



MINING MONITOR

JUNE 2015 / VOL 4



IN THIS ISSUE

REHABILITATING MIRARR LAND: MINING TO END AT RANGER?
OUT OF SIGHT OUT OF MIND | MONI, MEINING NA INDEPENDENS BLONG
OL PAPA GRAUN STAP KLOSTU | HIGH MORTALITY, POVERTY, ENTRENCHED
GENDER DISCRIMINATION

FROM THE EDITORS



We are excited about this Mining Monitor. Not only are we remembering the struggle at Ranger but we also publishing our first Tok Pisin article.

Lauren Mellor from the Environment Centre NT reflects on ERA's recent announcement on the Ranger 3 Deeps expansion, corporate liabilities and responsibilities and the potential mining legacy of Ranger.

Money land and autonomy is our first Tok Pisin translation, the article appeared in our April MM. Regular readers will know MPI has had a strong Papua New Guinea focus since our inception. Indeed the *raison d'être* and origins of MPI were strongly influenced by mining problems in PNG, particularly those involving Australian companies at Panguna and Ok Tedi. We hope to publish more Tok Pisin translations in the future.

Dr Judd continued his focus on mining impacts on PNG, this time exploring marine mine waste disposal (MMWD – otherwise known as STD or DSTP). With recent research showing significant but still poorly understood impacts from Misima and Lihir mines in the waters of Papua New Guinea.

Lastly, Charles reports on a recent trip to PNG, with his thoughts on a presentation given to the PNG Update entitled *Mining in PNG - lessons learnt from Watut River*. With recent documents showing significant levels on ongoing impact and little to show for the financial benefits coming from Hidden Valley mine.

Our film for this edition returns to our cover story with a fascinating edit of 'Dirt Cheap'.

Charles Roche and Jessie Boylan

MINING MONITOR, JUNE 2015

Editors: Charles Roche & Jessie Boylan
Design and Layout: Elbo Graphics
All images (c) MPI unless attributed

A Publication by the Mineral Policy Institute
www.mpi.org.au | mpi@mpi.org.au



Clive Hyde

REHABILITATING MIRARR LAND: MINING TO END AT RANGER?

Lauren Mellor, Nuclear Free Campaigner, Environment Centre NT

Ranger uranium mine operates within the bounds of the dual World Heritage listed Kakadu National Park. Ranger was established through a no-consent lease on the traditional lands of the Mirarr people in the late 1970s. Ranger is the only operating asset of mining company Energy Resources of Australia (ERA). ERA is 68% owned by multinational mining giant Rio Tinto.

No other mine in Australia today holds the status and notorious operating record of Ranger mine, surrounded as it is by our largest and World Heritage listed national park. Kakadu is a site of significance for its rich cultural history. It is home to over 60,000 years of living Aboriginal culture and is host to a unique ecosystem sustaining species of flora and fauna found nowhere else. After 30 years of accidents, spills and security breaches the nightmare for this incredible place

may soon be over as ERAs plans for expansion have been put on ice.

In 2013 Energy Resources of Australia announced its intention to seek approval to mine a 34,000 tonne uranium resource, Ranger 3 Deeps, and began construction of an exploratory tunnel that would allow underground access to the deposit. The Ranger 3 Deeps proposal was ERA's only viable plan for continued mining at the site after Ranger's reserves had been exhausted, but on June 11 Energy Resources of Australia shocked the ASX by announcing it would not proceed to the project's Final Feasibility stage due to economic uncertainty.

Mining at Ranger's open pit ceased over two years ago and production is currently sustained by processing stockpiles. All mining and mineral



Pit 3: MPI

processing at the site must end in January 2021, to be followed by a mandated five-year rehabilitation period whereby the Ranger Project Area must be rehabilitated to a standard acceptable for inclusion into surrounding Kakadu National Park.

COSTS AND CORPORATE RESPONSIBILITY FOR REHABILITATION

Critical to this decision was Rio Tinto's withdrawal of support for the proposed underground mine, saying in a statement it would not support any future mining at the site.

ERA's capacity - and Rio Tinto's commitment - to meet the site's rehabilitation requirements has been under a cloud since 2010 when ERA began posting successive pre-tax losses which now total \$981 million. Following the June decision to abandon further work on the Ranger 3 Deeps proposal ERA has lost a further 73% of its share value.

A combination of depressed uranium prices in the wake of the Fukushima nuclear accident, global market oversupply and two six-month long forced closures at Ranger mine due to mismanagement including a major radioactive spill in December 2013 have left the company with less than \$300 million operating cashflow. At present the Commonwealth holds just 10% of the rehabilitation bond as security and an undisclosed sum of cash bonds.

In 2013 ERA's Chief Executive warned that the company may request a public bailout to secure rehabilitation funds if the mine was unable to

return to profitability within its operational life.

Until recent developments Rio Tinto, which is worth an estimated \$100 billion, had attempted to publicly distance itself from responsibility for rehabilitation, deflecting criticism by downplaying corporate ties.

