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Artisanal and Small-scale Mining (ASM) in Bougainville: Raising Government Revenue

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1. HISTORY OF A.S.M. IN B-VILLE

Between the wars, small mines at Kupei, & Kanavitu

During 1987 air-borne survey of mineral anomalies (German aid, PNG and Bougainville Governments, 1987-88), PNG Department of Minerals and Energy staff from Wau are gave informal training for Bougainvilleans in Atamo/Karato areas in use of pans, construction and use of sluice boxes etc.

ASM industry emerges only after the conflict, late 1990s, aslack of alternative source of income sees people 'trained' in 1980s using and developing skills etc., then gradually transferred to other areas





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SCALE - ASM



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SCALE - ASM?



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WHERE ASM IS OCCURRING

Main categories of mining activity:

- a. Washing gold dust in BCL ore dumps and in Panguna tailings
- b. Accessing gold in different ways from varied kinds of deposits found in 50 or more distinct sites, some in close clusters, mainly in East coast mountain areas, central and south,

North: Tinputz only

North-west: Torokina mountains (3 sites) and Keriaka

Central: Atamo, Karato, Kanavitu, Kopani, Korovi

Central, Arawa area: Loloho (ore stock-pile), Morgan Junction

Central, Panguna area: Moroni, Pakia Gap, Kupei, the Panguna mine pit, concentrator ore stock-pile, etc.



WHERE ASM IS OCCURRING –Cont.

Central, South of Arawa: Kongara 1 and 2, Taba Taba (several)

‘South’-west: Upper, Mid, and Lower Tailings, and Paru Paru

South-east: Sinimi, Uisai, Leuro

Sites expanding steadily. The level of purity and the form and appearance of gold varies considerably between areas.

THE PEOPLE INVOLVED

All (almost all?) are Bougainvilleans, men, women and children, often in family or clan groups, mainly young people

Mainly landowners of the areas where they mine, or pan, with the exception of the Panguna and Tailings areas

10,000 people in a year, as many as 1,500 to 2,000 in tailings area, 300 or more at Sinimi, 500 at Kupei, etc.





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ATAMO - KARATO



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METHODS, EQUIPMENT ETC.

Metal detectors used in some areas to find gold.

Panning & sluicing (home-made boxes, carpet etc.), ore from:

- former Panguna mine stockpiles –ore from concentrator stock pile taken to houses in Dapera, Moroni and other villages;
- In mine Tailings areas, in rivers and creeks, or from prospective hills and mountain areas

Chipping 'hard-rock', crushing, and washing

Adaptation of sago washing methods at Sinimi

Equipment used in mining includes: pans, sluice boxes, shovels, picks, crow bars, wheel barrows, water pumps with generators, water pumps adapted to become 'Combos', improvised crushing equipment, machine crushing equipment etc.





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WASHING – SAGO STYLE



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A 'COMBO' AT ATAMO





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METHODS ETC. CONT.

Method of separation (gold from gravel etc.)
– mainly mercury

Three small refineries – one in Buka, two in
Arawa





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FURNACE, ARAWA





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FURNACE OPERATOR



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ARAWA'S OTHER FURNACE





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VicUrban **TONS SMELT SERVICES**

MELT FEE

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FEE: K150.00

LOTS: 260 – 1 KILO

***FEE: 60 toea/GRM**

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WHY PEOPLE ARE MINING

Generally for income.

For some it supplements other sources of income (especially cocoa or other cash crops), or is done to get money for particular purposes (building a house, paying for a feast or for school fees etc.

Others rely solely on gold production for income - especially some internal migrants in the Panguna and Kawerong/Jaba Tailings areas, this reliance being reported as due to:

- impact of cocoa pod borer on cocoa production;
- Land pressures in home areas

Migrants into Panguna and the Tailings areas are mainly (70-80%) from neighbouring areas of Nagovisi, with some also from Siwai and Buin, and Aita and other areas of North Bougainville.



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PANGUNA



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PANGUNA



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- Perhaps 1,000 or more kg produced annually, generating income of K100 million or more for miners
- Three main levels of buyers:
 - Small-scale buyers who go out to where the miners are, will buy small quantities of gold, at prices well below world market price
 - Mid-scale buyers, who buy larger amounts at higher prices
 - A few large buyers, who will pay a premium for larger quantities
- Businesses in support of mining, include supplies (including mercury) and equipment, food stores (in migrant areas), transport, security, buying, smelting



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TABA TABA



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TAILINGS



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- ABG Mining Act 2015:
 - recognises existing small-scale miners operating on their own land, or on other people's land with landowner permission;
 - Recognises ownership of minerals by the owners of land, and says no royalties on ASM production;
 - Provides system of designated community mining areas, giving community governments and village assemblies authority to grant community mining licences and to impose licence fees, up to K1,000;
 - As yet, no implementation of the community mining licence system



Internationally, a large proportion of gold is produced through ASM, and many governments have tried to tax ASM – e.g.

- Democratic Republic of Congo: \$25 fee to mine in official mining zones, 13% import duty on mining equipment, annual charges for gold traders licences – poor enforcement record;
- Philippines: various taxes and fees, and a 'People's Small-scale Mining Protection Fund' to receive 15% of revenue that's used for miner training , establish mine rescue teams - very poor record on collection of revenue;





- Peru: Since 2011, miners must be registered taxpayers, and must process their ore at government licenced processing facilities – little research yet on effectiveness of arrangements

Why Poor Record in ASM Revenue Collection

- Aspects of regulatory regime too onerous, and so rejected – and avoided – by miners;
- Government capacity – major problems in having access to mining in remote areas'



- Lack of government services in mining areas results in absence of incentives for miners to pay tax;
- Failure of government to make suitable land available for ASM, leads to miners evading the legal regime associated with designated areas
- High value of gold and the ease of transporting and concealing it, which results in ease for miners and gold traders in evading regulation and revenue raising measures.



Compared to the poor record of national-level revenue-raising efforts, greater effectiveness often seen in more localised revenue-raising – by local or regional authorities close to ASM operations and settlements where miners live.

In Philippines, some local government authorities have adapted national regulation or developed their own regulations, or done a combination of both.

In addition, local chiefs/other leaders often set informal approval/revenue sharing arrangements





Bougainville situation

Currently has unusual ASM regime, in that:

- a. Landowners own gold;
- b. Local authorities empowered to manage ASM;
- c. ASM miners are exempted from paying royalties on gold they produce

ASM miners receive no 'services' in relation to mining (e.g. training) and often limited other services (e.g. health and education) especially in remote areas

Law and order situation sometimes 'problematic'



Bougainville situation - continued

Could a tax be raised by amending the Bougainville Mining Act to allow a royalty or levy to be paid, perhaps collected by Community Governments or VAs, or perhaps collected from buyers or processors?

Could the Peru experience be followed?

Would such a tax be too easily evaded?

What benefits would ASM miners receive as a result of paying tax?



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