



THE UNIVERSITY  
OF QUEENSLAND  
AUSTRALIA

CREATE CHANGE

# Complex Orebodies in the Pacific: ASM-LSM Interface Risks

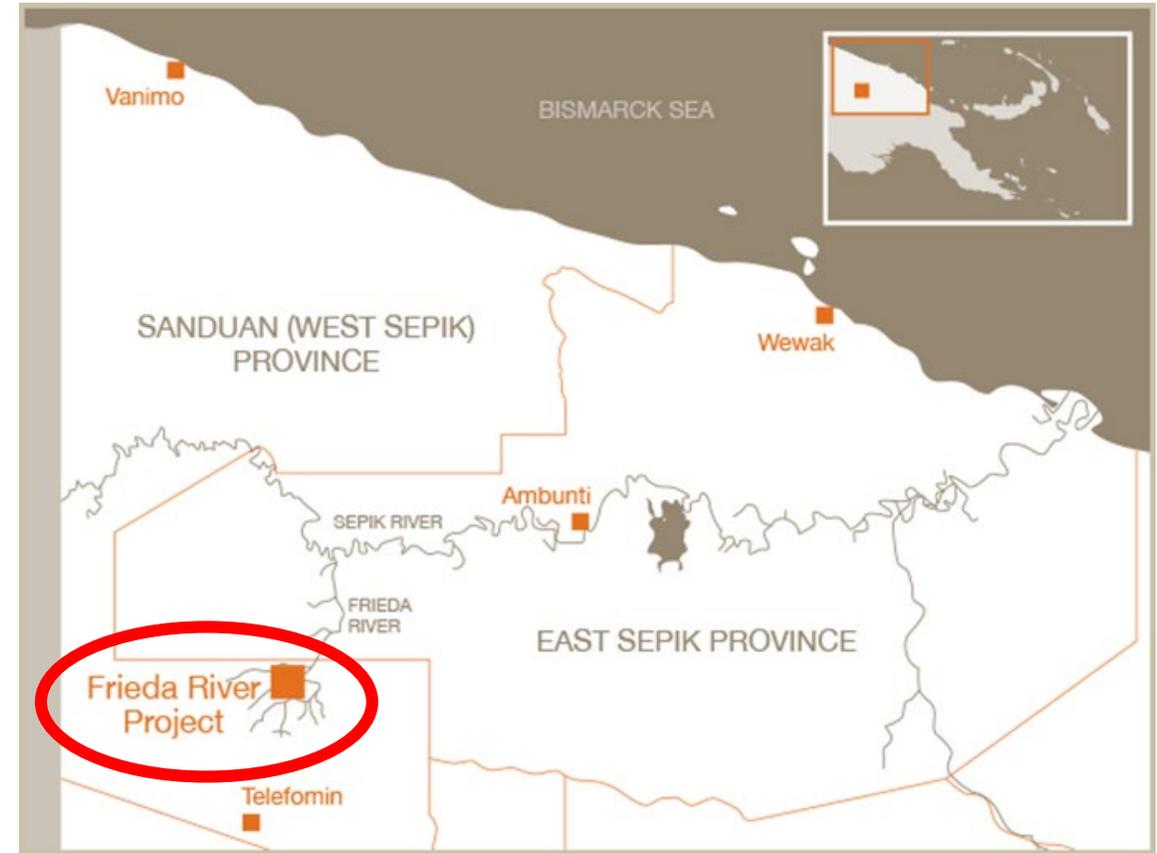
*Progress update*

5 November 2019

Associate Professor Nick Bainton

# Context

- The footprint of Proposed Frieda River copper/gold mine in PNG covers areas where there is significant ASM activity
- In 2019 CSRM successfully led a **Pilot Study** to characterise the ASM economy at Frieda River (basis of the COB match)
- Parallel geological study to estimate size of alluvial resource
- In discussion with PanAust about conducting a Full Study on the ASM economy (in 2020) to inform decision making on compensation and livelihoods