At its 2014 Annual Meeting, however, Rio Chief Executive Sam Walsh claimed: *"ERA is a separate public company, and the board of directors will be responsible for the affairs of that company"*. Walsh then further distanced himself and tried to limit Rio Tinto's responsibility by saying *"If Ranger 3 Deeps didn't proceed, there is an issue for the ERA board."*

In the intervening twelve months Mirarr Traditional Owners and environmentalists maintained the pressure on Rio, calling for assurances that the costly and complex task of rehabilitation would not be compromised and the parent company would not walk away from its responsibilities in Kakadu. At Rio's 2015 London Annual Meeting Chair Jan du Plessis appeared to change tack, suggesting the multinational miner was concerned its reputation may be at stake: *"We absolutely appreciate the need to take care of that site and to make sure it is properly rehabilitated and that it is restored in the way that people would expect from this company. I can assure you today however that should the board of ERA should at any point call a rights issue to get further capital into the company, we will follow our rights as shareholders to put further capital into the company so that they can meet their obligations."*

Rio also confirmed an offer of a “conditional credit facility” should existing or future cash reserves fail to cover the required rehabilitation effort. At the time of writing it is not clear that ERA has accepted this condition and abandoned consideration of options for further mining. The shock defection of half ERA’s Board members including Chairman Peter McMahon and independent non-executive directors Helen Garnett and David Smith appears to have resolved a lingering internal tension over which option the company would pursue – a lease extension or the beginning of remediation.

So after 30 years of uncertainty the question remains, will ERA accept Rio Tinto’s life-line in the form of a conditional credit facility or will it be forced into bankruptcy and risk creating a radioactive mining legacy in the heart of Australia’s most recognised national park?

RANGER’S MINING LEGACY

As the sun sets on Australia’s third mining boom, the uranium industry sinks into irrelevance against the backdrop of a rising renewable trade and analysts weigh up the social, economic and environmental cost benefit of this latest resource rush, the closure and clean up of Ranger mine will be a test of our national ability to hold the extractives industry to account. How can mining and the use of our shared natural resources be conducted in the public interest and for broad benefit? How can we plan to avoid the boom bust cycle? Can resource development be used to alleviate poverty and not entrench the wealth disparity that leaves a handful with obscene profits and sacrifice zones with sickness?

But it is not just Ranger mine that urgently requires rehabilitation. The impacts and imposition of this highly hazardous mine on the entire Alligator Rivers region and particularly its Aboriginal population require remediation by both the company and governments who have worked systemically over decades to ensure its effective exploitation.

CLOSING THE DOOR

As Australia’s oldest and most contested uranium mine approaches its closure date there is an opportunity for forward-looking Territory and federal governments to act rationally, to accept the uranium industry’s proven unviability and to quietly and firmly close the door on this, our most controversial contribution to what remains the world’s most contaminating resource trade. Before that, there is a mine-site and a region to be cleaned up and rehabilitated, land returned to its rightful owners and included in the Kakadu National Park.

