American should divest from high risk deep sea mining



Multinational mining company Anglo American will be held accountable today at its annual shareholder meeting. The company's investment in the experimental Nautilus Minerals Solwara 1 deep sea mining project, is deeply opposed by local communities, churches and wider civil society in Papua New Guinea. These stakeholders ask Anglo American to divest from Nautilus Inc. Anglo American is proud of its international commitments to sustainability, human rights, and environmental stewardship, but will they inform shareholders that their investment in Nautilus does not respect people's culture and heritage? "Anglo American, we are not guinea pigs for your experimental project!" stated Jonathan Mesulam from the Alliance of Solwara Warriors. "We in the Pacific are custodians of the world's largest ocean. These oceans are important to us as sources of food and livelihoods. They are vital for our culture and our very identity. Solwara 1 is in the middle of our traditional fishing grounds. You are threatening our home and our existence with experimental seabed mining."

Christina Tony, from the Bismarck Ramu Group in PNG, said, "Anglo American, Solwara 1 does not respect local communities' livelihoods, health, food security and culture all of which are strongly linked to the sea. Our people have not provided their informed consent for this project. The Solwara 1 Environmental Impact Statement contains many gaps and errors - we can't even obtain all the environmental research reports. By investing in this industry, Anglo American is complicit in trampling on our human rights."

Dr. Helen Rosenbaum, Deep Sea Mining campaign stated, "Deep Sea Mining is risky business as both the environmental impacts and the returns are complete unknowns. Nautilus' Annual Information Form, lodged with Canadian securities, emphasises the experimental nature of the Solwara 1 project. In addition, report after report[1] demonstrates the world's oceans are already on the brink of peril. Recent research from the MIDAS consortium indicates a concrete risk that deep sea mining would lead to serious irreversible harm. With our Pacific partners. we call for a complete ban on Deep Sea Mining and for Anglo American to dissociate itself and its shareholders from this unjust experiment."

Andy Whitmore, London Mining Network says "We welcome Anglo American's desire to look for more sustainable forms of mining[2][3] to meet society's needs. However, deep sea mining is not the answer. Instead, the solution should prioritise environmental protection and resource conservation while maintaining economic benefits. We ask Anglo American to divest from seabed mining and instead get behind alternatives to traditional mining developments and truly cutting edge approaches hold the promise of win-win solutions for society and the environment.

NOTES

[1] Reports include: World Wildlife Fund (WWF)<u>Reviving the Ocean Economy</u> (2015) ; <u>The Living</u> <u>Planet</u> (2016); International Union for Conservation of Nature (IUCN) <u>State of the Ocean</u> (2013) ; <u>Explaining Ocean Warming</u> (2016); and the <u>United Nation's World Ocean Assessment</u> 2016 which is a global inventory of the state of the marine environment and problems threatening to degrade the oceans.

[2] For example, California based <u>Blue Oak Resources</u> estimates that every year mining companies spend roughly \$12 billion for virgin ore deposits. While tons of cell phones and other electronics are thrown out every year, each ton contains 70 times the amount of gold and silver found in virgin ore. For copper the number is even higher, with the equivalent of roughly one-third of global mining production thrown out in e-waste globally every year; <u>'Urban mining': UBC engineers say e-waste richer than ore pulled from the ground</u>; <u>Can 'urban mining' solve the world's e-waste prob-lem?</u>

[3] In <u>Apple's 2017 Environment Responsibility Report</u> released last Wednesday 19th April, the company has announced a new, unprecedented goal for the tech industry to "stop mining the earth altogether". Read more: <u>No Mining Required</u>; <u>No more mining says Apple</u>; and <u>Apple will stop relying on mining for minerals 'one day'</u>

Panguna landowners say 'no' to BCL's proposed return to mining on Bougainville One PNG, 24 April 2017



Bougainville Revolutionary Army fighters look down on the Panguna mine in 1996

Panguna landowners have reacted angrily to a report that the PNG Government supports formerly Rio Tinto-linked company BCL in its bid to convince authorities it should be given exploration rights at the controversial Panguna minesite – the scene of major civil unrest in Bougainville in the 1990s. The President of the Special Mining Lease Landowners Association, Philip Miriori, said his group was 100% opposed and that many other Bougainvillians shared this view. Claims of unanimous landowner support for BCL were wrong and insulting, Mr Miriori said, adding it was time PNG Prime Minister O'Neill and Bougainville President Momis heard some true facts. He also went on to say: "In fact, during the first phase the issue of an exploration licence, we are the only Landowner Association that has a say as it will be our minerals and land that will be disturbed and subject to exploration. It is only later, when the mine is redeveloped that the other Landowners will need to consider their position." "Our group owns the land and the mineral rights for the minesite. Nothing can occur on the site without our permission," Mr Miriori said.

"We are being deliberately passed over despite Bougainville Government assurances that no action would be taken on the minesite without proper respect to people's views. "Many Bougainvillians were angered at the statements about PNG Government support for BCL. I expect we will hear much more this week," he said. Mr Miriori was referring to a planned gathering of ex-combatants from the Bougainville conflict, which erupted on the back of BCL and Rio Tinto's operation of the old Panguna, leaving only environmental carnage and deep-seated disputes over improper payments and lack of accountability with the death of many of our friends and family. "All this will do is further motivate our people to stand up against BCL, stronger and more vocally," Mr Miriori said. "Most people in Bougainville know of Francis Ona's words: 'BCL should never be allowed to return to Bougainville'."

The SML group made their position very clear to Bougainville's President Momis at a meeting in late February and another earlier in December last year. "We said we will never accept BCL. It is the same company that caused turmoil in Bougainville which lasted more than 10years. It is run by ex-Rio people. And it continues to break its promises, try to bully us and misrepresent us, as it tries to drive a wedge between our people and ignore our rights as the owners of the minerals." "It is time people woke up to this. In 28 years, BCL has done nothing for Bougainville or PNG except

make empty promises or ignore us. Why would we even consider giving BCL anything – they have given us nothing and they owe millions in unpaid rent and hundreds of millions in compensation for ruining the environment. "There is a better way forward which will finally get rid of BCL and bring some real hope back for Panguna and future Bougainville independence and prosperity."

Porgera rights activist arrested

Radio New Zealand, 24 April 2017



Porgera mine. Photo: wikicommons / Richard Farbellini

A human rights activist was arrested for allegedly "spreading misinformation" after another attack at the Porgera gold mine in Papua New Guinea's Enga province. Out on bail after 30 hours in custody, McDiyan Robert Yapari said police abused him for defaming them. Mr Yapari's human rights group, last week, said a person was fatally shot, and another critically wounded in the latest unrest at the controversial Porgera mine. The Akale Tangi Association said guards opened fire on two people panning for gold on mine property. The mine's major shareholder, Canadian company Barrick, has been consistently criticised for rights abuses in neighbouring villages, particularly at the hands of security contractors. Mr Yapari had gone to police to request an investigation into alleged forced evictions by police in the mine area. He said he was later arrested while being stripped of clothes and belongings, and had his mobile phone confiscated.

Mr Yapari is, this week, to attend a hearing on what is understood to be a charge related to spreading misinformation, or defamation. Meanwhile, local police hired for security provisions by Barrick have said the Association's claim that they carried out forced evictions at Wingima without a warrant was biased. Mr Yapari said his efforts to raise attention to this resulted in his arrest. "Upon going back to the cell blocks, I wrote an email without fear to Barrick's Corporate & Legal President Peter Sinclair informing him of my arrest by his company's hired Police Personnel," he said. Mr Yapari said that despite what he claimed was mistreatment by police while in custody, he would not shirk from continuing to raise concern about the abuses at Porgera. "ATA as an organisation will advocate and without fear of reprisal directly tell or inform of any human rights abuses committed by a corporate, private or public sector when it sees and feels that the local indigenous rights are abused or violated..."

Experimental seabed mining!? Leave my down below alone! Seas at Risk (Brussels), April 21, 2017



Mr Smashing makes a comeback with an experimental seabed mining disco love song. Destroying the deep sea to get metals for our throw-away mobile phones and other e-devices? Seas At Risk thinks it is better to step up efforts on the circular economy – make devices repairable, re-usable, recyclable. Use mineral resources more efficiently and keep them in the economy loop instead of wasting them. Link: <u>https://www.youtube.com/watch?v=JsA0emd2FNw</u>

Bougainville Copper Mine Makes Final Compensation Payment To Panguna Landowners *\$4.3 million is last royalty payment under 1990 compensation program* By Romulus Masiu



PORT MORESBY, Papua New Guinea (PNG Post-Courier, April 21, 2017) – Bougainville Copper Limited (BCL) has completed the 1990 Panguna landowners' compensation payment verification program. A total of K14 million [US\$4.3 million] has been paid directly into the bank accounts of the landowners as their royalty payment, as agreed in the Bougainville Copper Agreement. This is the landowners' last royalty payment, unless BCL returns to dig the mine again in the future. The program, which started in December last year, covers the Special Mining Lease areas, starting from

Port Mine Access Road to the Lower Tailings of the Emperor Augusta Bay in Bana and Torokina districts of South Bougainville. To date, the two districts are still facing the marine and environmental damages from the polluted Jaba and Kavarong rivers even though the mine officially shut down operations in 1989. The program has also covered the middle tailings and the SML areas, including the mine pit and the surrounding villages.

Full credit must go to the hardworking team led by Bruno Babato and his officers from the Office of Panguna Mine Negotiations who tirelessly worked for five years for this to finally happen. BCL was well represented during the verification process by Port Moresby-based officer, Justin Rogers, who was on the ground to oversee the smooth running of the program, which was finally completed at Pakia village, Ioro constituency of Panguna district. Mr Babato appealed to the recipients to use whatever amount they're paid wisely because this is the final land compensation payment since BCL started operations in 1972. Apart from the 1990 outstanding land compensation payment, which the resource owners of Panguna received, they also want BCL to progress with the belkol ceremony before any discussion with the company on the mine reopening issues is discussed. The belkol will involve the whole of the Autonomous Region of Bougainville population from North, Central and South Bougainville.

Fiji: Mining Work Ceased, 500 Workers Sent Home

Fiji Sun, April 20, 2017



A recent death and a series of accidents have forced the closure of all underground operations at the Vatukoula Gold Mines. The closure has seen about 500 underground workers sent home, pending the outcome of a safety audit. A team of mine inspectors from the Department of Mineral Resources are conducting their investigations and checks of all shafts at the mines. This was confirmed by the Director Mineral Resources, Raijieli Taga yesterday. "Yes the closure is temporary and it is being done for safety reasons," Ms Taga said. She confirmed that a recent death and injuries to workers below the surface was the main contributing factor towards the temporary closure. The latest death at the mines occurred on April 5 when a shaft supervisor was killed after two rocks, believed to have been loosened by an explosion, fell on him. Tekiata Teuongo Teirei, 51, was believed to have died after the rocks crashed on his back, smashing his backbone and spinal cord.

He was on the afternoon shift, which was from 3pm - 11pm and was about to finish work, when the alleged incident happened at the Smith's Shaft, which is about 1700ft below the surface. Ms Taga said the mine inspectors were investigating the safety aspects of the mine and the police were also included because of the death of Mr Teirei. "I cannot confirm as to how long the investigations will

take and what will happen after that," she said. "However, the findings of the mine inspectors will be tabled before a board of inquiry where a decision would be made." Ms Taga said all shafts would undergo the safety audit. As for the underground workers being sent home, Ms Taga said she believed they would be on full salary. From the era of the Emperor Gold Mines Ltd until the present day, it is believed that this was the first time that all underground operations were closed for a safety audit. Queries through e-mail and phone calls to VGML's Corporate Services manager, Dinny Laufenboeck, were unsuccessful.

UN against seabed mine

THE United Nations is against the world's first seabed mining operation which is set to start in two years time in the Bismarck Sea, off the coast of New Ireland Province. BY MEROLYN TEN, Post-Courier, 20 April 2017

THE United Nations is against the world's first seabed mining operation which is set to start in two years time in the Bismarck Sea, off the coast of New Ireland Province. Copper and gold deposits will be mined from the seafloor at a depth of 1600 metres. The UN says this will cause major environmental destruction not only to the communities in New Ireland but the entire Pacific Ocean, and is against the 14 Sustainable Development Goals of the UN. "There is a high likelihood that mining will disrupt life under the sea and potentially cause mass devastation for biodiversity," UN resident co-coordinator Ray Trivedy said. The 14 SDG states the importance of conservation and the sustainable use of the ocean, seas and marine resource.

Oceans, especially the Pacific Ocean which PNG is in, contain nearly 200,000 identified species, but actual numbers may lie in the millions. UN main targets were to prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution, sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts, including by strengthening their resilience, and take action for their restoration in order to achieve healthy and productive oceans as stated in the UN Convention Law of Sea. "I am against sea bed mining because despite what some companies say, I am not convinced that it will lead to sustainable development," Mr Trivedy said.

O'Neill indicates support for BCL to start operation

April 20, 2017, The National National

PRIME Minister Peter O'Neill has indicated his support for Bougainville Copper Ltd (BCL) to resume its operations on Bougainville. Bougainville President Chief Dr John Momis said this would provide BCL with the level of assurance they needed to manage sovereign risk and take meaningful steps to start feasibility work. Momis said that Prime Minister Peter O'Neill agreed that a steering committee would be established with joint representation from the national government, ABG Government, landowners and Bougainville Copper Ltd. The steering committee would be convened by an independent chairman to ensure that all parties' interests were heard. "As president, I am very conscious of the sensitivity of this issue, but I am pleased that the vast majority of landowners have now agreed that Bougainville Copper Ltd should be given the opportunity to rehabilitate the mine," Momis said. He said the economic benefits of that could not be denied, but Bougainville should ensure that any future mining operations were respectful to the people, protected their environment and benefits flowed through to the people.

Porgera: Lack of opportunities cause of illegal mining

April 20, 2017, The National Business

By MARK HAIHUIE

ILLEGAL mining in Porgera, Enga, is the result of a lack of opportunities for locals to participate in small to medium enterprises, according to Porgera Chamber of Commerce and Industry. President Nickson Pakea was responding to questions from The National on locals taking part in illegal mining activities. He said the ineffective government presence in the district in creating business opportunities, had created a dependency on the Porgera joint venture for basic services and business opportunities. "According to the business perspective, the mine area is the land in which the seven clans gave to the developer. It's the property of the company," he said. "If someone enters into this prohibited area then it is criminal. "The cash flow in the district is mainly from the Porgera mine. "The Government institutions within the district responsible for the growth of small to medium enterprises and the avenues is all moving backwards. "The Porgera Development Authority was misused and was closed for more than three years. "Paiam Hospital closed as well. "Porgera Health Centre closed with no reflection of government services except the Barrick Porgera joint venture that people of Porgera rely on. The service delivery there is minimal. The non-government organisation groups need to represent the bulk of population on such corruption affecting many lives."