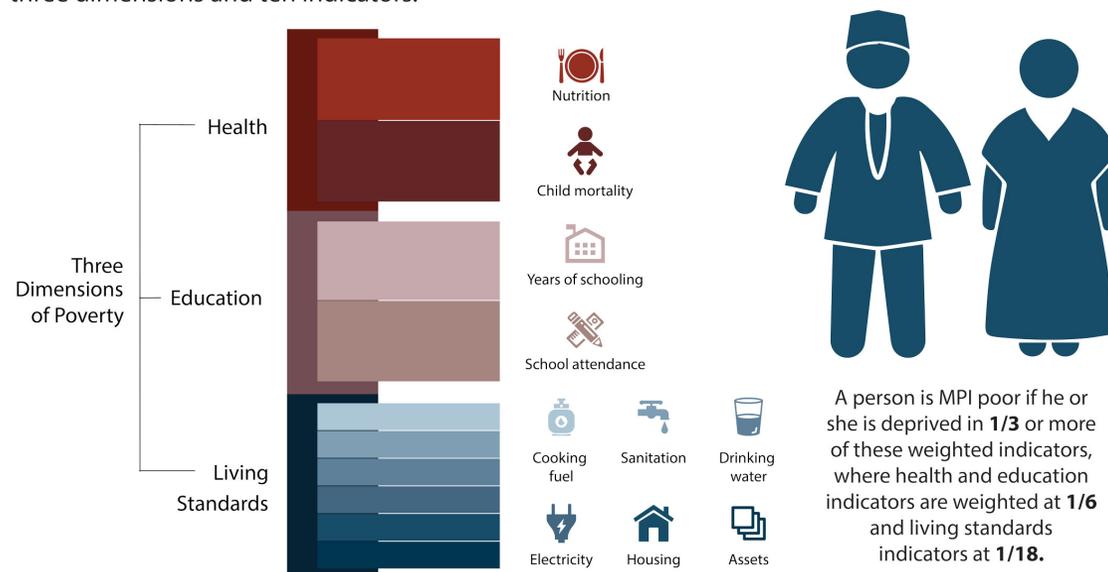


# Oxford Multi-Dimensional Poverty Index

- Data was collected that could be used for calculating the Oxford Multi-Dimensional Poverty Index.
- This allows for a calculation of household and community level vulnerability (among small-scale miners)
- Test the assumption that ASM incomes have improved well-being
- Data can be compared with other places where the MPI datasets exist.

## 2018 Global Multidimensional Poverty Index (MPI)

The global MPI directly measures the deprivations people face at the same time in different aspects of their lives. The MPI has three dimensions and ten indicators.



The global MPI helps to end poverty in all its forms and dimensions.

#MultidimensionalPovertyIndex #MPI4SDGs  
For more information please visit [ophi.org.uk](http://ophi.org.uk)

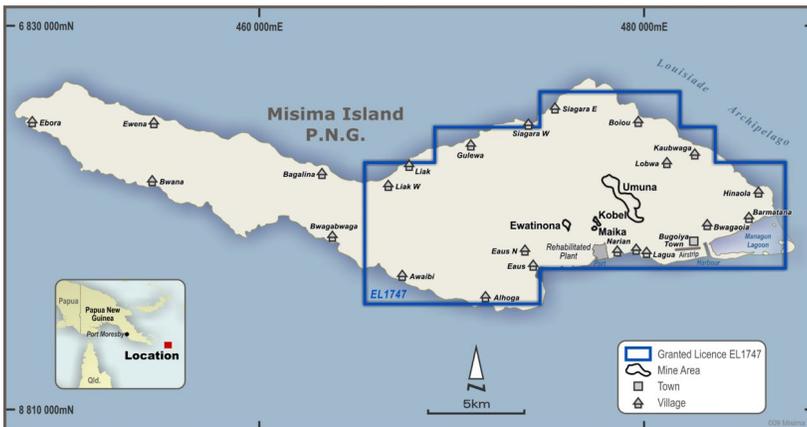
# Purpose of the COB match

## 2019 COB Match AUD 72k

- Investigate the relationship between LSM and ASM in PNG, and the Pacific more broadly, where future large-scale mining activities are likely to increasingly interact with expanding ASM activities.
- Contribute to the development of approaches and models aimed at improving the interface between LSM and ASM in the Pacific context. This will provide the basis to identify potential pathways to achieve more sustainable outcomes and reduce social impacts from future resource development projects in contexts where LSM and ASM interests interact.
- Opportunity for cross-centre collaboration between CSRM and the BRC on the methodology for ‘valuing’ an ASM resource/economy in relation to the livelihood and compensation considerations that arise in the context of developing new mines (where LSM activities are likely to impact an existing ASM economy).

# Misima

- Gold mine 1989-2004 (Placer Dome)
- Collapse of economy and services in post mine era
- Current explorations and proposal to re-open (Kingston Resources)
- Thriving ASM economy has emerged in post-closure era - now the primary economic activity



# Bougainville

- Panguna Mine 1972-1989
- Forced closure
- Referendum for Independence (2019)
- Proposals to re-open the mine (finance Independence)
- Thriving and complex ASM economy in post-closure era



# Actions & next steps

Action	Status
<b>1. COB Workshop</b> <ul style="list-style-type: none"> <li>- Map comparative ASM-LSM cases, and program of fieldwork / data collection</li> <li>- Map out publications</li> </ul>	<ul style="list-style-type: none"> <li>• Workshop held in April 2019</li> </ul>
<b>2. Fieldwork and data collection</b> <ul style="list-style-type: none"> <li>- Fieldwork on Misima</li> <li>- Understand ASM activities in post-closure era</li> <li>- Overlap between ASM and proposed LSM activities in the region</li> </ul>	<ul style="list-style-type: none"> <li>• Preliminary fieldwork completed (10 days)</li> <li>• Further fieldwork (Nov-Dec 2019)</li> </ul>
<b>3. Publications</b> <ul style="list-style-type: none"> <li>- Methodology for valuing an ASM resource at new projects in the Pacific</li> <li>- ASM / LSM interfaces in the Pacific (poverty risks for developing ore bodies with ASM/LSM interface)</li> </ul>	<ul style="list-style-type: none"> <li>• In progress (Nov / Dec)</li> </ul>