Dominic O’Brien



*Ranger spill site
December 12, 2013*



Dominic O’Brien



OUT OF SIGHT OUT OF MIND: MARINE MINE WASTE DISPOSAL IN PAPUA NEW GUINEA

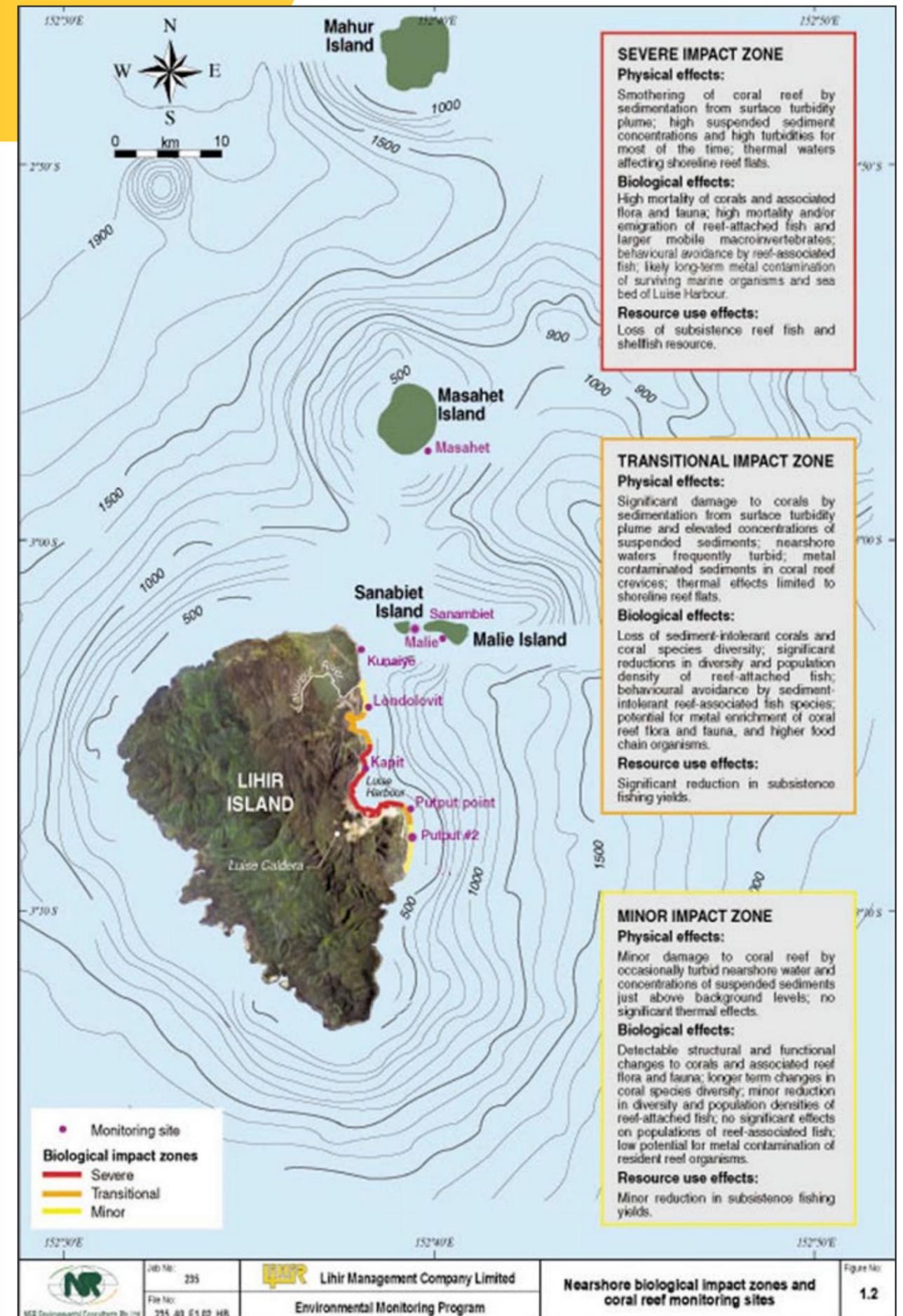
By Dr Simon Judd

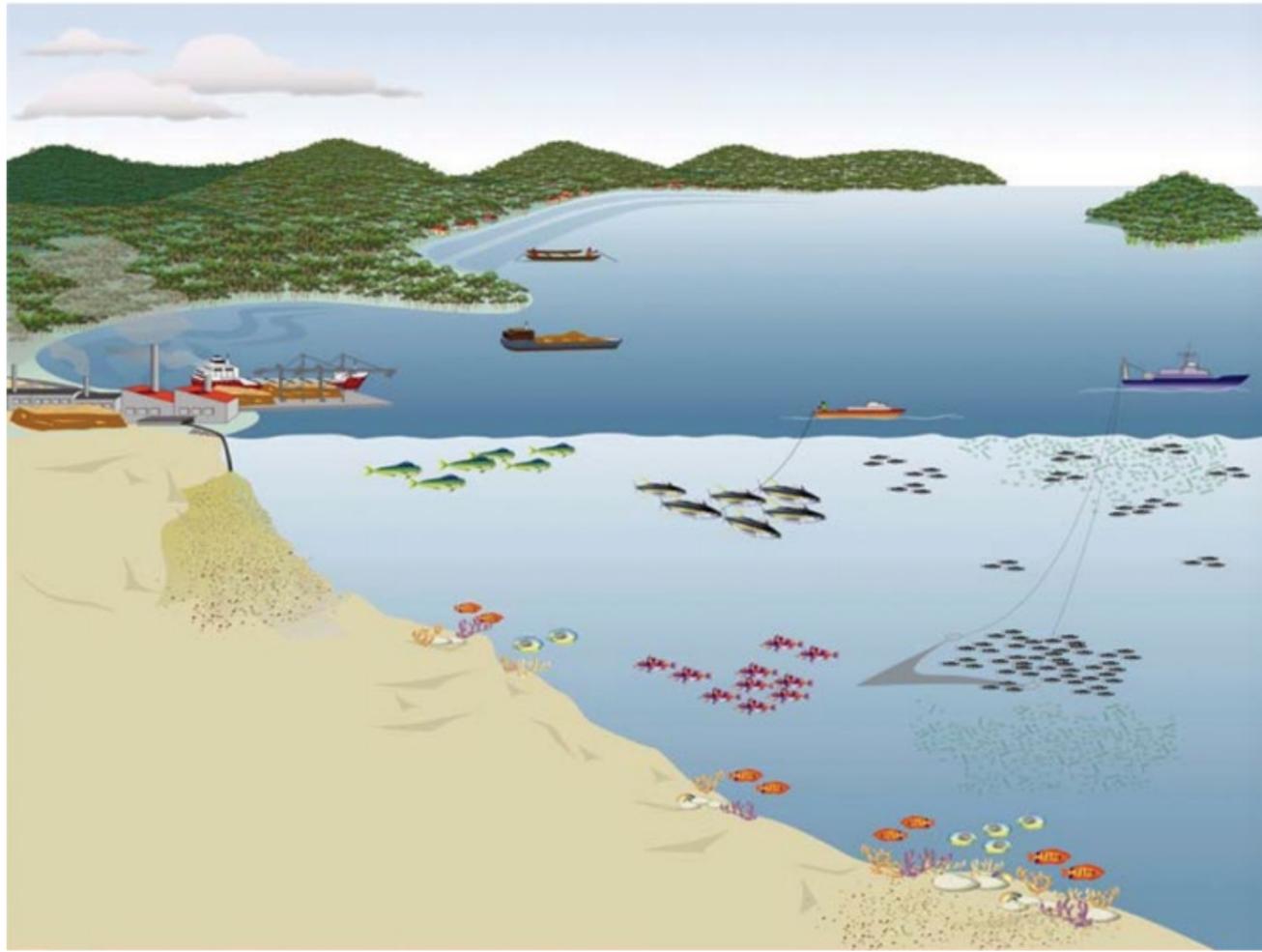
Papua New Guinea (PNG) could be said to be a world leader in Deep Sea Tailings Placement (DSTP). DSTP involves discharging of finely-ground rock, chemical reagents and water used in the mineral extraction process directly into the ocean and has been carried out since the 1970s. Currently it is used only in PNG, the Philippines, Indonesia and on the Turkish Black Sea. Contrary to what the term implies, however, the tailings are neither deposited directly into the deep sea, nor are they placed. The process actually involves pumping mine waste through a short pipe 70-150m in depth, with the mine waste then moving down-slope into the deep sea. The process is also referred to as submarine tailings disposal (STD), but it is accurately defined as Marine Mine Waste Disposal (MMWD).