Fiji Government Closes Gold Mine To Carry Out Full Audit

Vatukoula mine's underground operations under scrutiny after recent incidents, including one death By Repeka Nasiko



Photo: Khushie singh Creative Commons Attribution-Share Alike 4.0 International license

SUVA, Fiji (Fiji Times, April 20, 2017) – All undergound operations at the Vatukoula Gold Mine have been ceased indefinitely. Minister for Lands and Mineral Resources Faiyaz Koya confirmed the closure. "Yes, we have closed the underground operations because we are carrying out a full audit on the mine," he said. "The audit began post the sink hole incident in which a miner died, so it has been ongoing for a while. In the meantime, we've had to call up all underground staff and cease all underground operations because there have been some incidents that have occured recently. "It was a matter of safety and we've asked that they step down all underground operations as our Mineral Resources Department team carry out the audit." Mr Koya said there was no time frame for the

temporary closure. "It will depend on the full audit. In the meantime, all administrative operations continue."

Fiji Mine Workers Union president Jovesa Sadreu said an investigation had to be carried out on the series of accidents at the mine. Mr Sadreu said the death of Tekiata Teirei earlier this month could have been avoided if safety procedures were followed. He said Mr Teirei's death was the 110th death recorded at the mine. "Miners lives are at risk right now," he said. "There should be an investigation by Government on how Mr Teirei died." Mr Sadreu said two other accidents occurred at the mine seriously injuring two people who are at the Lautoka Hospital. "One of the miners was buried under some rocks and he broke both his legs. He was admitted into Lautoka last week. "Another case involved a worker who inhaled gas fumes." "He's in a very serious condition too."

PNGSDP backs locals' offer to government

April 19, 2017, The National National

THE PNG Sustainable Development Program has offered to help finance wellhead and facilities landowners buy equity in the PNG LNG project. Its chairman, Sir Mekere Morauta, said yesterday in a statement: "PNGSDP is happy to participate as the PNG-based member of a consortium of overseas financiers to provide a facility totalling K725 million (US\$230 million) to allow the land-owners to pay the State for their 4.27 per cent interest that was agreed under the Umbrella Benefit Sharing Agreement (UBSA) in 2009 between the Somare Government and the landowners." The landowners included in the equity holding cover groups within the PNG LNG project footprint from Western, Hela, Southern Highlands, Gulf and Central Provinces." Sir Mekere said the PNGSDP's Long-Term Fund totalled US\$1.4 billion, which was "invested securely and profitably around the world in government bonds, corporate bonds, equities and cash". He said PNGSDP therefore had the financial muscle to participate in the proposed lending consortium.

Road to connect Tabubil and Telefomin

By ISAAC NICHOLAS, Post-Courier, April 19, 2017

THE National Executive Council (NEC) has already approved a substantial increase in tax credit to the OK Tedi mine limited (OTML) to build the 100 kilometres of missing link from Tabubil to Telefomin. The NEC had approved an increase of 0.75 to two percent, tax money OK Tedi can retain to fund development programs in Western and West Sepik provinces. Yesterday was start of the historic moment with the launch of the first bridge that will cross over OK Menga River for the first stage of the four stages. The road link will cost an estimated K1 billion, which the government does not have and using tax credits for OTML to build. The first stage is from Tabubil to Olsobip then to Telefomin and linking the final stage to Oksapmin. OK Tedi deputy CEO Musje Werror, Department of works project director-missing links Robert Tela, Telefomin MP Solan Mirisim and contractor Starwest general manager Wayne Clark witnessed the unveiling of the new bridge. OTML's Mr Werror said Telefomin MP Mr Mirisim should be given credit for pushing for the increase in tax credit over the last four years for the road to be realised.

He said the increase in tax credit means that how much money that goes back to government will now be left for OK Tedi to build this road. "The MP has done well in convincing the Prime Minister to increase the tax to build this road." Mr Werror said although the start of the road will be in North Fly electorate, nobody from North Fly was fighting but the MP knows that the Min people are one and is fighting to have the road from Tabubil to Telefomin. "He knows you are his people and this kind of leaders must be returned in the election" Mr Werror said. He called on the mine landowners to protect the company which they are now equity partners with the recent 33 percent given away by the National Government.

PNG Human Rights Group Claims Another Person Shot, Killed Around Porgera Mine *Guards reportedly open fire on people panning for gold on mine property*



WELLINGTON, New Zealand (Radio New Zealand International, April 19, 2017) – A Papua New Guinea human rights group says one person was shot and killed, and another critically wounded in another attack at a controversial gold mine in Enga province. The Akale Tangi Association, which is based in the area surrounding the Porgera mine, said the incident happened on Sunday, when guards opened fire on two people panning for gold on mine property. The mine and its major shareholder, Canadian company Barrick, have been consistently criticised for human rights abuses in neighbouring villages, particularly at the hands of security contractors.

The association's executive officer, McDiyan Robert Yapari, said he had met with local police and written to Barrick about Sunday's incident, but he had little hope of an outcome. He said the government and Barrick had for years promised investigations and action to address human rights concerns, but next to nothing had happened on the ground. "We have written so many letters, the attention of Porgera and gross human rights violations has already reached the United Nations High Commissioner for Human Rights," Mr Yapari said. "All these issues of human rights abuse have been raised and Barrick purports to say the company is committed to protecting human rights, but according to us, it is a whole lot of bullshit."

Call for extra security in Hela before PNG elections

Radio New Zealand, 14 April 2017

There's an urgent need for bolstered security in Papua New Guinea's Highlands province of Hela, according to its deputy governor. Thomas Potobe's comment comes after a military and police

callout to a province plagued by tribal conflict and a build-up of high-powered firearms. The late December callout saw 300 police and military personnel deployed to the region which is central to the country's US\$19-billion LNG gas project. As the callout wound down last month, police and Hela authorities admitted its corresponding guns amnesty was only a partial success. Mr Potobe warned that since the last elections in 2012 tribal tensions in the area have worsened. "And this time I think there'll be fighting all over the place in the province," Mr Potobe said.



The spectre of tribal fighting is a constant in Papua New Guinea's Hela province where villages are typically protected by trenches and tightly guarded gates. Photo: RNZI / Johnny Blades

"But last year we had big fights in the province and at the moment now we cannot manage it. "It's very important, we need more security personnel on the ground." Last month, PNG's police Commissioner Gary Baki floated the idea of recruiting hundreds of ex-servicemen to Hela to help address the lawlessness and fighting. Mr Potobe said the plan was requested by the Hela provincial government, but it was clear that neither provincial or national government had the money to pay for this. He has confirmed fears that lingering tension in and around the provincial capital could escalate again. "Not only in Tari but also the Highlands around. We need more security on the ground, including Tari," he said.

"The view of the province, and the electorate, for me, it does not look good for the new elections." The elections period officially starts later this month with two months of campaigning before a twoweek polling period commencing in late June. Last month, Mr Baki told RNZ International that in a change from previous polls, provincial police commands, rather than national headquarters would coordinate policing in each province during elections. But he insisted there would be extra provision made for additional police presence in security hot-spots such as Hela. Echoing this, the government's chief secretary Isaac Lupari said that securing the LNG project area remained a priority, suggesting an increased police deployment in coming weeks was possible.

Hides landowners shut gates to power plant, camp site Post Courier, April 12, 2017

Disgruntled landowners of the Hides gas to power plant have blocked the road and closed the gates to the power plant at Yuni and Oil Search camp at Nogoli yesterday over non-payment of royalties. According to landowners from Hides, led by Peter Potape, the landowners are frustrated and had enough of the state's promises, and have threatened to disrupt all operations if the government con-

tinues to mislead them. He said the people are frustrated over the delay in the payment of the royalty for the gas to electricity project for the past four years, and have decided to block off all access to the main camp site at Nogoli and the Yuni power plant site, to get the government to listen to their demands before going into the elections.



Mr Potape said the landowners also want the state to review the Hides gas to power memorandum of agreement to resolve outstanding issues pertaining to the project that is well over due since 1992. He said the landowners also want the payment of the K35 million as project security as agreed through an understanding signed in August 2016. The landowners are calling on the State to address the issue as failure to do so will have serious consequences on the PNG LNG project and the Hides gas to power project. Similar calls have also been made by the Moran oilfield landowners. Oil Search Limited when contacted did not respond.

Ban seabed mining, says Cardinal

Naomi Wise, National, 11 April 2017



CARDINAL Sir John Ribat is calling on the governments of PNG and the Pacific to ban seabed mining in their countries. Sir John, who has just returned from Suva, Fiji where he attended a workshop on seabed mining at the Pacific Theological College, said this in support of people living in coastal areas and islands in the Pacific. "The ocean is home to people living around coastal areas and islands," Sir John said. He said they realised the impact the seabed mining will have on the ocean. "And that is why it is vital we highlight the importance of our lives in association with the sea," Ribat said. "My fear is, if this happens, our people will go into the deep ocean to fish. "We also don't know how long it will take for the ocean to heal itself after the destruction the seabed mining will cause," he said. "Do you want to see our people suffer?"

Ramu NiCo exceeds production targets

April 11, 2017, The National Business

THE Ramu nickel/cobalt mine in Madang exceeded production targets for the March quarter, benefiting from rising global cobalt prices, an official says. Cobalt prices have doubled in the past six months. Highlands Pacific, one of the joint venture partners in Ramu, said the mine had achieved total production of 7884 tonnes of nickel in concentrate and 755 tonnes of cobalt in concentrate in the three months to March. This is despite the scheduled maintenance of two of the process plant's three autoclaves for 12 days each during the period. Highlands Pacific chief executive Craig Lennon said: "We are delighted to see that Ramu is achieving excellent production outcomes at the same time that we are seeing strong growth in cobalt prices and nickel prices show signs of recovery after an extended period of weakness. Adjusted for the maintenance shut-downs, the plant was running at an annual production rate of some 34,600 tonnes of nickel and more than 3300 tonnes of cobalt per year. These exceeded design capacity and demonstrated success of recent initiatives to lift throughput rates. The increased production was being achieved as global cobalt prices continue to rise, driven by increased use in battery manufacturing.

New Zealand seabed mining plan is madness

'Companies involved in these boom-and-bust industries are known for rushing ahead with great gusto, only to suddenly scale back production, laying off workers as jobs disappear and, in fact, often disappearing altogether, leaving behind damaged ecosystems and pollution for the community to clean up' Graham Pearson, New Zealand Herald, April 10, 2017



Black gold: Taranaki's seabed could be mined. Photo/file

NEW Zealand resources have been ravaged through history by boom-and-bust industries that have extracted timber, gum, gold, coal, oil and gas. Now there is a crazy proposal to mine at sea our West Coast black sand, using untried and untested processes, with its suggested economics based on yet another old-fashioned boom-and-bust industry. Just a few minutes' Google search revealed the crazy price fluctuations of iron and steel. From a maximum price of US\$191 (\$275) in February 2011, iron crashed to US\$37 in December 2015, while steel has an even bigger range: US\$1265 in June 2008 to just US\$90 March 2016. Companies involved in these boom-and-bust industries are known for rushing ahead with great gusto, only to suddenly scale back production, laying off workers as jobs disappear and, in fact, often disappearing altogether, leaving behind damaged ecosystems and pollution for the community to clean up.

Recently spending two days attending the EPA's Decision Making Committee (DMC) hearing in New Plymouth, I was heartened to hear many, many organisations, iwi and members of the local communities speaking out for most of those two days against yet another extraction industry. Members of the fishing and dive clubs provided amazing footage of the undersea world just off the Taranaki coast, giving all of us present an idea of the wonderful environment that is at stake. Others spoke for the mammals that live in or travel through this section of the Taranaki bight. Others spoke with passion of their connections with the sea through their lifestyle and heritage, which they see as threatened with the TTR's proposal. Some objectors, with experience of sea-based industries, were able to give us valuable perspectives of this huge ocean-based proposal, with its weather-related risks and disruption to the ocean floor. A locally based economist pointed out to the DMC how the trickle-down idea for economic value has not worked in the Taranaki oil and gas industries. These extraction industries are known for "fly-in" workers taking the skilled, high-paying jobs, leaving only lower level and support industry jobs for the locals. He also pointed out that while New Plymouth and close environs might gain support for Womad and other local community activities, South Taranaki remains an economically depressed area with low incomes, job shortages and a high level of child poverty.

We even know, from Minister Judith Collins' recent statement, that the oil and gas industry needs multimillion-dollar handouts to close down its end-of-life wells. In contrast to this valuable evaluation of the proposal, our "guardian" organisations, DOC and councils, took a neutral stance. The Government's Ministry of Business, Innovation and Employment has supported the proposal and seems to think it's wonderful -- despite TTR's previous application being declined, and the company seeming to need a Callaghan Innovation Fund grant of \$15 million to keep it afloat while preparing to submit its second application. The DMC has extended the hearing deadline to the end of May, against some community opposition, to further examine the sand plume issue and consider possible mitigation options. So we wait until June to see if the decision is again a sensible decline or if we get yet another extraction industry.

AUS and PNG strong investment partners

AUSTRALIA's A\$18 billion investments in Papua New Guinea remains the largest compared to Indonesia. By MELISHA YAFOI, Post-Courier, April 10, 2017

AUSTRALIA's A\$18 billion investments in Papua New Guinea remains the largest compared to Indonesia. Prime Minister of Australia Malcolm Turnbull emphasised this yesterday at the Australia- Papua New Guinea Business breakfast in Port Moresby before his departure for India. Mr Turnbull said this says a lot in its investment in mining, oil and gas and it contributes to PNG's economic growth for both countries. He highlighted that almost 5,000 Australian companies are doing business in PNG through a two way economic relationship being united through development goals and big trade agreements. He made mentioned that the merchandise trade between the two has seen a drop partly due to the downturn in the commodities market and as foreign businesses accessing the PNG markets.

