OECD due diligence guidance for responsible supply chains of minerals from conflict-affected and high-risk areas
First meeting of the OECD-hosted working group on gold
4 May 2011

SESSION 1
SETTING THE SCENE
Kevin Telmer, Artisanal Gold Council
Outline

• The gold supply chain
  – Artisanal Mining Perspective

• Gold from conflict-affected and high-risk areas
  – Artisanal Mining Perspective
Opening Question:
Effect of OECD due diligence guidance on ASGM

• Is Hernando de Soto's Mystery of Capitalism (2000) the fate of ASGM? or a wake up call on what not to do?
FIGURE 2.2 Procedure to formalize informal urban property in the Philippines

<table>
<thead>
<tr>
<th>RODs</th>
<th>Other Public Offices</th>
<th>Local Government Offices</th>
<th>HLURB</th>
<th>LRA</th>
<th>RTC or MTC</th>
<th>LMB</th>
<th>NGC</th>
<th>OGO</th>
<th>Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mayor</td>
<td>Clerk/Cashier</td>
<td>Technical Treasurer of MTC</td>
<td>Region Director</td>
<td>Technical Division</td>
<td>Clerk/Cashier of the Municipality</td>
<td>Chief</td>
<td>Clerk of the Newspaper</td>
<td>Publisher</td>
<td>Clerk</td>
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**ORIGINAL REGISTRATION PROCEDURE**

**PROCEDURES FOR SUBDIVISION OF LAND**

<table>
<thead>
<tr>
<th>COMMUNITY LAND ACQUISITION AND REGISTRATION</th>
<th>LAND ACQUISITION AND REGISTRATION BY NONRESIDENTS</th>
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<tbody>
<tr>
<td>168 STEPS 13-25 YEARS</td>
<td></td>
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<tr>
<td>7.5 MONTHS</td>
<td></td>
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<tr>
<td>4.9-12.4 YEARS</td>
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<tr>
<td>1.7-4.1 YEARS</td>
<td></td>
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<tr>
<td>2.3 YEARS</td>
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<tr>
<td>3.3 YEARS</td>
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</tbody>
</table>
OECD Due Diligence

- To ensure not buying gold from bad guys
- Can it be designed to help ASGM miners and poverty and development?
- Will it help people or avoid risk for companies and shareholders?
- Will it increase or decrease conflict?
political instability, repression, institutional weakness, insecurity, no civil infrastructure, violence, human rights abuses, violations of national or international law

The in-formal Supply Chain
The in-formal Supply Chain
The formal Supply Chain: Africa Precious Metals Ltd.
Complexity of the Current Supply Chain – low transparency

- Gold Souk, Dubai, hundreds of shops, hundreds of businesses
ASGM

• It is a **gold supply chain**
• Exploitation of small deposits
• Low capital input, labour-Intensive
• Poor access to markets and support services
• Almost no presence of government
• Low standards, health and safety, environment
• **Huge Development Opportunity**
ASGM - A Gold Supply Chain

• A gold-based socio-economic system and community
• Includes miners, security (police, military, and mafia), retail merchants, health providers, gold shops, gold refiners, financiers, claim holders, and other service providers.
• Involvement formally, informally, legally, illegally, and extra-legally
• At least 90% are subsistence workers
• A linkage to the modern world
AM to Formal SM through Services

- Canada + US + Australia formalised their ASM sectors through provision of services
  - Transportation
  - Communication
  - Technical Services
  - Marketing
  - Capitalisation

- Beginning of modern mining sector based on ASM
- King Edward Hotel Stock Exchange 1903
- Royal Canadian Mint 1903
ASGM 101

• ASGM has an inverted employment-production character compared to LSM
  • e.g. Tanzania - 10,000 LSM vs 500,000 ASGM
  • Salary (US$ 100 M) (US$ 500M)

• 12-15% of world gold supply comes from 10 million people in "high risk areas" in 70 countries

• Huge wealth transfer from rich to poor
LSM triangle from:
The Golden Building Block,
World Gold Council, 2009
High-Risk Areas (as per OECD)

• areas of political instability or repression, institutional weakness, insecurity, collapse of civil infrastructure and widespread violence. Often characterised by widespread human rights abuses and violations of national or international law.

• Most ASGM camps have significantly higher risks of numerous sorts and fit this description
  – poor security, organised crime, violence, labour exploitation, illegal land use, illegal chemical use; almost 100% in my experience (15 years)
Conflict-affected and high-risk areas and ASGM

- According to OECD definition, at least 90% of ASGM sites are minimally **high-risk areas**
- A subset are **conflict-affected areas**
- The current dataset is very weak. **Red Flagging** countries and ASGM sites very complicated – few experts exist
- The issue:
  - The development/control of the informal gold supply
  - Primary value (2011): 400 tonnes gold = **19 billion USD**
    - **Un traced - fungible**
  - 70 countries: Africa, Asia, South America
    - Sudan, Zimbabwe, West Africa, DRC, **Indonesia, Philippines**, Colombia, Peru, Brazil...
Ex.: LSM-ASM Conflict Indonesia

• Papua – 10,000 ASM miners working in Grasberg’s tailings illegally

• Straits Resources, Kalimantan – 2500 miners using highly damaging and unsafe practices operate on straits’ property in collusion with local authorities
  – Operational performance for Sep 2010 quarter was down due to an unexpected suspension of operations due to landowner access issues.
Mt Muro
Puruk Cahu
Cyanide
Philippines