In PNG, the Lihir gold mine discharges approximately 100,000 ML of tailings slurry per year into the Pacific Ocean. This contains an estimated 2.5 Mt of sediment. Over the course of its life, the gold & silver mine on Misima Island discharged approximately 90 Mt tailings into the Solomon Sea. The Simberi gold mine also uses DSTP and the proposed Woodlark Island gold and silver mine is expected to discharge 12.6 Mt of tailings, also into the Solomon Sea.

EVER-INCREASING WASTE

In recent years, there have been numerous examples of the very visual environmental impacts of discharging tailings into terrestrial, particularly riverine, environments. The inherent environmental risks of tailings dams and other land-based storage methods make DSTP an attractive and economic disposal option. This is especially true for developing nations that are economically, heavily reliant on exploitation of mineral resources. The need for metals is increasing and, as high-grade ores become rarer, lower grade ores are becoming increasingly exploited. This means that the ratio of waste to metals produced increases. Many lower grade ores, and especially those more difficult to mine, are sulphide mineral ores. These have a very high potential for acid mine drainage and toxic metal contamination. This makes the disposal of tailings one of the most problematic, and contentious issues associated with mining. In PNG and elsewhere, sediments and toxic metals have accumulated in rivers and the near-shore environment, frequently poisoning and degrading food supplies for local inhabitants. This raises the question of whether the environmental impacts of tailings disposal are minimised or avoided by DSTP or is it a case of out of sight out of mind?





Schematic of Lihir ocean outfall: LGL 2007

OUT OF SIGHT, OUT OF MIND?

The London Convention (1972) and its updated version from 1996, the London Protocol (in place since 2006) on the prevention of marine pollution by waste disposal or other materials, prohibit the disposal of potentially harmful waste at sea. While Australia and other developed nations are signatories to the London Protocol, Papua New Guinea which signed the London Convention, did not sign the London Protocol. Both the United Nations and the World Bank have been critical of DSTP.

Little is known about the environmental impacts of DSTP. In PNG there is very little monitoring carried out. Globally, research on the impact of DSTP has focused on larger fauna found in the open sea and on near shore coral communities. There are some studies which have shown that trace metals (and other classes of contaminants) reduce the richness and evenness of marine

communities but next to nothing is known of effects at the deep-sea bed where the millions of tonnes of sediment eventually end up. The geochemical nature of the ore itself dictates how tailings will behave once they are discharged into the environment. Sulphide mineral ores, which when exposed to oxygen either in air or water, will create acids and liberate often harmful metals into the environment and, consequently, the food chain. DSTP requires of access to deep (>1000 m) ocean via a steep continental or island slope. The theory is that sediments will eventually settle deep enough in the ocean where there is little or no oxygen available thereby stopping the chemical reactions that lead to acid mine drainage and heavy metal contamination from taking place. Because the sediment eventually accumulates in the ocean depths, the monitoring of environmental impacts is difficult and expensive. It is hardly surprising then that little is known about the impacts of DSTP.

KNOWN IMPACTS OF DSTP IN PNG

A recently published, open access study, [Ecological impacts of large-scale disposal of mining waste in the deep sea](#), by David Hughes and colleagues, looked at the effects of DSTP from both Lihir and the former Misima Mine giving us some insight into what actually happens on the ocean floor. The study found that the effects of DSTP at both Lihir and Misima are readily detectable on the seabed. At Lihir, the operating mine, effects are detectable up to 20 km east of the discharge point and to at least 2000 m water depth. DSTP was considered responsible for greatly reduced abundances and changes in higher-taxon composition of the sediment fauna. The impact on benthic fauna such as metazoan meiofauna and calcareous forams declines with distance from the tailings outfall, but is still significant down to 1700 m. In addition, macrofauna and organic-walled forams (single celled organisms with a calcium or organic shell) are severely impacted to at least 2000 m.