"PNG already has a duty free access to the Australian market but more can be done about the biosecurity arrangements, our requirements and you've got high quality products that Australia distributes. The recent ministerial forum has agreed to look and establish a trade, investment and economic working group to address economic issues and foster for operations," he said. Mr Turnbull said both governments have recognised that many things need to be done to improve the business environment for businesses to come and invest in PNG. He pointed out that PNG has been receiving significant corporation and large scale investments which was attracted by its vast and rich resources. "ExxonMobil, Santos and Oil Search who have seen how transforming it has seen how foreign investment has been contributing to PNG's infrastructure and skills development and also contributing the doubling of employment in PNG by the private sector in the past ten years.

"It also creates opportunities for local suppliers to support local communities and investments in education, health and on the environment. New and major projects are already in the pipeline including extending of the ExxonMobil \$26 million LNG projects that will develop new gas fields. "To make this a reality and to extend the benefits of investments for more Papua New Guineans, you must continue to work together to bring all best practices that will attract long term investment. As we all know will benefit both regions. "Now is crucial as large projects are the engine of the economy and the diversification must encourage the growth of the economy and our businesses. "Had it not been for the big free trade agreements that we secure, the opening of access for full range of exports for the markets from Australia servicing agricultural products will not be possible. To have a resilient economy, brilliant economy is absolutely critical," he said.

Pacific churches call for a ban on experimental seabed mining in Papua New Guinea and the Pacific Lice Movono, The Fiji Times, April 9, 2017

CHURCH leaders from the Pacific have called on governments and people of the Pacific to unite to preserve the region with regards to seabed mining. In an acknowledgement of industry action in sea bed mining the churches acknowledges that developments were taking place in some governments but they singled out the government of Papua New Guinea for having issued mining licenses. "We also acknowledge the campaigns against Seabed Mining by local communities in PNG. We are aware of the destruction by Seabed Mining," the church statement said. "Therefore, we call on the PNG Government and other Pacific countries to put a stop to testing of Seabed technology on PNG Land or Seas."

The churches who were joined at the workshop by representatives of civil society organisations called on the rest of the non government community to unite stand with the churches and the Alliance of Solwara Warriors "to say NO" to any development regarding Seabed Mining in their area." "We call on the Governments and the people of the Pacific to stand together to preserve our common home for the unborn and the future generations." "We call on all the people and the governments of the Pacific to stand together in solidarity to Ban Seabed Mining in PNG and the Pacific."

MRA promotes transparent mining

PAPUA NEW Guinea has taken serious steps toward becoming a fully fledged member of the Extractive Industries Transparency Initiative (EITI). Post-Courier, April 7, 2017

PAPUA NEW Guinea has taken serious steps toward becoming a fully fledged member of the Extractive Industries Transparency Initiative (EITI). This was what representatives from the Mineral Resources Authority (MRA) told potential investors including mineral exploration companies, service providers, and geologists at the Hong Kong Mines & Money Convention this week. MRA's manager for Geographical Information System (GIS) Marketing and Information, Arnold Lakamanga, said the PNG Government through a National Executive Council (NEC) decision had set up a secretariat (PNGEITI) to work toward being a full member of the EITI.

Mr Lakemanga said the secretariat is housed within the National Treasury Department as the lead government agency. The Secretariat comprises Civil Society, NGOs, and relevant government agencies like the MRA. "The MRA's objectives are clear. We want investors to know that we want to be transparent in the way we do business," said Lakamanga. He said as a strong supporter of the PNG EITI process, MRA has put in place a digital tenements management system that is open and

transparent as it has features that eliminate potential for any form of influence outside of the normal process. He said the system enables license holders to check on the status of their tenements and applications online. The public can also access general information on tenements and applications. In addition, its website www.mra.gov.pg has important and up to date information on the MRA's activities.

Mr Lakamanga explained that the PNGEITI secretariat had so far produced two reports on the 2013 and 2014 reporting periods, with 2015 and 2016 reports due by December 2017, however more work was being carried out in efforts to become a qualified member. Several investor representatives including those from Rio Tinto and Zijin which is jointly operating the Porgera Mine with Barrick, had commended the country for its efforts. It is hoped that PNG's EITI efforts will encourage investment in the country by providing investor-confidence. Meanwhile MRA managing director Philip Samar met yesterday (Thursday) with a few of these investors to discuss their interest in mineral exploration and to further assure them of PNGs competent and transparent regulatory processes.

Claims of human rights abuses near a PNG goldmine

Dateline Pacific, Radio New Zealand, 7 April 2017



The aftermath of the Porgera fire. Photo: Supplied/ McDiyan Robert Yapari

A Canadian mining giant is again under the spotlight following allegations of police brutality during the forced eviction of villagers near their gold mine in Papua New Guinea. Barrick Gold claims to have taken steps to address an appalling record of decades of violence at the Porgera Mine. But a spate of recent allegations has some asking whether it's doing enough. Jo O'Brien reports

There are conflicting accounts of the police operation at Wangima village near the Porgera mine in late March. Cressida Kuala from the Porgera Red Warra Women's Association believes nineteen houses were burnt down in the early morning raid. "Children and women woke up at around 4 o'clock in the morning. The police personnel who were hired by the company, Barrick PJV went up to the village and chased them out of the area." The chairman of the Akali Tange Association Langan Muri says up to 50 houses were destroyed in the village, where about 100 homes were burnt down in two previous raids. He says they've received allegations police raped at least three girls during the latest operation and assaulted others. "Police freely walked into the houses while they

were sleeping and they have raped. The victims are still coming everyday to report to us. Some schoolgirls have been raped inside the houses."

Locals believe the raid was ordered by Barrick Gold, the co-owners of the Porgera Mine. The company has yet to respond to RNZ International's request for comment, but in a letter posted on its website it's denied any involvement or prior knowledge of the operation. The independent monitor of policing activities in the area IIa Geno backs up their claim that police conducted the raid under a court warrant after evidence of illegal activity was found there. "The perception that the police are paid by the company and subsequently they are also ordered by the company to do those things. But from my independent observation point of view police are not commanded by the company to carry out operations." But Sarah Knuckey, the director of the Human Rights Clinic at Columbia Law School, says the exact nature of the relationship between Barrick Gold and police at the mine is unclear. "There is apparently a written agreement between the government, police and the company but it's never been made public and when you speak to police there, they say their accommodation, their food, their fuel is funded by the company. But it's not easy to tell what the command structure is for the operations."

And for Catherine Coumans from MiningWatch Canada, Barrick's denials are problematic. "If the company really didn't have any knowledge that this was going to happen then it clearly needs to question why this gross violation of human rights on the company's mine lease area, without the company knowing about it. And if the company did know about it then the company needs to come clean and account for why it's asking police to carry out these raids." In the past few years Barrick Gold has undertaken measures to address longstanding concerns about abuses at the mine. Compensation has been paid to more than 130 women for acts of sexual violence and gang rape committed by security guards and police. Cressida Kuala says that remedy for victims is not enough and not everyone has been compensated. But she says steps by the company to improve training of security personnel had been making women feel safer - until now. "Barrick is trying its best to train its police and the security on human rights disciplines. And it looks like police are aware of the human rights laws and still they are going ahead to do these things. I don't know why. The police said they were just doing their duties on Barrick's order."

Sarah Knuckey from Columbia Law Schools says steps Barrick has announced such as improving the training, monitoring and reporting structures of police have been good on paper. But she says they're still seeing serious allegations of violence at the mine and there needs to be more transparency about what the company is actually doing to respond to them. "Over the last few years we saw a noticeable improvement. People reported feeling safer. However recently there's reports of the village burning as well as the accompanying physical and sexual assaults. There's also another report of a different set of sexual assaults two weeks prior and of assaults last year that the company has never responded to." Independent policing monitor IIa Geno, whose position is financed by the Government and Barrick Gold, says he's also very concerned about human rights. He says the company is addressing the issue but individual police officers must also take responsibility.

"Training is adequate but the individual police application, that's an issue where individual competency of a police officer in complying with those instructions." But Tyler Giannini, a director of the Harvard Law School International Human Rights Clinic, says much more needs to be done to stop the cycle of violence. He says divisions between the company and the community run deep and trust needs to be built. "Any complaint mechanism that they create needs to actually address all of the problems that the community has faced not only sexual violence, but also killings, assaults and deeper environmental issues that have been longstanding in the community. Until that happens I think you're not going to have a stable development situation in the area." Human rights advocates are calling for the relocation of the 50,000 to 60,000 villagers who live near the mine. Sarah Knuckey says people tell her they are living like dogs and pigs just a few metres away from its factories. "People are frequently sitting in tailings waste from the mine. They drink water out of blue buckets. They're full of mosquitoes and dust and leaves. In many villages all night long you can hear the sound of the trucks very loud. The children find it very hard to get to sleep." Ms Knuckey says everyone who lives at the mine feels the "injustice of being the original owners of the land and the gold underneath it and seeing it literally being flown out of the country" while they live in squalor. She says the Canadians who own Barrick Gold would never accept such terrible conditions for their own families.

Papua New Guinea government intensifies military operations at ExxonMobil plant John Braddock, World Socialist Website, 7 April 2017



Armed clansmen in the town of Komo in Papua New Guinea's Hela Province. Photo: Michael Main

The Papua New Guinea government of Prime Minister Peter O'Neill is moving to intensify its massive police and military operation against villagers in Hela province, where the \$US19 billion ExxonMobil liquefied natural gas (LNG) is based. In January, the government deployed 150 troops and police near the ExxonMobil site in response to what it claimed was a spike in tribal violence that had left dozens of people dead. Security forces were ordered to seize and destroy illegal weapons after police raised concerns about a build-up of high-powered guns. Police Commissioner Gari Baki proposed last month that the government recruit 500 retired ex-servicemen to help enforce "law and order" in Hela. Baki said the former police, soldiers and warders would be on a six-year contract to train new police officers. Baki announced the plan while overseeing the destruction of over 500 firearms, mostly home-made, surrendered by locals during an amnesty that started in January.

Hela Governor Francis Potape admitted that the amnesty, which was extended twice into March, was largely unsuccessful. Police commander Samson Kua told the media on March 7 that hundreds of weapons still remain unaccounted for. Security forces would be ordered to take "tough measures" to recoup the guns and arrest the owners, Kua declared. The actual purpose of the police-military buildup, which will involve 300 people, including public servants from the law and justice sector, is to protect the giant LNG project, which has been subjected to protests and blockades by traditional landowners. Chief Secretary Isaac Lupari said securing the LNG site was a "critical" aim of the operation. "We've got a very important project that is located there," he said. "It supports the economy, employs thousands of Papua New Guineans, so we've got to restore law and order."

Construction of the ExxonMobil operation was originally bankrolled by the US Export-Import Bank. The project is viewed as economically vital by the major Wall Street shareholders that have backed it.

In February, the Singapore-based InterOil Corporation announced a \$US2.5 billion deal approving ExxonMobil's acquisition of the company. It includes interests in six licenses covering four million acres of the PNG highlands. One undeveloped gas field, Elk-Antelope, is among Asia's largest and will be used to vastly expand ExxonMobil's footprint. Landowners in Hela are meanwhile still waiting for royalties, development levies and dividends from the project to be paid. In February, more than 1,000 protesters from four villages gathered at the ExxonMobil site to demand the payments, estimated at over 1 billion PNG kina (\$A400 million). A spokesman said the government had promised to pay royalties but never kept its promises. It was the second major protest affecting the LNG project. In August 2016, landowners blockaded the entrance to the plant and disrupted gas supplies over the lack of payments. Michael Main, a PhD student at the Australian National University, told ABC Radio on March 10 that "after four years of operation and windfall profits for the project's joint venture partners," the project had "delivered almost nothing of benefit to landowners." "In fact," Main declared, "it has, in important ways, made life worse for the majority of people living in the project area."

Under the LNG Project Umbrella Benefits Sharing Agreement, signed in 2009, ExxonMobil agreed to pay 700 Kina (US\$216) per hectare per year for land occupied by the project. The government promised specific additional development programs, such as road sealing and township development. Landowners were told they could expect, according to Main, "the project to deliver tangible improvements to their lives and to the lives of their children." However, during the seven months Main conducted fieldwork in the province, he witnessed "a life of immense frustration, disappointment and palpable anger at the absence of benefits." "What I encountered was abject poverty situated alongside one of the largest natural gas extraction operations in the world," he explained. Rampant corruption is a major issue. Main cited the township of Komo, near the LNG plant, which contained a newly built hospital that stood empty with no beds, no staff and no fuel for its generator. This was one of several "white elephants" built at inflated prices by companies owned by PNG's politicians.

"Promised developments, including road sealing, power supply and schools, had all failed to materialise," Main said. The complex clan-based society of the highlands region, with a history of disputes over land and possessions that can be traced back over many generations, has been made worse, according to Main, "by the frustrations of a population hammered by the broken promises of the nation's largest resource development project." He described constant outbreaks of fighting by "heavily armed clans, young men gunned down by military assault rifles, and many dozens of houses shot through with holes and razed to the ground." Main noted that since the beginning of the ExxonMobil project, PNG's ranking on the UN's Human Development Index has fallen by two places to 158, having been overtaken by Zimbabwe and Cameroon. "Far from enhancing development indicators, the largest development project in PNG's history, has coincided with an unprecedented downgrade in the country's development status," he concluded.

PNG still has one of the lowest levels of GDP per capita in the region. Real GDP growth has dropped from 11.8 percent in 2015 to a forecast 2.8 percent in 2017. Government revenue has fallen sharply due to the precipitous decline in global commodity prices. LNG prices are less than half what they were in early 2014. The price in 2016 dropped as low as \$US6.45 per million British thermal units (Btu) from a peak of \$19.70 in 2014. Asia's LNG market fared worse than slumping oil markets, plummeting by 67 percent. The O'Neill government has responded by slashing spending, targeting health and education, by up to 40 percent. Austerity is fueling explosive social antagonisms and anti-establishment sentiment. Sections of the working class are becoming more restive

over the government's vicious attacks on jobs, living standards and basic rights. Early last month, National Civil Registry office workers in Port Moresby stopped work and locked the premises, demanding overdue wages. Workers alleged that they had not been paid for over two years.

The government is increasingly mobilising the police and armed forces to suppress deepening unrest. On March 28, armed police intervened to disperse a large crowd outside the provincial assembly in the East Sepik capital Wewak as Governor Michael Somare, PNG's first prime minister under formal independence in 1975, was preparing to retire from official politics. The crowd had gathered to demand payments for various projects, activities and past "loyalty" to Somare.