• 2000 – Mindanao; ceasefire - the Moro Islamic Liberation Front and the Philippine Armed Forces - allowed an end to the displacement of entire communities that were caught in the crossfire

• 2011 – Mindinao is essentially a no-go zone for ASGM interventions but one of the most active areas

• 2011 - Landslide deaths, a call for ASGM moratorium, but DENR states importance of role of ASGM in Philippino gold production – 70%
Due diligence in gold supply chain

• The OECD hopes to bring transparency to the gold supply chain from the top down through a paper trail
• That is possible using the Tiffany model: 50% from Bingham Canyon Mine in Utah, 50% recycled
• But is likely exclusionary for ASM who have the lowest capacity to follow due diligence
ASGM Supply Chain
Purification (quartering with silver)
Purification (quartering with silver)
Purification (quartering with silver)
24 Karat Gold - Internationally Tradable

International Market
Supply Chain Model (70% model)

LME price: $40,000/kg

1 Financier 5 kg Gold/week (profit = 25,000-costs/week)

5 Field Gold Shop 1 kg Gold/week (profit = $7000-costs/week ea.)

100 Site Bosses 50g Gold/week (profit $700-costs/week)

1000 Miners 5 g Gold/week (profit $70-costs/week)

Costs: Food, Shelter, Transport, Equipment, Fuel, Purification, Security, Staff

Site boss gets 70% of LME

50:50 Split

International Gold Buyer

Refiner

Export
Division of profits (USD per year)

- ASM miners: 37M (70.4%)
- Illegal security forces: 4.5M (8.3%)
- ASM miners: 5300 (88.0%); 7000 USD
- Illegal security forces: 200 (3.3%); 22000

Labour Force & income

- ASM miners: 5300 (88.0%); 149000
- Illegal security forces: 200 (3.3%); 5000

Socio Economic Structure
Informal vs illegal players in supply chain
ASM vs LSM supply chain (Patrick Schein)

• Which is more complicated for due diligence?
• Which pays more into the local economy?

<table>
<thead>
<tr>
<th>Site 1</th>
<th>Site 2</th>
<th>Site 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>30 Miners</td>
<td>30 Miners</td>
<td>30 Miners</td>
</tr>
<tr>
<td>Producer Country</td>
<td></td>
<td></td>
</tr>
<tr>
<td>On site buyer</td>
<td>Regional buyer</td>
<td>Exporter</td>
</tr>
<tr>
<td>70%</td>
<td>80%</td>
<td>90%</td>
</tr>
<tr>
<td>100 g</td>
<td>2 kg</td>
<td>50 kg</td>
</tr>
<tr>
<td>30 Miners</td>
<td>30 Miners</td>
<td>30 Miners</td>
</tr>
<tr>
<td>Site 2</td>
<td>Site 3</td>
<td>Site 1</td>
</tr>
<tr>
<td>Refiner</td>
<td>Smelter</td>
<td>L B M A</td>
</tr>
<tr>
<td>99%</td>
<td>99%</td>
<td>99,5%</td>
</tr>
<tr>
<td>100 kg</td>
<td></td>
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<tr>
<td>L B M A</td>
<td></td>
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</tbody>
</table>
Mined gold, beginning now, accounts for ~1.5%; ASM gold = 0.3%
Gold from **red flagged** areas = ?

**WORLD GOLD STOCKS END 2009: 165,600 t.**

- Official sector Sales: 212 t.
- Old Scrap: 1,674 t.
- To Stocks: 4,033 t.

2009 DEMAND

2009 SUPPLY

- Transformed/Transferred: 4,033 t.
Supply Chain Solutions/Vehicles

• Tiffany (no ASGM) – simple, but responsible?
• Cartier (small ASGM, perhaps growing)
• FT Gold (ARM’s Fairtrade and Fairmined certification) – directly for helping ASM formalise + model for responsible ASM
• Artisanal Gold Fund - an improvement fund to capitalize formalisation - monetized by trading gold; it mixes non-profit and for profit mechanisms
Risk

• Will OECD guidance build the fence higher and excludes 90% of the workforce in ASGM?
• Suggestion to formalize is right
• The means must be enhanced
• The barriers to compliance with the guidance must be lowered or subsidized
• 90% of the golden work force does not have the capacity or the incentive to follow the guidance
• Become more vulnerable
• Become in an even worse bargaining position
OECD Due diligence to an ASGM community
Hans Rosling – Means and Goals in development

<table>
<thead>
<tr>
<th>The dimensions of development</th>
<th>Means</th>
<th>Goal</th>
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</thead>
<tbody>
<tr>
<td>Human Rights</td>
<td>+</td>
<td>++++</td>
</tr>
<tr>
<td>Environment</td>
<td>+</td>
<td>++</td>
</tr>
<tr>
<td>Governance</td>
<td>+++</td>
<td>+</td>
</tr>
<tr>
<td>Economic growth</td>
<td>++++</td>
<td>0</td>
</tr>
<tr>
<td>Education</td>
<td>++</td>
<td>+</td>
</tr>
<tr>
<td>Health</td>
<td>+</td>
<td>++</td>
</tr>
<tr>
<td>Culture</td>
<td>+</td>
<td>++++</td>
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Big Picture

• To genuinely solve the problem of making gold sustainable and supporting human rights, the OECD needs to work proactively to support the economic development and reduce the poverty of 10 million miners currently operating in high-risk areas
Thank you