At Misima, three years after mining ceased, abundance of metazoan meiofauna (very small nematode worms and small crustaceans such as ostracods and copepods), macrofauna and benthic forams were markedly different between sites with high and low tailings deposition. Some sites subject to tailings deposition were also characterised by a rarity of peracarid crustaceans (amphipods, isopods and tanaidaceans) which were much more common at sites not subject to tailings.

Although the study was of limited scale and only classified animal abundance classified into very broad groups, it demonstrated that DSTP causes significant changes to the communities of animals investigated. The nature of the impacts of tailings deposition at Misima and Lihir are consistent with published studies from elsewhere that reported substantial loss (or disappearance) of benthic forams, metazoan meiofauna and macrofauna in coastal sediments exposed to mine tailings deposition. Many of the species involved maybe unknown, or even new to science. Their, environmental tolerances, therefore, are also unknown. If an assessment was made looking at the individual species rather than broader classification used, then the impacts would likely be much more profound and readily detectable. While these impacts have been found shortly after deposition, the physical stability of seabed can be compromised for many years. This further extends the duration of impacts and can prevent ecological succession in affected areas of the seabed in an altered, less diverse and biologically

unsettled state for many years after tailings deposition has ceased.

The whole premise of MMWD, is based on a severe paucity of data and in comparison with the clearly visible impacts from terrestrial waste disposal methods. The work of Hughes et al. questions this assumption by showing that there are significant impacts from MMWD. Many more detailed studies are required to justify or validate the process as a viable alternative. While no further MMWD should be approved in PNG, it is clear that more monitoring of the seabed is required before, during and after dumping of tailings takes place. The impacts are likely to be no less profound than those already witnessed in the terrestrial environment, just less visible.

Hughes, D. J, Shimmield, T. M, Black, K. D, and Howe, J. A, (2015) [Ecological impacts of large-scale disposal of mining waste in the deep sea](#). *Sci. Rep.* 5, 9985; doi: 10.1038/srep09985

MONI, MEINING NA INDEPENDENS BLONG OL PAPA GRAUN STAP KLOSTU

By Charles Roche, translation Nancy Sullivan



Skirt image: James Leach

Wanem samting kamap bihain long maining emi klia. Ol gutpla na nogutpla samting wantaim yumi save lukim. Long Western Australia nau mipla lukim displa bikpela kampani bilong maining ibin pairap na nau I wok long do gaun. Na long PNG mipla lukim ol moni igo ovasis na ol pipia blong Porgera na Ok Tedi go daun lo liklik wara blong peles.

Igat plenty ol arapela samting save kamap bihain long developmen, olsem trabel blong femli-, femli pait, kros na sik AIDs, displa kain samting save kamap wantaim maining. Tasol sampla samting stap ananit long ol displa kain hevi i kamap bihain long maining, na igat planti samting mo I save bagarapim astingting blong ol kain senis olsem, na ol displa kain samting isave kamap wantaim nogat lukasave, hau na ol displa kain samting isave bagarapim na brukim gutpla wok bung blong komunity na graup. We mining olsem, developmin save kisim nupla pasin ikam wantaim em, na displa pasin em i mekim mipla nogat powa long komuniti, we ol lain peles no stap bos yet. Plenti ol i tok olsem developmen emi sapos long halivim ol lain long ples, tasol mipla save olsem developmen save rausim powa blong ol ples lain tu.

Wanpla waitskin anthropologist blong Raikos, husat wok long Frens na stap long Western Australia nau, Professor James Leach, I raitim tupla stori. Emi stori blong ol lain Reite long Raikos Madang, na displa tupla stori I tokaut long au ol lain long ples I stap, tumbuna graun blong ol, ol samting blong ol na developmen.

Displa pepa emi bai toksave long displa tuple pepa blong Professor Leach. Tasol mi nonap givim ful stori long Reite peles, bikos mi no bin stap tripla yia long Reite olsem Professor Leach. Mi laik toksave long displa efek istap long maining na developmen long ol local komuniti. Interes blong mi emi painim rot long kirapim komuniti hapsait ol main blong PNG moabeta .

Reite peles stap tuple ten kilometres long displa processing plant blong Kurumbukari main. Na displa plant istap long Basamuk Bay, na igat paipain igat 130 km igo antap long mauntain, na save kisim olgeta rabis blong main igo aut long solwara 150 meter na lusim displa pipia ananit long Basamuk Bay igo daun 1500 meter.

Olgeta tingting na stori blong ol Reite stap long ol purpur bilong ol. Ol purpur igat mak bilong wan wan clan na femli blong wanwan peles. Displa piksa igat mak bilong Tupon sarrung, mining wara kalap, na ol mak bilong em bungim mak

bilong wara kalap na denis bilong man—olsem yu lukim purpur na bai yu kisim save long man na graun stap wantaim. Man na graun stap wantaim long tingting bilong ol Reite.