Rio Tinto walks away from environmental responsibility for Bougainville's



Panguna mine Catherine Wilson, Mongabay, 6 April 2017

Silent rusting mine machinery litters the Panguna mine site, abandoned 28 years ago. Photo by Catherine Wilson.

The people of Bougainville Island successfully shut down the mine in 1989, but now find themselves left to cope with its environmental fallout. Rio Tinto operated the Panguna copper mine in Bougainville from 1972 until 1989, when local landowners — angered about pollution and revenue sharing — forced the mine to shut down. Rio Tinto divested its share of the mine in 2016, and now believes it has no obligation to address the mine's environmental legacy. Today, Bougainville — an autonomous region in Papua New Guinea — is devastated by damages wrought by both war and the mine. The Bougainville government is considering re-opening the mine in order to fund a cleanup.

British-Australian mining giant Rio Tinto was for 45 years the majority-owner of the Panguna copper mine in Bougainville, an autonomous region in Papua New Guinea (PNG). But now it has given up its 53.8 percent stake in the mine's operating company, Bougainville Copper Ltd (BCL), and announced it rejects any corporate responsibility for environmental damage wrought during operations from 1972 to 1989. The company believes it no longer has any obligation to address the mine's environmental legacy because it adhered to PNG's laws of the day and was forced to abandon the extraction venture due to armed conflict. "When BCL had to leave the site in 1989, we believe BCL operated Panguna in compliance with applicable laws and standards until 1989 when it was required to leave the country.....Given the lack of access since then, it has not been possible for Rio Tinto or BCL to confirm the nature, extent or cause of any alleged damage or pollution," a spokesperson for Rio Tinto at their London head-quarters told Mongabay. The controversial open-pit mine, once one of the world's largest, hit world news headlines almost three decades ago when indigenous landowners forced it to shut down. Angered about tailings and mine-waste contamination of agricultural land and nearby waterways, as well as inequity in revenue and benefit-sharing, landowners used a campaign of sabotage to halt operations in 1989, subsequently precipitating a decade-long civil war.

The mine's social and environmental legacy

Now, rusting mine trucks and machinery litter the long-abandoned mine site in one of Bougainville Island's remote mountain valleys, while gutted mine buildings have been resourcefully adapted and reoccupied by local villagers as dwellings. But rivers and streams in the vicinity remain contaminated, tailings dumps have become unstable and chemical storage areas are deteriorating. "In terms of the environmental damage and social disruption, it is a moral negligence on the part of Rio Tinto to have caused so much damage to the environment and to people's lives, and to now walk away," said Chief Dr. John Momis, president of the Autonomous Region of Bougainville. Rio Tinto claims on its website that "respect for the environment is central to our approach. Wherever possible we prevent – or otherwise minimize, mitigate and remediate – harmful effects that our operations may have."



The Nasioi people were the first indigenous peoples to force a global mining multinational to flee one of its most lucrative extractive ventures. Photo by Catherine Wilson.

However, the Bougainville Copper Agreement Act of 1967 — drafted when the region was under Australian administration as part of the former Territory of Papua and New Guinea — does not incorporate any significant environmental regulations or liability of BCL for the rehabilitation or restoration of areas affected by mining activities. "Rio is now deeply hypocritical in its blatant disregard of the higher corporate responsibility standards it says it has adopted," President Momis declared in a June 2016 media statement, following announcement of the company's divestment. "Corporate social responsibility means responsible companies accept that their responsibilities go beyond the legal requirements of the day." Lee Godden, Director of the Centre for Resources, Energy and Environmental Law at Australia's University of Melbourne, commented that: "Many of the

early agreements between mining companies and the PNG Government did not contain effective clauses for environmental damage remediation....Typically it is not possible to retrospectively amend those agreements in light of subsequent damage or subsequent international law principles that have operated to address some of the balance of power problems in these early agreements."

Putting pressure on Rio Tinto

Determined that the mining multinational should not escape accountability for environmental and social legacy issues, President Momis has called for "an international campaign to force Rio Tinto to accept its responsibilities" and sought advice on taking legal action. However, taking the matter to court requires considerable funds — which the Bougainville Government, still heavily dependent on international aid and financial support from the national government, has limited access to. "We have financial constraints and these financial constraints make it difficult for us," President Momis admitted. And while Rio Tinto's divestment resulted in the Bougainville Government acquiring an extra 36.4 percent shareholding in the Panguna mine and the PNG Government 17.4 percent (with the latter gifting its shares to "the landowners and the people of Bougainville"), their value is negligible unless the mine is in production.

Even during the 17 years of copper extraction in Panguna, which generated an estimated 1.7 billion kina in total revenue (roughly US\$1.44 billion at the time), only 1.4 percent was granted to land-owners, while 61.5 percent went to the PNG Government. Local resentment about the marked in-equity of economic benefits was one of the major factors in the escalation of the civil war. In 1989, indigenous landowners demanded compensation of 10 billion kina for the mine's detrimental environmental and social impacts, as well as benefit-sharing grievances. When this was not met by Rio Tinto and BCL, they formed a rebel group, known as the Bougainville Revolutionary Army, and used explosives to destroy the mine's power supply and bring the functioning of the mine to a standstill. In so doing, the Nasioi people of Central Bougainville became known as the first indigenous peoples in the world to force a global mining multinational to abandon one of its most lucrative ventures.



The abandoned Panguna mine pit, as it is today. Photo by Catherine Wilson.

The PNG Government responded by imposing a blockade on Bougainville in 1990 and deployed its armed forces to quell the uprising. A civil war then raged between the national military and armed revolutionary groups, wreaking widespread destruction across the islands and leading to an estimat-

ed death toll of 15,000-20,000 lives, until a permanent ceasefire in 1998. Today the long-term processes of post-conflict peace building, disarmament, reconciliation and reconstruction continue to consume the energy and resources of the government, international donors and local leaders and communities. And memories of the violence, atrocities and injustices of the conflict are still vivid in the minds of many people throughout the region. An estimated one-third of men and one in five women who were exposed to violence during the war now suffer from Post-Traumatic Stress Disorder (PTSD), while more than one in three men and women believe there is continuing lack of peace in their communities, according to <u>a recent study by the United Nations Development Program</u>.

Walking away from the mine

For at least the past seven years, Rio Tinto has been engaged in discussions with the Bougainville Government about the possibility of returning to Panguna to recommence extraction of the estimated 3 million tonnes of copper reserves remaining there. Rio Tinto's final decision last year to exit Bougainville has been attributed primarily to both the dramatic fall in commodity prices in recent years and investor risks — including substantial opposition to the company's return by landowners and communities in the Panguna mine lease area and the region's uncertain political future. "During the strategic review that led to the announcement in June 2016, Rio Tinto concluded that it would not be in a position to take part in future mining activities at Panguna and that it was in the best interests of BCL and its stakeholders to transfer our 53.8 percent shareholding to those better placed to determine the future direction of the company," the Rio Tinto spokesperson stated. However, the massive environmental legacy is still unaddressed and continues to affect the lives of indigenous communities, especially the Barapang, Kurabang, Basikang and Bakoringku clans who own the mine-pit land. For customary landowners, "the land is like a mother because we feed on the land. It's nothing compared to money. I can always go to the land for food and nourishment," Panguna landowner, Joanne Dateransi, explained.



Rivers and streams in the mine's vicinity remain polluted and unusable as sources of freshwater or fish. Photo by Catherine Wilson.

There has been no official environmental assessment of the damage since the mine was deserted. But it is known that around 300,000 tonnes of ore and water were excavated every day in Panguna and the mine tailings were discharged down the Jaba River and into the Empress Augusta Bay, while the spoil and overburdens accrued in waste dumps in the Panguna area. Local communities claim there has been no fish in the local Jaba and Kawerong Rivers for four decades. The Bougainville authorities also report that: "The levy banks built by BCL to contain the flooding of nearby areas arising as the bed of the Jaba River rose (because of the depositing of vast amounts of tailings) were breached by floodwaters over 15 years ago. River water polluted by acid leached from the crushed tailings now floods huge areas of our people's land all along the lower Jaba." And, further, a mammoth delta of tailings extends 15 kilometers (9.3 miles) into the sea on the west coast of Bougainville Island. Social impacts include the forced relocation of at least five villages, such as Dapera and Moroni, to land unsuitable for growing crops and supporting livelihoods, while families were provided with cheap, substandard housing, resulting in severe overcrowding and health problems. The original location of the villages is now a barren terrain of waste rock.



Residents of relocated villages, such as Dapera and Moroni, have endured substandard housing and land unsuitable for food production. Photo by Catherine Wilson.

Funding a cleanup

President Momis says the government is keen to facilitate an expert environmental assessment. "We are having discussions with the United Nations Environment Program (UNEP) about the possibility of organizing such a study and also a social impact study. We are also contacting international NGOs which support third world nations in the interests of preserving history, forests and ecological balance," he said. Following this, the most critical question is how a major environmental cleanup, which could cost billions, can now be pursued. One option, according to the President's office, is to set up a trust fund with potential contributions sought from the PNG and Australian Governments, as well as Rio Tinto, although, to date, Rio Tinto has not indicated any willingness to support such an initiative.

"World Bank or Asian Development Bank funding is sometimes available for this type of cleanup, but often that will mean a loan to what are impoverished governments which need to meet a range of other socioeconomic needs in their countries," Professor Godden also advised. President Momis suggests that "the only other way to fund a cleanup is through the resumption of mining. It [BCL] is now majority owned by the landowners and the Autonomous Bougainville Government and we believe the cleanup could be done concurrently with the reopening of the mine. During our discussions with them so far they have been conscious of their responsibilities." However, the capital investment required to reconstruct and reopen the Panguna mine is estimated to be about 20 billion kina (\$6.3 billion) and securing investment of this magnitude will be a challenge in the current investment climate.



Gutted mine buildings in the forested mountain valley are now being reused by local communities. Photo by Catherine Wilson.

Recommencing large-scale mining is also seen by the authorities and some landowner groups as a way to acquire the sizeable revenues needed to generate economic self-sufficiency ahead of a referendum on Independence from PNG. A major provision in the 2001 Bougainville Peace Agreement, the referendum is planned to take place by 2020. At present, only 10 percent of the Bougainville Government's annual budget of about 300 million kina derives from internal revenue. Two years ago, the Autonomous Bougainville Government, which was established in 2005, passed its first mining law, thus paving the way with a legal framework for large-scale mining to be reconsidered in the region. The Bougainville Mining Act (2015) requires mining-lease applicants to protect the environment and comply with environmental policies and regulations, and stipulates that customary landowners have ownership of mineral resources found on their land. But, while they are entitled to consultation about exploration and mining interests, as well as related benefits and employment, the Bougainville Government retains exclusive powers over the granting of mining tenements and distribution of revenues.

Nevertheless, because of the unique history of the Panguna mine and the fact that its territory is controlled by the local Mekamui Tribal Government, comprising many former rebel leaders and combatants, any development or exploitation of Panguna's resources will require the final consent of local chiefs and landowners. And reports in recent years have highlighted that a significant proportion of landowners in the Panguna mine lease area oppose large-scale mining on their customary land in the near future. "We don't need Rio Tinto or BCL," Lynette Ona of the Bougainville Indigenous Women's Landowner Association and a Panguna landowner declared. However, she added that a meeting was being planned in the near future so that people across Bougainville, not only local landowners, could voice their views on the question of mining. If there is majority consent for this to happen, "then we have to bring in a new company after Independence, so that we can fund the economy, but we don't want mining now," Ona emphasized. The "new BCL," without Rio Tinto, has only begun articulating its future plans. Any provision, in this context, for an environmental cleanup is very unclear, but will come under severe scrutiny by those most affected, given that the history of the Panguna mine, to date, is a lesson in the shortcomings of corporate social responsibility.

Seabed mining law boost

Lice Movono, The Fiji Times, April 5, 2017



Dr Pierre-Jean Bordahandy and Dr Lili Song.

PACIFIC governments may soon have answers to major concerns about seabed mining which can be useful in the formulation of laws which govern the issue. This follows a boost to the University of the South Pacific's ability to provide research based analysis and advise when it won a research grant recently. According to a statement from the University of the South Pacific (USP), two academics from its School of Law won the grant worth AUD 7000 from the Guangdong Institute for International Strategies. The USP says the grant will fund a research project which examines the development of legal framework for deep-sea mining in South Pacific Island States. The two academics, senior lecturer, Dr Pierre-Jean Bordahandy and lecturer Dr Lili Song, are based based at USP's Emalus Campus in Vanuatu where they will will conduct the research. The USP says Dr Bordahandy and Dr Song's research will evaluate selected national deep-sea mining legal frameworks developed by Pacific Island governments states which consider the United Nations Convention on the Law of the Sea and COP 21 and COP 22 agendas.

Major questions the two's research will address include:

Whether there is any major discrepancy or imbalance between the international and national regimes that will lead to the shift of deep-sea mining operations from high sea areas to areas within national jurisdiction, or vice versa?

What is the role of the principle of precaution in relation to deep-sea mining? Is there any major gap in the way deep-sea mining risks are framed in the various national regimes considered?

"According to Dr Bordahandy, the vast ocean floor of the Deep South Pacific is generally said to boast great potential of valuable mineral resources, however, its exploitation poses technical, environmental, economic challenges both to coastal states and to the international community," the USP said. Dr. Song said their analysis may help Pacific governments to make informed decisions as they legislate deep-sea mining "and to better address the various challenges presented by deep-sea mining operations." The project which started in December 2016 ends in November 2017.

Seafloor production machines arrive

April 5, 2017, The National Business



NAUTILUS Minerals says the company's seafloor production tools have arrived and will shortly commence submerged trials. Vice-president PNG operations Adam Wright said the trials would be carried out in the next four months in an existing facility on Motukea Island near Port Moresby. "This is a significant step forward in the development of the project," he said. "The trial is when we take the mining equipment submerged 10 metres deep and operate the equipment," Wright said. "There are four things that we really are validating at the trials – the stability of the equipment, the cutting efficiency (how it cuts the rock), the collection efficiency (how it can pick up the rock that's been cut) and the visualisation technology (how the machine can see under water, how the operator can see what he is doing underwater)," he said, Nautilus chief executive Mike Johnston, said: "We are delighted to be given the opportunity to complete these trials in PNG rather than overseas.

"Not only will it result in putting over K6 million into the PNG economy and employing Papua New Guineans, it will also ensure that our partner Kumul Mineral Holdings, officers from the MRA (Mineral Resources Authority), CEPA (Conservation and Environment Protection Authority), and both New Ireland and East New Britain provincial governments can participate in the trials. "It is important to note that the machines will not be deployed into the ocean. So there will be no impact on the seafloor around Motukea Island. "Instead, the machines will operate in an existing fully enclosed excavation on the island." According to Nautilus, the machines use established technology from deep sea trenching and coal mining industries and the trials will demonstrate that capability. As part of the trials, Nautilus will be training Papua New Guineans to operate the equipment.

Ok Tedi landowners to receive K1.5m

April 5, 2017, The National Business

THE Royalty Trust will pay K1.5 million to its beneficiaries in Western, bringing to almost K20 million the total payments since the Royalty Trust began, chairman Joel Dangkim says. It is an investment trust established under the Trust Deed in November 2004 and approved by the landowners of Ok Tedi Mine, Ok Tedi Mining Limited and the Government to manage 20 per cent of royalties for mine villages. This is stipulated in the agreement between the Government, Fly River government and the mine area landowners. The landowners receive 50 per cent (30 per cent cash and 20

per cent royalties) while the provincial government receives the other 50 per cent from monthly royalty payments. The Royalty Trust has grown from an investment portfolio of K6 million in 2006 to K120 million today.

It was established to oversee, manage and safeguard investments for a sustainable future for more than 4000 people (beneficiaries) in the 10 mine villages. The number of beneficiaries has since increased to almost five thousand. More than 300 landowners from the 10 mine villages attended a beneficiary awareness session hosted by the Ok Tedi Landowners Royalty Investment Trust on Friday in Tabubil. The 10 mine villages are Atemkit, Bultem, Finalbin, Kavorabip, Migalsimbip, Wangbin, Ankit, Kumkit, Niosikwi and Okteditau. The Royalty Trust board consists of eight trustees – two from the Government (Mineral Resources Authority and Treasury), two independent trustees and four locals representing the villages.

Mining industry faces setback

April 5, 2017, The National Business

THE PNG mining and petroleum industry is going through a challenging period, according to executive director of PNG Chamber of Mines and Petroleum Greg Anderson. Anderson said although commodity prices had improved for PNG's resource commodities, including oil and gas, they were still relatively low. He said in the chamber's newsletter, this was reflected in the national budget passed in November 2016 which included estimated company tax from the resource sectors of K21.9 million. "Despite this, major positive developments were achieved last year. Within a space of a month in June 2016, PanAust Ltd, the Australian miner owned by China's Guangdong Rising Assets Management Co Ltd, on behalf of its joint venture with Highlands Pacific, applied to the Mineral Resources Authority for a special mining lease for its Frieda River project. "The Morobe Mining Joint Venture made up of Newcrest Mining Ltd and Harmony Gold (also) applied for a special mining lease for their Wafi-Golpu project in Morobe." Anderson said although both projects were still awaiting approval, which could happen within the next 12 months, they were still a long way from being developed.

Nautilus to test seafloor production tools in PNG submerged trials Henry Lazenby, Mining Weekly, 4 April 2017



Marine mining hopeful Nautilus Minerals will shortly start submerged testing of its fleet of seafloor production tools, following the equipment's arrival in Papua New Guinea (PNG). "We are delighted to be undertaking submerged trials in PNG. The trials will result in money and investment going into the PNG economy, and the employment of Papua New Guineans in 'state of the art' technology,

which are some of the key benefits of seafloor production. The trials also allow us to work closely with our partner Petromin, government officers from the various government agencies, as well as representatives from Provincial Governments of New Ireland and East New Britain," CEO Mike Johnston stated Monday. The submerged trials will happen in an existing facility on Motukea Island, near Port Moresby in PNG. The company last month stated that it remains on track to achieve production from the Solwara 1 project, offshore PNG in the Bismark Sea, in the first quarter of 2019. The company's objective is to develop the world's first commercial high-grade seafloor copper/gold mine and launch the seafloor resource production industry.

Nautilus formed a joint venture company with PNG's nominee, Eda Kopa (Solwara), in December 2014 to mine high-grade polymetallic seafloor massive sulphide deposits. Nautilus has an 85% shareholding and Eda Kopa 15%. Nautilus announced in September a revised work programme, pending the company successfully raising the required capital by June. It entails a more staged approach, moving the Nautilus equipment integration phase of vessel construction out until after the vessel has been delivered by Fujian Mawei Shipyard and Marine Assets Corporate in the fourth quarter of 2018, resulting in a 12-month delay to the original schedule.

Nautilus submersible trials will start soon

BY ROSALYN ALBANIEL, Post-Courier, April 4, 2017

THE Seafloor Production Tools (SPTs) developed by Canadian Miner Nautilus Minerals for the World's first ever deep sea mining have arrived in the country and will shortly commence submerged trials. Nautilus vice president Adam Wright, who flew in from Brisbane where he is based said the equipment was shipped mid-March from a ship yard where they had been stored, arriving in Port Moresby on Monday. Mr Wright told the Post-Courier the equipment would undergo a series of trials over a four to five month period at Motukea island. He said the four things that the Canadian miner will be testing are the stability of the machine, how efficiently they can cut rock, how efficiently they can collect rock and how well the operator can control and monitor submergible using visualization technology.

"This really puts the spot light on PNG in taking the lead role in developing deep sea mining and this is a joint initiative between Nautilus and PNG through Kumul Mineral Holdings Limited. Nautilus chief executive officer Mike Johnston in commenting on the arrival of the machine said "We are delighted to be given the opportunity to complete these trials in PNG rather than overseas. Not only will it result in the addition of over K6million into the PNG economy and employing of thousands of Papua New Guineans. "It will also ensure that our partner Kumul Mineral Holdings, government officials from the Mineral Resources Authority (MRA), Conservation and Environment Protection Authority (CEPA) as well as from New Ireland and East New Britain provincial governments can fully participate in the trials.

"The machines will not be deployed into the ocean so there will be no impact on the seafloor around Motukea Island Instead the machines will operate in an existing fully enclosed excavation on the island," the CEO said. Meanwhile, Mr Wright said after the trials have been concluded the equipment will be shipped back to China to be integrated onto Nautilus' production support vessel which he added is currently being built in a shipyard in there. "Once the ship completed and completed its sea trials then that vessel will come back to PNG," Mr Wright said. He said the firm remains confident that the commissioning of the mining operation will fall in the early part of 2019.

Ramu NiCo faces huge deficit

Post-Courier, April 4, 2017

THE Ramu nickel-cobalt project in Madang is facing a huge deficit balance accounting to more than K100 million despite achieving 100 per cent design capacity beginning this year. The deficits are due to the declining commodity prices and serious April 2016 fatality at Basamuk refinery forcing the project to shut down indefinitely at the time incurring huge production losses. Vice President of Ramu NiCo, Zhao Deqian announced this during the monthly KBK elders' project update meeting in KBK on Saturday. Mr Zhao was accompanied by Executive Deputy General Manager KBK Mine Li Bentao and Deputy General Manager Commercial KBK Mine Liu Tianhua. "We have achieved milestone production reaching 109 percent design capacity but at the time when nickel price is at US\$13,000/ton low and production loss during Basamuk April 2016 incident costing hundreds of millions of Kina deficit.

"We are still recovering from production loss but capable to sustain ourselves given the current production stability," Mr Zhao said. He said the project operation cost can sustain itself from little money made including salary for employees and the deliverance of Project MOA commitments. "We are now emphasising on safety issues and taking strict control on safety standards on site so we do not repeat the same Basamuk April 2016 incident. We cannot afford another production loss," Mr Zhao said. He said the company has identified some priority areas to cut down costs including the reduction of Chinese employees and increase of national employees through localisation programs. "Our aim now is to make profit, deliver benefits to landowners and ensure high safety standards," he said. The Vice President acknowledges the landowners for their support and asked for their continuous support for the Project until it clears off the deficit balance.

Foreign gas companies show interest in Western

March 30, 2017 The National Business

WITH a flurry of major-led merger activity in PNG's big gas fields over the past three years now easing, there are interesting developments in the nation's west. Horizon Oil is considering a \$1.3 billion (K3bn) "float-in" LNG plant and Spain's Repsol is said to be looking to sell out. InterOil founder Phil Mulacek, recently unsuccessful in scotching a \$3bn (K7bn) takeover of InterOil by Exxon, is in the mix, having about a year ago taken a 19.9 per cent stake in ASX-listed Kina Petroleum, one of Repsol and Horizon's partners. Chinese interest is also said to be high. The completion of the InterOil takeover caps three years of jostling for InterOil's big Elk/Antelope fields, after French major Total entered them at the end of 2013. Oil Search then tried to buy InterOil and scupper the Total deal before Exxon trumped the InterOil bid with a takeover only given final court approval last week.

A lowball \$11bn (K25bn) scrip bid for Oil Search by Woodside Petroleum, which failed to gain traction, also provided excitement in 2015. At the smaller fields in the Western Forelands, Horizon, whose shares have rebounded after a long oil-price and debt-related descent, has stakes with Repsol in all appraised gas fields. This gives the pair two-thirds of a contingent resource of up to 2.5 trillion cubic feet of gas and 70 million barrels of condensate. "We're through the pre-feasibility stage in looking at stripping the condensate and sending the gas to the coast for LNG," Horizon managing director Brent Emmett told The Australian. "We intend to go into pre-FEED (front-end-engineering and design) studies later this year." The project, known as Western LNG, would export the gas through a small 1.5 million-tonne-a-year LNG plant at Daru Island in the Gulf of Papua. – The Australian

Call for people to be relocated after PNG's Porgera mine raid Radio New Zealand, 30 March, 2017



Photo: Supplied/ McDiyan Robert Yapari

A human rights group in Papua New Guinea is calling for 10,000 people near the Porgera mine to be relocated following a police operation last weekend. The Akali Tange Association says 50 houses were burnt down in the police raid in a village where 100 houses have been destroyed previously. The Association Chairman Langan Muri said three girls had reported being raped during the raid and more people were coming forward with complaints. He said they believed the mine co-owners, Barrick Gold commanded the operation by police, who were employed by the company. He called for Barrick and the government to take urgent action.



The aftermath of the Porgera fire. Photo: Supplied/ McDiyan Robert Yapari

"They should relocate the entire village. Let the mining activities go ahead. People and pets, children playing around the mine site and the company seems to be saying illegally trespassing and police every now and then, shooting people, raping people, burning down houses." Barrick Gold denied involvement in the police operation and said only 18 structures were removed. **NZ Maori blasts EPA decision to extend seabed mining hearing** The New Zealand Herald, 28 March 2017



Te Runanga o Ngati Ruanui Trust has blasted a decision to extend the hearing into Trans Tasman Resources' plan to mine ironsands from the seabed off South Taranaki. The Environmental Protection Authority (EPA) hearing was due to finish on March 20 but has been extended until May 31. It then has 20 days to make a decision. The EPA delayed the completion date after more investigation was needed into sediment plume modelling, and working out worst case scenarios. Te Runanga o Ngati Ruanui kaiarataki Debbie Ngarewa-Packer said the trust along with the several fisheries organisations, including Talley's Group Limited and Fisheries Inshore New Zealand, opposed the extension because it "unreasonably added cost, time and effort to an application that was already seen as inadequate".

She said there had been "a clear one-sided advantage throughout the whole process". Ngarewa-Packer said there was an allowance under law to extend the hearing but the scales were tipped in the wrong direction. "Trans Tasman Resources are set up to focus on one thing, while the hundreds who oppose this can only draw on a finite amount time and money. "As it stands, TTR have failed to dispel any of the uncertainties brought up during the hearings to date. "So why give them more time to address the numerous gaps in their own information? "If it doesn't stack up now the project should be rejected outright." She said the delay was another "questionable act by the EPA" which had previously "refused to hold the hearings in the area that would be affected most". It had also wrongly redacted information, she said. Te Runanga o Ngati Ruanui chairman Haimona Maruera Jnr said it "appeared the authority was doing everything it could to get the project over the line". "Moving the goal posts to suit one side is shameful and highlights the unfortunate trend of playing games with our community's future." He called the process "shambolic and often confusing". "…we have lost all faith in the EPA and doubt it can uphold the fairness the authority should stand for.

"Our people have fought hard and fairly, yet the burden is again placed on us to exhaust further time, money and effort to protect our rights," Maruera said. In announcing the extension, EPA chair Alick Shaw said its Decision Making Committee (DMC) had taken into account the interests of the parties to the hearing, including the additional time and costs. "However the DMC is conscious of its obligation [under law] to base its decision on the best available information and consider that the extension serves the interests of the community in ensuring that the DMC is able to achieve an adequate assessment of the application." He said the DMC "thanked all parties for their contributions to the hearing up to this point. "The DMC have received a considerable amount of information and heard a wide range of views from a large number of submitters and expert witnesses. "Much time, effort and thought has gone into the evidence and representations that have been heard," Shaw said. **Police target 'illegal' activities at Barrick's Porgera mine: Houses razed but no arrests** Martyn Namorong, Namorong Report, 28 March 2017



Aerial view of police operation in Wangima, Porgera-image Barrick Niugini

Barrick Niugini Limited has confirmed allegations made by the Akali Tange Association that a Papua New Guinea police operation on the 25th of March led to the destruction of homes belonging to the villagers of Wangima near the giant Porgera gold mine. The Wangima settlement is located on the slopes of Mt Peruk on the perimeter of the Porgera Mine pit. According to Mr McDiyan Robert Yapari of the Akali Tange Association of Porgera, "PNG police Mobile Units forcefully evicted residents from Wingima village near Barrick's Porgera gold mine and burnt down some 150 houses." Yapari further alleged that no prior warning was given to the residents of Wangima. Barrick has however disputed these claims and said in a statement that "approximately 18 structures were removed in the police operation." Barrick further added that the "police operation was conducted under warrants issued by the Porgera District Court, and that notices of eviction had been previously provided by police to persons residing unlawfully in the operation area."

However according to Mr Yapari, locals claim that the police had informed them that they were acting on company orders. Mr Yapari further claimed that this was "the third time Barrick and its allies are burning down Wingima Village." Yapari further alleged that several women were sexually assaulted and men were beaten during the raid. Barick and the Porgera Joint Venture management have responded to these allegations by appointing former Chief Ombudsman Mr Ila Geno, the Independent Observer of Porgera Police Operations, to investigate the reports. Porgera mine management distanced themselves from the raid stating "that mine personnel had no involvement in or prior knowledge of the police operation." However Mr Yapari pinned the blame squarely on the mine management stating "you are paying for the food and accommodation and fuel of the police, and they are guarding your gold, you have a responsibility."