Professor Leach save toktok long displa samting, long ol manmeri husat makim graun, na makim graun save senis o muv nabaut—graun igat laif olosem man. Tokpiksa olosem gran na man na femli na kastom na lo bilo peles—ologeta stap long mak blong purpur bilong yu. Leach save tok ol man save muv nabaut olosem gran na wara kalap...tasol emi holim powa tu.

Taim Leach save tok long 'taim blong taro na yam'na 'taim bilong moni' bai you kisim save long bikpla senis I kamap pinis. Olosem plenty opl arapela peles long PNG, Reite save kaikai taro, banana, kaukau sak sak na yam. Tasol olosem purpur emi no klos nating, emi kastom. Na taro emi no kaikai nating, emi gat mining. Igat mining bilong hau ol manmeri save marit, save stap wantaim, save stap insait long komuniti. Igat lo blong plantim taro, na rausim taro, lo ilong wanwan femli, na wanpela stori blong taro oli kolim Samat Matakaring Patuki.

Nau yumi stap long 'taim bilong moni' na olgeta manmeri stap hangre long kisim developmen na kisim moni. Taim bilong twenty toea no gat mining, nogat powa long baia samting. Nau ol manmeri save harim displa tok blong salim graun na kisim moni, long mekim garun kamap moni. Displa kain tingting save kamap lo main, tasol nogat developmen kamap wantaim. Ol manmeri save plantim plenty kumu, na makitim kumu moa yet, na apim prais bilong kumu lo salim long main---oli tok taim blong moni-sense tasol, traim tasol.

Tasol 'taim bilong moni'save kilim 'taim blong yam na taro.'Isi isi save kilim displa 'subsistens base'(ol save kolim) blong komuniti. Taim ol komuniti save hangre long kisim moni, oli save stap yet long gaden—long 'subsistens base' kaikai. Sinduan blong ol stap long gaden na bus na lukautim pik na ol displa samting. Professor Leach tok Reite bai no inap stap sapos pasin bilong 'subsistens base'bagarap olgeta. Olgeta samting bilong sinfaun blong ol depen tasol long gaden, na exchange, na kastom stap baksait long olgeta displa.

Displa wari blong taim bilong moni emi no tokpiksa tasol. Emi samting tru long grain na laif. Taim yu katim bush gen na gen to wokim gaden bai yu lusim powa blong kirapim kaikai long graun—graun bai kirapim liklik na liklik moa na

olsem. Olsem Leach save tok developmin bilong taim bilong moni ino 'sustainable'---mining olsem behain you wokim gaden bai no inap kamap. Risos blo yu bai pinis. Na sapos yu lusim gaden, bai yu lusim olgeta liklik samting stap insaid long sinduan blong yu.

Mipla no tok komplein long ol komuniti save paingin moni o deivelopmin. Mipla toksave tasol long wanem samting bai kamap bihain---no ol displa projek or plan bai no inap toksave long yu. Sapos wanpla projek save kisim graun bilong yu, nay u muv, o sapos emi kapsaitim pipia long wara bilong yu---nau bai yu filim pen hariap. Tasol sapos yu stap olsem taim bipo na kamap hangri long moni na salim ol kumul long graun, binhain bai yu bagarapim sindaun blong yu tu. Yupla husait painim gutpla laif bai no inap kisim.

Yu ken lukim bus taim yu kliarim ol gaden o salim graun long narapela. Tasol olgeta liklik sensis ikamap long tingting blo yu ino klia tumas, tasol tu ino isi. Displa tokpiksa long purpur na topksave long taro bai bagarap olgeta. Kastom bai bagarap. Emi olosem olgeta samting stap long bilum, na yu pulim tred bilong bilum. Bihain bai yu lusim olgeta samting. Dvelopmen na taim blo moni save wokim displa kaim bagarap we yu no inap klia tumas, tasol bihain bai yu kisim pen. Yumi tok Graun I Laif. Long PNG igat mining moa yet long ol arapela kantri.

Leach toksave long wanpla bikpla difrens namel ol tingting bilong ovasis na ol blong PNG. Taim yumi muv igo long tain blo moni yumi lus tingting long ol arapela mining blo graun, we graun igat laif na emi wankain man na kouniti, igo long narapela kain tingting we ol waitlain save toktok long 'rait'blong usim na salim graun. Dispela narapela kain tingting save mekim graun kamap samting istap autsait long man na komuniti---samting yu ken baiaam na salim. Dispela emi arapela kain tingting ologeta. Lo blong PNG tu luksave long dispel niupela kain tingting taim emi makin wanpela man o meri kamap papa graun---emi no inap tainim taintim tingting tru long peles we oli respektim histori na komuniti nan a we bilong skelim graun bilong femli. Taim bilong moni save sensism olgeta samting.

Taim wanpla projek o dvelopmen kamap long peles emi gat wori kamap wantaim. Ol manmeri wori long nogat narapela we long kisim moni olsem oli troimoi han long kainkain tingting long kisim moni. No gat chance long skelim gutpela tingting na nogutpla tingting. Long Taim bipo ol lo blo graun ibin rot blong givim powa long komuniti. Nau long taim blo moni displa lo save rausim powa na making graun kamap samting long baiaam na salim tasol.