Yapari called for an independent investigation into the matter and for partners in the Porgera Joint Venture to provide humanitarian assistance. Barrick has urged the government of PNG to investigate the police operation and has stated that it will consider any requests for humanitarian assistance. The Porgera Gold Mine employs over 2,500 Papua New Guineans, and over the life of the mine it has contributed approximately 10% of Papua New Guinea's total annual exports. On an annual basis, the Porgera Gold Mine pays more than K34 million on royalties, over K109 million on taxes and duties to the National Government, more than K9 million on the Government-owned Tax Credit Scheme (TCS), spends over K3 million on highway maintenance, and over K1 million annu-

ally on donations, among other benefits from the mine. The mine has however been dogged by human rights abuses including the infamous rapes of local women by mine employees. A quasijudicial settlement of that matter has been heavily criticized by international legal experts including the <u>Harvard School of Law</u>.



Location of Wangima settlement relative to the Porgera Mine-image Barrick Niugini

OTML's 30 years of production

THIS year Ok Tedi Mining Limited (OTML) will celebrate its 30th consecutive year of shipments to its six Japanese smelter company customers. Post-Courier, March 28, 2017

THIS year Ok Tedi Mining Limited (OTML) will celebrate its 30th consecutive year of shipments to its six Japanese smelter company customers. From 1987 until the end of 2016 Ok Tedi has sold 7.3 million tonnes of copper concentrate to the smelters. To celebrate this milestone, representatives from Ok Tedi's six Japanese smelters, two buyers' agents, four Japanese trading companies and resource project investors, and two Japanese shipping companies visited Ok Tedi mine operations from March 22-24. OTML managing director and cheif executive officer Peter Graham said it was an honour to meet with the firm's Japanese customer representatives and agents in Papua New Guinea to be able to celebrate the long standing, positive relationships. Mr Graham said the visit allowed Ok Tedi to again thank its customers for their support, particularly through the difficult period in 2015/2016 when the operations were temporarily suspended due to dry weather.

The delegates visited OTML's Kiunga Port and the Mine and Processing Plant to understand the production and logistics processes. General manager, Sumitomo Metal Mining Co. Ltd, Toru Higo said on behalf of the delegation: "We'd like to express our deepest gratitude to everyone at the Ok Tedi mine for the invitation to come to the mine. "We seldom have the opportunity to visit Papua New Guinea. Ok Tedi cares for the environment and the local people and has made a big contribution to PNG society. We consider OTML a success model of a mine owned and operated by the government," he said. "We Japanese smelters strongly hope to procure the Ok Tedi copper concentrate for a long time. We sincerely wish to continue this relationship between OTML and the Japanese smelters," Mr Higo said.

Ok Tedi's Japanese customers visit mine

March 28, 2017, The National Business

OK Tedi Mining Limited is celebrating its 30th consecutive year of shipment with its six Japanese smelter company customers. From 1987 to the end of last year, Ok Tedi sold 7.3 million tonnes of copper concentrate to the Japanese smelters. The company in a statement said to celebrate the milestone, representatives from Ok Tedi's six Japanese smelters, two buyers' agents, four Japanese trading companies and resource project investors, and two Japanese shipping companies visited its mine operations last week. Managing director and chief executive officer Peter Graham said it was an honour to meet their Japanese customer representatives and agents in PNG to celebrate the longstanding positive relationships. Ok Tedi again thanked the customers for their support, particularly through the difficult period in 2015/2016 when the operations were temporarily suspended because of the dry weather. The delegates visited OTML's Kiunga Port and the mine and processing plant to understand the production and logistics processes. General manager of Sumitomo Metal Mining Co Ltd Toru Higo on behalf of the delegation thanked Ok Tedi for the invitation to come to the mine. "We seldom have the opportunity to visit PNG," he said

Porgera police squads accused of burning 150 houses and raping women

Radio New Zealand, 27 March, 2017

A human rights group in Papua New Guinea is accusing police of burning down 150 houses in a village near the Porgera Gold Mine, during an early morning raid over the weekend. The Akali Tange Association also alleges up to eight women were gang-raped and six men beaten during the raid. The group's executive officer, McDiyan Robert Yapari, said police mobile squads forcefully evicted residents from Wingima village and it is the third time the village has been burnt down. Mr Yapari said he had been informed by a local policeman that the raid was ordered by Barrick Gold, which co-owns the Porgera Mine. Earlier this month, the association joined calls for Canada to appoint a mining ombudsman to monitor Canadian mining companies, including Canadian company Barrick Gold, which co-owns Porgera. It said an ombudsman would finally provide some justice for victims as well as holding mining companies to account. Barrick did not immediately respond to a request for comment.

World's First Experimental-Sea Mining Venture Set to Launch in 2019

Greg Walters, Seeker, 24 March 2017



Remote-controlled robots will journey to the bottom of the ocean in search of copper, nickel, cobalt, gold, and platinum as global demand for minerals surges.

The world's first deep-sea mining operation will [may] kick off in early 2019 when a Canadian firm, Nautilus Minerals Inc., lowers a trio of massive remote-controlled mining robots to the floor of the Bismarck Sea off the coast of Papua New Guinea in pursuit of rich copper and gold reserves. The machines, each the size of a small house, are equipped with rock-crushing teeth resembling the large incisors of a dinosaur. The robots will lumber across the ocean floor on mammoth treads, grinding and chewing the encrusted seabed, sending plumes of sediment into the surrounding waters and killing marine life that gets in their way. The smallest of the robots weighs 200 tons. "A lot of people don't realize that there are more mineral resources on the seafloor than on land," said Michael Johnston, CEO of Nautilus, by phone from the company's field office in Brisbane, Australia. "Technology has allowed us to go there." If Nautilus succeeds, an undersea gold rush could be at hand. Over two-dozen contracts have already been granted to explore hundreds of thousands of square miles of ocean floor by a United Nations body called the International Seabed Authority (ISA), which regulates areas of the seafloor that lie outside of any national jurisdiction. "In the seabed, resources are incredibly rich," said Michael Lodge, Secretary-General of the ISA. "These are virgin resources. They're extremely high-grade. And they are super-abundant."



An Auxiliary Cutter goes along the sea floor first, removing rough terrain and creating benches for the other machines to work on. It has a boom-mounted cutting head for flexibility



The Collecting Machine gathers cut material by drawing it in as seawater slurry with internal pumps and pushing it through a flexible pipe to the riser and lifting system

Analysts warn that population growth and a transition to low-carbon economies will test global supply constraints for minerals. Indeed, current levels of mining exploration are not keeping pace with future demand, according to a peer-reviewed paper published in March by a team of researchers led by the University of Delaware's Saleem Ali. The prospect of mineral demand outstripping supply has led an increasing number of firms to consider operations at the bottom of the ocean, where reserves of copper, nickel, and cobalt are thought to be plentiful, along with lesser amounts of gold and platinum. "It's no exaggeration to say that there are thousands of years' supply of minerals in the seabed," Secretary-General Lodge said. "There is just absolutely no shortage."

Nautilus says early tests show their Bismark Sea site, called Solwara-1, is over 10-times as rich in copper as comparable land-based mines, with a copper grade above 7 percent versus an average 0.6 percent grade on land. The site also boasts over 20 grams per ton of gold, versus an average grade of 6 grams per ton on land. Many of the world's best options for surface mining have long since been explored and developed, according to Thomas Graedel, an industrial ecologist at Yale University. "The planet has been extensively explored on land," he said by phone from New Haven. "I think industry will continue to want to explore for new potential deposits of minerals." Indeed, mining the ocean floor has been under consideration for decades, but seen as a remote possibility.

In one famous case in 1974, the CIA used a fake ocean floor mining expedition, ostensibly backed by the eccentric billionaire Howard Hughes, as cover for an attempt to hoist a sunken Soviet submarine off the coast of Hawaii. But now, the practice is shifting from fantasy to reality — a fact that is causing alarm among environmental groups who argue that not enough research has been done to prove seabed mining is ecologically sound. "There are too many unknowns for this industry to go ahead," said Natalie Lowrey of the Australia-based Deep Sea Mining Campaign, which is calling for the practice to be banned. "We've already desecrated a lot of our lands. We don't need to be doing that in the deep sea." Lowrey worries that the plume of seafloor sediment stirred up by the mining robots could travel with sea currents, disturbing ocean ecosystems. Sediment clouds could prove harmful to filter-feeders, environmentalists argue, undercutting the lower rungs of the food chain and potentially causing knock-on effects for other creatures.

"There's a serious concern that the toxicity from disturbing the deep sea can move up the food chain to the local communities," who live along the coast of Papua New Guinea, she said. Johnston of Nautilus said his company is taking the sediment plume issue seriously, and that the company's machines are designed to minimize the undersea cloud through the collection procedure itself. "When we're cutting, we have suction turned on," he said. "It's not like we're blowing stuff all over the place. We're actually sucking it up. So the plume gets minimized through the mining process." Johnston added, "We go to great efforts to minimize the impact of the plumes. We're quite confident that the impact from these activities will be significantly less than some of these people claim." At Solwara-1, Nautilus is going after a type of deposit known as Seafloor Massive Sulfides (SMS), which form next to subsea hydrothermal vents at the margins of tectonic plates. The deposits, which include copper, gold, and potentially other valuable minerals, collect after cold water seeps into the earth and becomes geothermally heated, dissolving metals and sulfides from the surrounding rocks before being spewed back out of the vent at temperatures up to 400 degrees Celsius and collecting on the sea floor — along with the minerals brought up from below.

The mining robots have been designed to operate in near-freezing temperatures, under pressure 150 times greater than at sea level. The first robot, the auxiliary cutter, carves a level path to make way for the second machine, the bulk cutter, which is equipped with a wide, powerful cutting drum. The third robot, called the collecting machine, follows behind them, slurping up the seawater slurry with a consistency like wet cement through internal pumps before sending the material to the ship at the surface via a riser system. On the ship, the water is filtered, and solids larger than eight microns are removed, before being returned back into the ocean. The cargo is then transferred to a transport ves-

sel and sent directly to customers in China. Now, as Nautilus prepares for its maiden voyage, many will be watching from the sidelines — and if it succeeds, imitators will likely try to follow. "If Nautilus goes ahead, it's going to open the gateway for this industry," Lowrey said.

The Sinking Titanic: German Government facilitating Deep Sea Mining PNG Mine Watch, 23 March 2017



NGOs and civil society from Papua New Guinea, Australia, Germany and around the world are calling for a ban on seabed mining. They challenge the development of regulations[1] by the International Sea Bed Authority (ISA) and the German Government's push to strengthen these regulations this week at a meeting in Berlin[2]. "Enough is enough!" stated Pastor Matei from the <u>Alliance of Solwara Warriors</u>, Papua New Guinea (PNG). The Solwara 1 Project is risky business as it is an experiment and people do not want to be used as guinea pigs. The Bismarck Sea is not a science laboratory for Nautilus Minerals Inc. "People from the Pacific are custodians of the world's largest oceans and it is these oceans that connect everyone in the Pacific. The oceans are as important as land. They are sources of food and livelihoods and they are of strong cultural and spiritual importance. Experimental seabed mining threatens this."

"The demand for a ban on deep sea mining reflects the views of communities in PNG and across the Pacific. Our opposition is <u>strong and growing</u>[3]." Natalie Lowrey, Deep Sea Mining campaign stated, "The demand by Pacific communities for a ban on this frontier industry is joined by the Deep Sea Mining campaign and leading <u>NGOs in Germany</u>. The development of regulations for deep sea mining is akin to loading more passengers onto a sinking Titanic. Report after report[4] demonstrate that the world's oceans are already on the brink of peril." "Recent research from the MIDAS consortium indicates a concrete risk that deep sea mining would lead to serious irreversible harm. The ISA and the German Government are paving the way for yet another assault upon our oceans – an unprecedented and unnecessary assault."

"The demand for a ban highlights the need to debate whether we should open up our oceans seabed to mining when alternatives are available. Germany and the EU should promote sustainable sources of minerals. such as urban mining. Christina Tony, from the Bismarck Ramu Group in PNG said, "In Papua New Guinea and across the Pacific we do not see experimental seabed mining as meeting any of our communities' needs, nor does it provide a benefit for humankind as a whole. In PNG, and across the world, we already have plenty of land-based mines and they have plenty of problems." "Imposing this industry on us is another form of colonisation. By promoting experimental seabed mining, Germany and the EU are complicit in continuing the 'empire' tradition in which it believes it should be free to rape and pillage the Pacific for its own profit."

NOTES

[1] See submissions by the Deep Sea Mining Campaign: http://www.deepseaminingoutofourdepth.org/wp-content/uploads/Deep-Sea-Mining-Campaignsubmission-to-the-ISA-Nov-2016.pdf and Seas At Risk:

https://www.isa.org.jm/files/documents/EN/Regs/DraftExpl/Comments/SAR.pdf

[2] Organised by the German Federal Institute for Geosciences and Natural Resources the 'Towards an ISA Environmental Management Strategy' workshop is being held in Berlin this week 19-14 March. The meeting aims to progress an ISA Environmental Management Strategy for deep sea mining.

[3] <u>Lutherans Walk 9 days Across Highlands Region Campaigning Against Deep Sea Mining in Papua New Guinea</u>, EMTV; VIDEO: <u>Lutherans Campaign Against Deep Sea Mining in PNG</u>, EMTV online and <u>Caritas PNG Forum call for ban on Sea bed mining</u>

[4] Reports include: World Wildlife Fund (WWF) <u>Reviving the Ocean Economy</u> (2015) and <u>The Living Planet</u> (2016); International Union for Conservation of Nature (IUCN) <u>State of the Ocean</u> (2013) <u>and Explaining Ocean Warming</u> (2016); and the <u>United Nation's World Ocean Assessment</u> <u>2016</u> which is a global inventory of the state of the marine environment and problems threatening to degrade the oceans.

We must protect our seas

Editorial, The National, March 20, 2017



These giant seabed mining machines will do enormous damage

PRIME Minister Peter O'Neill has conveyed another powerful message about the imminent threats of pollution, illegal fishing and climate change to Pacific Island nations, including Papua New Guinea. And he has called on island nations around the world to come together for global action to protect their communities from marine damage. O'Neill told leaders attending the Pacific Regional Preparatory High-Level Meeting for the United Nations Conference on Oceans in Suva, Fiji, that they had valid marine resources concerns that must be taken up by the global community. "Pollution, illegal fishing and climate change destroys ecosystems in island nation maritime areas. We did not cause these problems but these problems cause damage to our communities today and into the future." The meeting in Suva on Thursday and Friday focused on building consensus and establishing a way forward to seek the global community's support and assistance in preventing the destruction of marine resources in the island nations. This is the third occasion that O'Neill has raised concern about the imminent dangers that the Pacific Island community faces.

In 2015, he warned to global leaders attending the COP21 UN climate change conference in Paris to find a workable solution to save lives and protect island communities. And last year, he warned leaders attending the Pacific Island Forum (PIF) meeting in Pohnpei, Federated States of Micronesia, that the threat posed by illegal fishing on their economic survival was growing. As chairman of

the PIF, O'Neill is spearheading the Pacific Island community's cause for greater attention by the global community on these pertinent issues. This is part of his address to leaders at the Suva meeting: "Our ocean and its vast resources, not only provide nourishment for us, it also provides 20 per cent of the world's protein and economic returns for our countries from fisheries. Our ocean is a highway for significant shipping and trade generating significant economic value but with minimal returns to us. But, we are seeing alarming statistics about the health of our ocean; of the poor state of our coral reefs caused by coral bleaching and pollution, of the negative consequences for our marine biodiversity and of the levels of Illegal Unreported and Unregulated fisheries.

So we need to not only make declarations but to accelerate and step up our actions and demand the same of others to restore our ocean's health, through embracing integrated ocean management approaches and sustainably managing and conserving our coastal, inshore and ocean resources." Insofar as Papua New Guinea is concerned, the effects of climate change are already evident in the Carterets Islands, islands in Manus and the outer atolls in coastal provinces that have experienced the rise in the sea level. While climate change needs a global approach and solution, illegal fishing remains a sticky point for individual island nations. The PIF meeting last September resolved for greater action in dealing with illegal fishing and related activities. The increase in illegal fishing and human trafficking, especially by fishermen and companies of Asian origin, in our region is a growing concern.

These illegal activities seriously affect the economic survival of the small island nations, especially when large importers like the European Union and the United States raise questions and threaten to impose trade restrictions. Efforts by the fisheries authorities of the various, mostly ill-equipped island countries and their collective voice, the Forum Fisheries Agency, have been largely unsuccessful in effectively curbing illegal fishing. In a way, the PNG National Fisheries Authority (NFA) is far better placed to monitor and report on illegal fishing. The NFA has, over the years, drawn on the assistance of the maritime element of the PNG Defence Force and the Australian Navy to patrol our waters. For the smaller island nations, a lot is left to goodwill and hope that sovereign territorial rights will be respected by our neighbours. Still, we may never get to know the full extent of what is happening on the high seas. Ongoing incursions into territorial waters are indicative of blatant disrespect for sovereignty. And such a practice does nothing to help mutual relations between countries. Repercussions of illegal fishing are not only about economic losses for small island nations but there are also greater environmental concerns involving the maintenance of marine species.

Deep sea tailings not affecting sea level: Ramu Nico

March 22, 2017 The National Business

A GROUP of villagers living along the north coast of Madang has been told that the deep sea tailings placement system at the Basamuk refinery operated by Ramu NiCo (MCC) is safe. This followed the Sumkar district leg of the system awareness conducted last Wednesday by the company, Madang provincial government mines coordinator John Bivi, the Mineral Resources Authority and the Conservation and Environment Protection Authority. The DSTP awareness is a requisite environment obligation observed by the project to educate locals in and near the project impact areas to understand the operations and disposal locality, marine ecology and implications.

Officers from Ramu NiCo Health, Safety and Environment explained to the villagers the processes used to monitor the DSTP at the refinery. The awareness at Matugar vilolage was attended by Sumkar district chief executive officer Ben Parando, Sumgilbar local level government president Michael Badui, villagers and primary school students. The villagers raised their concern regarding the rising sea level which is affecting their shoreline. They wanted to know if that was associated

with the dumping of tailings into the ocean. Ramu NiCo officers said climate change was a global issue affecting many coastal and low lying island communities in Papua New Guinea and the world.

Awareness on deep sea tailings

Post-Courier, March 22, 2017

THE people of Matugar village in Madang Province have been assured that the deep sea tailings placement (DSTP) system at the Basamuk refinery operated by nickel-cobalt mine developer, RamuNiCo (MCC) is safe. The locals were also told that the system is adequately appropriate and avoids causing significant changes to the mine ecosystem. The information was part of the Sumkar district leg of the DSTP awareness conducted last Wednesday. The awareness was conducted by RamuNiCo and the Madang provincial government mines coordinator, John Bivi and the State team from the Mineral Resources Authority (MRA) and Conservation and Environment Protection Authority (CEPA). The DSTP awareness is a requisite environment obligation observed by MCC.

This is to educate locals within and near the project impacted areas to thoroughly know and understand the DSTP operations and its disposal locality, marine ecology and implications. Health, safety and environment officers including Jay Jerry, Shiela Danga and Steve Opur, did the awareness using educational charts and graphs to simplify the process of disposal to the villagers on how RamuNiCo uses the DSTP system and its six major components to neutralise waste before it is discharged into the deep sea at Basamuk bay. The awareness at Matugar was also attended by the chief executive officer of Sumkar, Ben Parando along with the LLG president of Sumgilbar LLG and the local non-governmental organisation chairman, Michael Badui.

Meanwhile a number of issues regarding the rising sea level which is affecting the shorelines in Matugar were also raised by the community wanting to know if it was associated with the dumping of tailings into the ocean. Officers clarified to the villagers that Climate Change was a global issue affecting many coastal and low lying island communities in PNG and the world. There were a number of critics in the village who blamed companies dumping their waste into the ocean thus causing the rising sea level in the area. However, the awareness team refuted these claims and clarified that DSTP was not responsible for the rising sea level current faced by the villagers at Matugar.

Fiji villagers claim mine spill destroying fishing grounds

Luke Rawalai, Fiji Times, March 20, 2017



Shalend Prasad points at a water outlet from the bauxite mine alleged by members of the public to be waste water from sediment ponds within the mine. Picture: LUKE RAWALAI

PEOPLE in Nasarawaqa, Bua and those living along the Dreketi River claim the decline in marine resources around the area is due to spillage of waste water from the bauxite mining in Naibulu, Dreketi. Sasake villager Apisalome Tumuri claimed that the spill off from the mine during heavy rain forced marine life out from the area to the deep sea. The 52-year-old fisherman claims there had been a lot of changes in their fishing ground since mining began in nearby Naibulu, Dreketi. Mr Tumuri said fish, crabs and bech-de-mer had begun disappearing from their fishing grounds during the past three years. He said in the past, villagers could pick shellfish and fetch mud crabs from nearby mangroves. He said they now had to go out into the open sea to get these.

Dreketi resident Losana Lomani said the Dreketi River had turned red last week after heavy rain was experienced in the area. Ms Lomani said they learnt that the muddy water originated from the mining site and that women in the area found it hard to find freshwater mussels in the river. XINFA Aurum Exploration Fiji Ltd's senior officer Sang Lei said the muddy water witnessed by villagers was normal rain run-off from land. Mr Lei said all waste water from the mine was contained in the sediment pond at the mine and that none had seeped into the waterways as claimed. Responding to queries, permanent secretary for Lands and Mineral Resources Ministry Malakai Finau said it was normal for the sea to turn muddy during heavy rain.



Fiji villagers complain of 'red' sea

Luke Rawalai, Fiji Times, March 17, 2017

The sediment pond at the XINFA Bauxite mine in Naibulu, Dreketi which is said to have spilled waste water. Picture: LUKE RAWALAI

XINFA Aurum Exploration Fiji Ltd has strongly denied claims that sediment ponds at their mining site were overflowing, spilling into waterways and ending up in the sea. The sediment ponds hold wastewater from the mining process. The company made the statement after people raised concerns regarding the change in water colour during adverse weather experienced last week in Nasarawaqa, Naibulu, Nakalou and surrounding areas. The company's senior officer San Lei said it was just normal water runoff from land. Mr Lei said all wastewater from the mine was contained in the sediment pond at the mine and none had seeped into the waterways as claimed. However, villagers of Sasake in Bua claimed heavy rain in the mine area caused spill-off from the sediment ponds that ended up in the sea.

Viliame Bailato, who claims to have fished in the area for 20 years, said seawater around the village turned red during the heavy rain, claiming it was soil carried by rain water from the mining site and the sediment pond. Mr Bailato said the normal run-off from land during heavy rain was different from what they experienced last week. He said last week they had to travel to open sea to catch fish because there were no fish within the lagoon. The 53-year-old said the incident had been happening for a while now, claiming the spillage had even driven mud crabs and other marine organisms from their shores. Nasarawaqa fisherman Oliva Uga alleged fish numbers in the area had dwindled because of the spillage.

Mr Uga said the waters in the area used to be known for the schools of mackerel or salala. He said for three years now they had no sign of the fish in their fishing grounds. Other fishermen in both areas claim waters within the Nasarawaqa, Dreketi and Nakalou areas had been affected by the spillage last week. Responding to questions from this newspaper, permanent secretary for the Lands and Mineral Resources Ministry, Malakai Finau, said muddy water experienced last week was the result of normal run-off from land. Mr Finau said it was normal for the sea to turn muddy during heavy rain, adding this even happened at the Rewa River. He said officials from the ministry had been at the mine to verify claims from people, adding they would send them to the mine site again to verify the current claims.

Government gives K300m for Plaza

BY KEVIN TEME, Post-Courier, March 17, 2017

THE PNG Government has committed K300 million for the building of the five star hotel – Star Mountain Plaza at Hohola in Port Moresby. Managing Director of Mineral Resource Development Company Augustine Mano confirmed this yesterday on a tour of the site. Mr Mano said this is a milestone in itself as it is also the first time the government has partnered landowners in a major project as such. "The State participation on this project shows a true partnership in every sense between the landowners and the government. We've had two NEC decisions, one in 2014 on the concept which the government had approved through the NEC and the second was in 2015 which is the project agreement," Mr Mano said. He revealed that the Government lived up to its commitment and has now committed K300 million for this project. "I want to thank you the government in having faith with the landowners to invest in such an iconic project like this," Mr Mano said. He said the project comprises two phases, the first of which will be completed two months before the APEC meeting in November 2018 while the second phase will continue thereafter.

The project is being constructed at a cost of K1.2 billion with landowners as major shareholders at 80% and the government with the remaining 20 percent. He reiterated this was a first such collaboration between landowners and the State. Meanwhile, project manager Brian Eldridge said stage one includes the Hilton hotel, convention center, combined facilities and car park while stage two will include Hilton residential tower with 200 apartments. "The earthwork contract, negotiated with Vuksich and Borich (PNG) Ltd is delivered on budget including the car parks which has been completed and also on budget," Mr Eldridge said. He said 30,000 cubic meters of bulk earth works has also been completed and the hotel structure is complete. Mr Eldridge said the convention center roofing laminate will commence on July 3 and will be completed by November 30 this year.

PRK major shareholder in SM Plaza

BY KEVIN TEME, Post-Courier, March 17, 2017

PETROLEUM Resource Kutubu (PRK) is the major shareholder of the Star Mountain Plaza project apart from the State and other landowners. This was revealed yesterday by managing director of

Mineral Resource Development Company Augustine Mano to the media and trustees of the project who were taken on a tour to witness the progress of the project. Mr Mano said PRK owning an asset of K1.8 billion is the major shareholder owning 45 percent while 20 percent is owned by the government. "The project is at a cost of K1.2 billion where the landowners are the major players in putting up their resources and will own 80 percent while the government will own 20 percent shares in the company," Mr Mano said.make it happen will come from the landowners," Mr Mano said. ""I thank the Government for having faith in us. You rarely seen government having faith in landowners and putting the money in a true partnership that will revolutionise, the way we define entrepreneurship, the way we define partnership in this country and I want to thank you all the landowners for making this happen."

Two directors of PRK Mark Sakai and John Kapi Natto spoke of the significance the partnership between them and the government will bring to the people of PNG. "For the last 20 years we've been like that. Since the new management has come in under the leadership of Augustine Mano, we've seen changes through investments. This is one of them," Mr Natto said. "The Hilton brand and the convention center here is of a higher magnitude and for me as a landowner and a trustee, I am very excited. For us, we just want to say thank you to the State for coming and supporting us in building this investment together. "Today we see the state coming in believing in us that as Landowners we are not only looking at our own people but as a nation that we want to work together and to build something like this is iconic building is an investment for the country and good for the wellbeing of our people. For me, I am very excited," Mr Natto said.

A similar sentiment was given by Mark Sakai thanking the government for having confidence in landowners. "This project is a Government and private business partnership as you can see and on behalf of the shareholders of PRK and Kutubu landowners we thank the government for the commitment it shows now as we have already committed ourselves where you can see the work so far here, we made our commitment, and we are very pleased that the government has come on board now," Mr Sakai said. "I would remind the critics that it is not a free gift from the government but they are investing as a partner; they will be shareholders of this development and for the benefit of the development of the people of country. "It's not free money to us, its government commitment as an investment for the people of this country. We thank the government for honoring its commitment and also believing in us."

PNG group says mining ombudsman 'last hope'

Radio New Zealand, 13 March, 2017



Porgera mine. Photo: wikicommons / Richard Farbellini

A human rights group in Papua New Guinea says it would be a great relief if Canada agrees to appoint an ombudsman to monitor PNG's mining sector. The Akali Tange Association has written to Canada's Prime Minister, Justin Trudeau, as part of a wider global campaign calling for the appointment. The group said Canadian-owned Barrick Gold had employed security guards at Porgera who had committed killings, assault, and rape. Its executive officer, McDiyan Robert Yapari, said an ombudsman would finally provide some justice for victims as well as holding mining companies to account. "Now we don't have any choice but only our prayers – our only hope now lies with the Canadian Prime Minister, if he sets up this Canadian extractive human rights ombudsman – that would be a great relief for us," said McDiyan Robert Yapari. Mr Yapari said the situation at Porgera Mine was getting worse and an ombudsman was the community's last hope.