Nogut yu ting displa tingting blot aim blo moni bai no inap kamap long peles olosem Reite. Em

bai kam. Long plenty hap I kam pinis. Dispela sensis ikam bilo mipela no luksave tumas long dvelopmin na mining blong em. Taim yumi hariap bihainim rot bilong kisim moni yumi no save long olgeta kastom na tingting yumi bai lusim long rot.

Professor Leach save kolim displa sensis wanpela rot bilong lusim powa, lusim control long komuniti. Bilong ol lain peles save kisim displa nupla tingting bilong graun, na displa tingting save kilim ol tingting bilo bipo. Yumi wokim tasol yumi no save displa bi kamap. Emi olsem you making nupla toktok na lus tingting long olgeta toktok na tingting bilo bipo. Sampla oli tok ol tokples blong PNG pulap long tingting bilong kastom na sapos yumi lus tingting long tokples bai yumi lus tingting bilo kastom. Displa 'taim bilong moni'na nupla we long lukautim gran emi wankain samting---bilong sapos yu ksisim displa tingting bai yu lus tingting long olgeta arapela. Taim yu bihainim displa nupla tingting bilong Taim Bilong Moni tu bai you lusim powa blong komuniti na lukluk long nasenal govamen na ol kampani lain tasol.

Olgeta komuniti blong PNG save pauingim dvelopmin, tasol yumi nogat plenty komuniti igat save long mining bilong displa dvelopmin. Oli no gat save long wanem samting bai kamap bihain---plenti ol samting yu bai no inap stopim, em bai kam. Taim yumi tok dvelopmin yumi mas

sindaun na kisim olgeta toksave stap beksait long wanpla projek. Ol lain blong mining no gat save long autim toksave klia long ol manmeri peles. Yumi mas wokim nau.

Professor Leach emi no birua blong dvelopmin. Mi tu nogat birua blong dvelopmin. Mipla laik toksave long mining bilong dvelopmin na wanem kain efek bai kamap. Ol kampani lain na ol gavmanolino save tok aut klia long displa. Tasol ating yumi mas tokaut long efeks na mining blong wanwan projek na tingting stap beksait long em bifo yumi ken kirapim nupla kain dvelopmin we igat lews, igat tingting bilong peles, na emi bai no inap kilim kastom bilong bipo. Plenti sensis ikamap yumi no lukim bikos emi stap long tingting long man. Tasol displa nupla tingting bai kilim idai kastom bihain, na yumi mas tokaut klia.

Yupla husat laik painimaut moa yet lo wok blong Professor James Leach, yupla ken sekim displa [website](#).



Leach, J. (2014). 'The time of money': property and sovereignty as alternative narratives of land and value near the Ramu NiCo mining project (Madang, PNG). *Journal de la Société des Océanistes*, 138-139.

Leach, J. (2011). "Twenty Toea Has No Power Now": Property, Customary Tenure, and pressure on Land Near the Ramu Nickel Project Area, Madang, Papua New Guinea. *Pacific Studies*, 34 (2/3 Aug/Dec).

HIGH MORTALITY, SEVERE POVERTY, ENTRENCHED GENDER DISCRIMINATION: LIFE NEAR THE HIDDEN VALLEY MINE

by Charles Roche



Image: Alluvial Miners, Watut River

have highlighted just how poor the outcomes from Hidden valley have been. This article attempts to capture my presentation, focusing on the new Reports. While there are also clearly some benefits from the mine, I'll leave reporting on those to Newcrest and Harmony Gold, and concentrate instead on the outcomes they neglect to report on.

The first of these is the [A] *Review and assessment of the benefit-sharing arrangements of the large-scale mining activities in the Wau-Bulolo, Papua New Guinea*, published by the PNG National Research Institute and commissioned by the Bulolo Joint District Planning and Budget Priorities Committee (JDP&BPC) under the Chairmanship of MP for Bulolo Sam Basil. The report makes clear that despite 500m kina being spent in the area and 57 m kina coming in royalties, the 'development impact of these funds has been minimal'.

The Report finds structural and governance issues relating to the Nakuwi Association that represents landowners. Describing the organisation as "**... having significant deficiencies that undermine its usefulness in pursuing long-term interests. Structurally, this is a defective association with poor governance and accountability mechanisms**". It is unfortunate that the structural issues, obvious from the beginning, have been allowed to undermine the legitimacy of the Association and hampered the organisation's ability to represent landowners.

The second source is actually a three volume report *Development and social mapping in the Hidden Valley gold mine impact area, 10 year re-study - draft final report* by John Burton, a consultant for the operators of the mine. Firstly Dr. Burton needs to be commended for making the documents available; normally this type of report is never made available to public, thereby hiding valuable research and the real impacts of mining. replace with - Nearly four hundred pages, it tells a completely different story to that presented in company reports by the mine's owners, Newcrest

The Hidden Valley mine in the Morobe Province of Papua New Guinea (PNG) has been controversial since construction started in 2007. Poor construction practices, a persistent lack of transparency and a culture of denial have created tension with local communities, ongoing concerns from the local Member of Parliament and attracted the keen eye of the Mineral Policy Institute.