Star Mountain Plaza completes stage one

Post-Courier, March 13, 2017

The Star Mountain Plaza (SMP) development has seen completed stage one. This is for the detailed engineering design and commencement of the above ground structure of the Hilton Hotel building and the Kutubu Convention Centre for the Star Mountain Plaza in Port Moresby. Star Mountain Plaza project manager Eric Alome when giving an update in the MRDC's December issue of *To-kaut* revealed that there have been mixed results in 2016 in terms of overall performance on the hotel. However, Mr Alome stated that there were also some key successes including the securing of the BSP K200m bank finance, completion of the car park structure, completion of the detailed engineering design for Stage 1, and commencement of the "above ground" structure of the Hilton Hotel building, combined facilities, and the Kutubu Convention Centre. He also pointed out some issues and difficulties outside of the project environment and beyond their control, such as the weakening of the PNG kina against major foreign currencies which resulted in significant foreign exchange losses on payments and procurement in foreign currencies.

"Others that were within our control could have been better managed, however, have now become lessons learnt for everyone involved in the project going forward. "As investor and developer of one of the single largest commercial property investments by a Papua New Guinean company in extremely tough economic conditions both locally and internationally, we are taking our successes and victories in stride, learn from our mistakes, and continue to improve everyday to ensure a successful completion. "By virtue of its size and scale, the SMP demands the highest level of commitment and attention as anticipated by investors, stakeholders and most importantly, the people of Papua New Guinea. To this end, we are committed and focused on delivering the SMP by July 2018 after an extension of six months," he said. Mr Alome described the overall performance of the project as generally good in terms of both schedule and cost performances and added that the project team will work with all the contractors, consultants, and suppliers to ensure an early completion.

'No harm in Experimental Seabed mining' says Minister

Merolyn Ten, Post Courier, March 10, 2017

THE world-first seabed mining project in Papua New Guinea due to start in 2019 will not be harmful to the environment, says Mining Vice-Minister Wera Mori. Mr Mori is confident that the Solwara 1 project that will mine copper and gold deposits from the seafloor at a depth of 1600 metres in the Bismarck Sea, off New Ireland Province, does not pose a major environmental hazard. "The seabed mining offers an alternative that could be less environmentally destructive than land-based mining. The copper deposit on the sea floor are about 10 times more concentrated than a typical land-based copper mine, so less material needs to be extracted to achieve a similar production rate," he said. Mr Mori said the deposits were at the surface, so large amounts of material did not need to be removed. Unlike land-based mining, seabed mining occurs where people do not live and requires little production infrastructure, and increased worker safety with the operations being conducted remotely. He said that the metals will be mined into the subsea slurry lift pump (SSLP) and transported through the riser and lifting system (RALS) pipe straight onto the mining ship or the production support vessel (PSV).

"The mined copper and gold deposits will be then taken straight to demanding countries including Japan, China, Korea and India." Nautilus Minerals is the Canadian company in charge of the Solwara 1 Project, being developed in a joint venture with State entity Kumul Minerals Holdings. However, according to the Deep Sea Mining Campaign, a project of the Ocean Foundation, Solwara 1 Project would represent "the first large scale, human-induced, site-specific disturbance to the deep ocean basin anywhere in the world, hence it must be considered with exceptional deliberation and caution". A call has been made to the Government to place a ban on the experimental seabed mining. This call was made by the Caritas Co-ordinators of the 19 Catholic dioceses in solidarity with Alliance of Solwara Warriors, Bismarck Ramu Group, and concerned organisations that resolved to speak out on behalf of the silent majority affected by the proposed "experimental seabed mining" of Nautilus Minerals Limited.

Porgera mine reaches milestone

March 9, 2017, The National Business



PORGERA gold mine in Enga reached a milestone this month, achieving 20 million ounces (oz.) in gold production [or 622 tonnes of gold!] the start of operations in 1990, according to the company. The mine is a joint venture operation between Barrick Gold Corporation, Zijin Mining Group and Mineral Resources Enga (MRE) Limited. The PJV processing department attained the production on Monday after 7044 ounces were produced for the particular day. General manager operations Damian Shaw on behalf of the management commended efforts of those who had been involved with the operation since the first pour in 1990 and those who were still with the operation. "This has been a great effort by everyone, the employees, the community, the government and all other stake-holders," Shaw said.

"To those who work behind the scene to make it possible to achieve this result, congratulations. "Not many mines meet 20 million ounces.....it is a rare achievement. Porgera still has a long life so let's get another 20 million." The 20 million plus oz. derived from more than 143 million tonnes of ore that were mined in both the open pit and underground since start of production. Production superintendent (Anawe) Anthon Pakyo, acknowledged contributions from all of PJV site departments, adding that there had been challenges along the way but as a team, the site had achieved this. "For the processing team, this is a real milestone achievement as we all know it has been challenging to get this far," Pakyo said. "We can hope for some more million ounces in the future through our continued team efforts."

Porgera goldmine managed 570 credit-scheme development programmes

March 9, 2017 The National Business

PORGERA gold mine in Enga has managed more than 570 tax credit scheme and infrastructure development programme funded projects, according to the company. The projects were valued at over US\$74 million (K234.36m) since the start of TCS in 1992. The mine is a joint venture operation between Barrick Gold Corporation, Zijin Mining Group and Mineral Resources Enga (MRE) Limited. According to a statement yesterday, Porgera mine employs more than 2,500 Papua New Guineans and over the life of the mine had produced more than 19 million ounces of gold and contributed approximately 10 per cent of PNG's total annual exports. The mine on Monday reached a milestone, achieving 20 million ounces (oz.) in gold production since the start of operations.

Achieving this significant production record, the mine had also had significant other achievements that continued to make it a reputable operation in PNG. Porgera accounts for on average 11 per cent of Papua New Guineas total exports and is a major contributor to the PNG economy in taxes, duties, royalties and infrastructure development. Porgera is the second largest gold producer in Papua New Guinea and its contributions over the last 26 years had placed PNG as the 15th largest gold producing country in the world. The Porgera mine is operated by Barrick (Niugini) Limited (BNL) – through an equal partnership between Barrick Gold Corporation and Zijin Mining Group Company Limited – which owns 95 per cent participating interest in the PJV. The remaining 5 per cent is owned by Mineral Resource Enga (MRE) Limited – a consortium consisting of the Enga provincial government and the Porgera landowners.

Frieda River mine set to start operations

Post-Courier, March 9, 2017

The giant Frieda River mine in West Sepik is now 60 percent ready of becoming a reality with the National Government waiting to issue the mining license for the project to start after few technical issues are sorted out, says Aitape Lumi MP and Minister for Treasury Patrick Pruaitch. "Frieda River is 60 per cent reality now, we are ready to issue the license. We just need to work through with the technical people to on how they will dump the raw waste." "The company has put an application to convert mine waste into power generation system , but the State does not have the capacity so it is doing its best to hire people to give the best advice on how we can look at that and we can give the okay for that 40 per cent to be completed, for 100 per cent to give the mining license for project to start," Mr Pruaitch said. Mr Pruaitch said this at the opening of the first ever Frieda Mine Landowners Forum underway in Port Moresby's Crowne Plaza Hotel that started yesterday and will end today.

Mr Pruaitch urged the people to work together and put together their benefits package for the National Government to consider during the project negotiation. "Let us not send mix signals, it will give opportunity for company to go divide a few LLGs and MP's to start the mine with the least cost possible so we can bring in impacted development for that region, "I believe that is a big project that will transform Sandaun Province and Sepik region including Madang. This project will spread benefits across the region." "I want initial support from landowners because if we don't have a project, we will not talk about benefits. We have to have a project, we have to get a leg in and another one in than we can be able to negotiate for the benefits. If we are not supporting the project than we can be standing here as leaders driving a lost cost, we must have a project, we must have shareholding understanding with impacted landowners, we must have understanding with the Telefomin district, we must have that understanding with the Telefomin LLG and sandaun Provincial Government." "I want Frieda mine which is going to be the first mining for the next government to use LNG precedent to allocate these benefits."

Landowners to discuss benefits amongst others

Post-Courier, March 9, 2017

FRIEDA Mine landowners have come together to discuss issues including benefits for negotiations with the National Government and developer PanAust when Frieda Mine project comes into development. Member for Telefomin Solan Mirisim who initiated the first ever landowner forum to discuss issues surrounding the Frieda River Project, the Political Leaders from the West Sepik Province. MRA and stake holders emphasised on how best they can work hand in hand and support the Company, landowners and the State to kick start the Project once the SM application is granted. "I stand up here representing the views, the cries and the excitement of over 50,000 people from Telefomin District, including people from ward 21, particularly the seven impact Villages within the vicinity of Special Mine Lease area."

Mr Mirisim said Telefomin is the host District of the Frieda River Project and is one of the most remotest districts in the country that has no road link, only mode of transport is by Air and the four LLG are all accessible by third level airline and it is very expensive District to deliver goods and services to our people on time. "Frieda River Project is the only Project in this country that has taken over 40 years of exploration after exploration, I must take this time to thank many exploration companies who have worked on the Frieda River Project for many years to this time, it is long time awaiting for our People in Frieda River and Telefomin District." "I would like to thank the Highlands Pacific and the PanAust for taking the project closer to fruition. One final step to finish and we will have a world class Mine that will be mined and developed in our District which will no doubt create prime opportunity to impact and transform the lives of our people through employment, training, economic empowerment, contracts and all kinds. "We want to see a Pathway that will improve our way of life, a pathway that will change the areas of Infrastructure, a pathway that will see a society transformed with Improved Social and Health Indicators.

Caritas cordinators call for ban on seabed mining

March 8, 2017, The National Business

CARITAS coordinators of the 19 Catholic dioceses of PNG are calling on the Government to order an immediate ban on seabed mining after discussing its negative impact on coastal provinces. The coordinators, who are part of the Catholic network for social and ecological justice and integral human development in rural communities, made this call following their 2017 annual Caritas Papua New Guinea forum 2017 in Madang last month. According to a statement, the potential impacts of the proposed first "experimental seabed mining" in PNG waters was among agendas discussed. The coordinators discovered that negative impacts greatly outweighed the anticipated benefits. "We foresee that the coastal and island people whose daily lives are wholesomely dependent on the marine resources will be seriously deprived if the project goes ahead," the cordinators stated. "Therefore, in solidarity with Alliance of Solwara Warriors, Bismarck Ramu Group and other concerned organisations, we are compelled to speak out on behalf of the affected silent majority in the rural coastal and island communities. They urged Prime Minister Peter O' Neill and Mining Minister Byron Chan to order an immediate ban and for the MPs of coastal provinces to also support their call.

Summit stresses landowner benefits

March 2, 2017 The National Business

LANDOWNER participation and benefit-sharing were some of the issues stressed by government officials yesterday. Petroleum and Energy Minister Nixon Duban said the Government felt that it was its obligation to those who were in the business to allow for local content to become priority. "In order to allow for skills transfer, spin-off opportunities for our people, that must become important agenda for discussion as to how we stretch the benchmarks, and how we would like to set the milestone," he said. Gas project coordination office director Peter Koim said landowner identification had been an issue. "I don't think we have got the (landowners') identification process right for all of us to have a good sleep and to be rest assured that our landowner stakeholders are getting their benefits," Koim said.

"The Government needs to work together with the project operators to ensure that before we go into development forum or issuing of PDL (petroleum development license) we really need to put our resources down, put our time down and get our landowner identification process done so that at the time of PDL issue, we know who we are going to take to the development forum." KPHL managing director Wapu Sonk said there is a feeling that the locals were being left behind. "The different people, different parts of the community, the landowners, thus there is a push on national content policy, third party access and DMO (domestic market obligation)," Sonk said. "Those policies need to be in place. The biggest risk is to have dissatisfied landowners."

Local investor aims to be first mining company

Post-Courier, March 2, 2017

LOCAL investor company Akim- Ku Limited aims to be the first to be recognised as a mining company. Owner Joe Tomperop told the media yesterday that the benefits of owning a mine would mean a lot for this country because it will help bring a lot of benefits for both the state and the resource project areas. Mr Tomperop outlined this challenge when explaining why he has invested with the Lepyok-Saii landowners Association Inc of Enga province. He said it was a difficult task to invest in resources that were initially non-material, but as proven with the development of existing mining companies, small companies can reap the benefits.

He said home-grown mining companies offered spinoff benefits to local communities which paved the way for more developments giving them equal access to services which they have lacked. "I chose this project because there are 7, 000-9,000 people living in a basin of with no form of income can ease this problem. "SMEs invest on something they see but I am investing on something I can't see because I believe we can do the job rather than depending on expatriates to do the job for us," he said. He said government assistance was welcomed in seeing a mining company, including a refinery that can enable the country to have an export license guaranteeing retention of the country's revenue. "I see a sleeping giant in the Kweokam gold project that can match existing alluvial mines and that is because PNG is sitting on an island of gold," he said. **Panda says risks of experimental seabed mining outweigh the limited benefits** PNG Mine Watch,11 April 2017



International NGO group WWF says proposed experimental seabed mining will provide little benefit in Pacific island countries, while the risks and costs could be significant. This is the conclusion in a new economic report [**published in June 2016; R.S.**] commissioned by the Panda from policy and research consultancy firm MainStream Economics, titled *Counting the Potential Cost of Deep Sea-bed Mining to Fiji*. Key findings from the study include:

Direct benefits to Fiji from experimental seabed mining are likely to be relatively small. While the major benefits will be from additional royalty and tax revenues, the major value adding will occur outside the Fijian economy.

- There are a number of potential costs to tourism, commercial fishing, and other ecosystem services. These are poorly understood due to the current lack of information and data available on the risks to the marine environment, the relationships between those risks and key sectors, and the economic value of affected sectors.
- Tourism is a key sector that is potentially at risk, particularly loss of Fiji's reputation as a world-class marine tourism destination. Even relatively small reductions in overseas visitors can have significant economic consequences for tourism. Just a 5% decline in dive tourist visits would reduce Fiji's Gross Domestic Product (GDP) by around FJD 14 million, and could result in the loss of more than 0400 jobs.
- Commercial fisheries, particularly tuna could also be impacted from plumes and water column discharges causing disruptions to marine food webs. Even small reductions in catch rates can have large economic impacts. Just a 5% reduction in catch rates would result in a 15% fall in value added and a 21% reduction in operating surplus/profit for the fishing industry. There would also be negative flow-on impacts in the processing sector.
- Experimental seabed mining will also have an impact on other ecosystem services such as carbon abatement and the existence value of biodiversity.
- In addition local residents derive cultural and subsistence benefits from the sustainable management and use of the marine environment. Little is known about the actual risks to those values in the Fiji context.

Download the report: Counting the potential cost of Deep Sea-bed Mining to Fiji