In 2014 the Mineral Policy Institute published a report *Mining in Morobe: Impacts from mining along the Watut River* and a documentary, entitled Hidden Valley. The documentary makes it clear that communities from the middle and lower Watut are concerned about the current impacts of mining on their people and land, and highlights their concerns for the future, particularly if other mines are developed. The report provided evidence of impact, poor transparency and concerns about the impact of a mining dominated future in Morobe Province and along the Watut River. It made a series of recommendations regarding transparency, board accountability, and breaches of guidelines and reporting. Unfortunately little has changed.

In June, I travelled to PNG to present at the University of PNG and Australian National University's PNG Update. My presentation, *Mining in PNG: lessons from the Watut River*, was based on MPI's previous work and two recent reports which

Mining and Harmony Gold, over the last few years.

In this brief article it is not possible to share the weight of Burton's research, documentation and findings. But the depth of his concerns are immediately apparent in the second paragraph, where he states that "**... 27 years after the principal ore body was discovered, communities in the entirety of the Hidden Valley impact area are still experiencing significant poverty. The immediate impact area includes pockets of the world's poorest people who have yet to participate meaningfully in mine benefits and some of these are the host communities on whose land the mine has been constructed**".

Burton then identifies seven 'red flag' issues identifying: (1) severe poverty; (2) high mortality levels and an absence of primary health care; (3) despite being identified as especially vulnerable in 2005, the Hikinagowe and Heyu communities are living in extreme poverty; (4) the use of child labour and a lack of adequate management tools; (5) the benefit distribution agreements have entrenched gender discrimination; (6) the absence of Free Prior and Informed Consent in the mining agreements; and (7) biodiversity impacts.

This is a roll call of what should be avoided, rather than the proud outcome of a supposedly modern mine. It seems that despite a significant flow of funds coming from the mine, including to the landowners, the mine is failing to alleviate the issues facing local people. Unfortunately, despite Newcrest and Harmony Gold having access to Burton's Report's, these issues are not raised in sustainability reporting or at the last two Newcrest AGM's.

Hopefully corrective action has been implemented, though tackling these entrenched issues will take years, if not decades. Or, perhaps the level of public reporting accurately reflects the level of importance Newcrest and Harmony Gold give to these issues.

In closing, it is clear there is much to be learnt from Watut River. Not the least being that PNG's newest mine is failing impacted communities. Immediate and sustained action is required to address the high mortality rates and the severe and extreme poverty. Hopefully other mining affected communities in PNG do not share these problems.

Apparent along the Watut and probably applicable more generally is the urgent need (1) to increase transparency (money, science, management) and inclusiveness; (2) to reduce gender discrimination; (3) to allow decisions to be made by people with a vested interest, not just transient and disconnected decision makers; (4) ensure ongoing independent research - such as Burton's application of the multidimensional poverty index.

Until these are issues are owned, reported on and tackled collectively with stakeholders, we will continue to witness poor reporting and a state of denial not just at Watut, but by the PNG mining industry.

The PNG Update presentation and reports can be found at watutriver.com



Image: Hidden Valley mine - Jessie Boylan

FILM CORNER

Dirt Cheap 30 years on: the story of uranium mining in Kakadu



 Click image to play on Vimeo online

Uranium mining was imposed on the Traditional Owners of Kakadu in the late 1970s and the controversial Ranger mine commenced production in 1981.

Three decades later the mine is majority owned by Rio Tinto and Kakadu uranium is still shipped out of Darwin to fuel nuclear reactors in Japan, Europe and elsewhere.

Dirt Cheap 30 years on includes rare footage of Mirarr Senior Traditional Owner Toby Gangale stating clear opposition to mining on his country and documents his prescient concerns about uranium. It shows how the Australian Federal Government overrode the human rights of Kakadu's Traditional Owners in order to impose a toxic industry in a World Heritage Area.

The film provides a unique insight into a story that continues to generate heartache and headlines today.

A Gundjehmi Aboriginal Corporation Film: To download this video or to arrange a public screening please contact: gundjehmi@mirarr.net

Mining in Morobe,
Papua New Guinea



WWW.GIVENOW.COM.AU/MPI

CONSIDER DONATING TO MPI

Despite significant volunteer and pro bono contributions, MPI is under considerable financial pressure and needs to raise new funds to continue our work.

So if supporting an organisation **that challenges the root causes of social and environmental destruction caused by industrial large scale mining** aligns with your values and world-view then please sign up and make a (tax deductible) [donation](#) today.

While MPI may not have a large media presence, we are successfully implementing a long-term strategy that achieves positive change through supporting communities, targeted research and long-term engagement with decision makers.

So join with us as we reduce the impacts from a global mining industry that affects vulnerable communities everywhere.

Please make a donation or become a monthly donor at [givenow](#).

Thankyou!



mpi

mineral policy institute