Addressing the Social and Financial Challenges of Artisanal and Small Scale Gold Mining

Meeting Summary

Geneva, Switzerland
International Environment House II

Thursday, 23 September 2010, 14h30 – 17h00
Cover page pictures: courtesy Cartier
Table of contents

Meeting Summary................................................................. 5
Appendix 1: List of participants................................................. 9
Appendix 2: Program ............................................................... 11
Appendix 3: Presentations....................................................... 13
Meeting Summary

Geneva, 23 September 2010

1. The meeting was opened by Mr. David Piper, Deputy Chemicals Branch of the United Nations Environment Programme’s Division of Technology, Industry and Economics (UNEP Chemical). Opening the meeting he remarked that approximately twelve percent of the global supply of gold is produced annually by artisanal and small-scale gold miners and with the price of gold reaching new highs, this sector is likely to grow. He commented that this meeting was organized for the international community and stakeholders to highlight changing global policies on mercury in light of the future global mercury treaty. He urged participants to consider their possible role in developing and supporting an effective global solution in the artisanal and small-scale gold mining (ASGM) sector.

2. The first presentation was given by Mr. Kevin Telmer who has 15 years of experience working with artisanal and small gold mining communities in numerous countries. He is the founder of the Artisinal Gold Council (AGC), an organization that promotes sustainable development in artisanal and small-scale gold mining communities and is affiliated with the University of Victoria, Canada. The speaker stated that ASGM currently represents one third (approximately 1000 tonnes a year) of mercury demand globally. As mercury is easy to use, accessible and cheap, it is widely used by the miners to extract gold. Discussing the economic aspect of ASGM, he noted that gold is an excellent method of transferring wealth from rich to poor countries indicating that small producers get 70% or more of the international price in remote areas. The presenter recommended that ASGM needs to be brought into formal economy to maximize benefits and for this to happen, improved practices and reputation are essential. He stressed that whole ore amalgamation is a mercury intensive practice that should be replaced. Some technical solutions to decrease the use of mercury in ASGM were presented, including emission control through the use of fume hoods and retorts, mercury re-activation and other non mercury techniques such as gravity separation and chemical leaching. He also indicated that field work is the source of innovation and progress.

3. The next presenter was Ms. Nawal Ait-Hocine who was representing Cartier. She is the manager of Cartier’s ethical, social and environmental performance with a particular focus on product manufacturing, supply chain issues and corporate communications. She noted that Cartier is taking a leading role in the advancing exemplary ethical conduct through a ‘corporate approach’. Cartier buys gold from Goldlake mine and has signed a unique sourcing deal with the company. Goldlake addresses many social and environmental issues related to gold mining and has a business model, not an ‘aid’ model, practicing mercury and cyanide-free extraction processes and a zero discharge waste and water management system. Goldlake has an interdependent working relationship with artisanal miners from the local community who supply them with gold extracted by using traditional mercury-free techniques. Cartier is seeking other ‘partners’ who can demonstrate similar high standards and mutually support the Cartier strong bond with its customers and sustainable development.

4. The next presentation was given by Mr. Patrick Schien. He is a French entrepreneur and has been active in the precious metal industry for 30 years. In 1992 he founded a Precious Metal Trading Company operating its own refinery in Paris and is a member of the executive board of Alliance for Responsible Mining (ARM). He outlined ARM’s fair trade label approach and
highlighted some of the important issues which are addressed by the fair trade model. The advantages of the Fair Trade Labeling Organization (FLO) model is that it can directly raises awareness of consumers and campaigns for change about social and environmental challenges associated with ASGM activity. This bottom-up business model is transparent and democratic and ensures a fair price of gold to miners while promoting traceability along the supply chain.

The presenter pointed out some of the social challenges faced by the miners and mining community including legal issues, formalization/organization, developing democratic governance, literacy, gender issues, child labor, transparency and accountability in organizations. He also highlighted the following economic development challenges: strengthening administrative capabilities, developing economies of scale, export markets and pre-financing for purchase of gold and cleaner technology. Getting banks, professionals and governments to work with ASGM is a major challenge to the model. Overall, he indicated that the private sector will play a pivotal role in providing the access to credit needed to address these challenges.

5. The last presentation was delivered by Mr. Juan Miguel T. Cuna, Director of Environment Management Bureau of the Department of Environment and Natural Resources, Philippines. The presenter gave a government perspective of ASGM and the challenges faced at a national level. In the Philippines, the sector provides employment to more than 300,000 miners, including 18,000 women and children and supports the livelihood of about one million people. Miners are generally organized in the Philippines and are mostly families and neighbors involved in ‘backyard’ activities. He identified one of the key issues faced by the government in terms of ASGM is that about 30 permits are issued for small-scale gold mining covering more than 400 hectares of mining areas while the rest of the small scale mines are operating without legal mining titles. The presenter expressed his concern about the large amount of mercury being used in the sector (70 tons of estimated annual mercury release in 2008 alone).

The mercury is supplied mostly by the gold dealers to the miners. Some of the social concerns he outlined for this sector include: uncontrolled migration into mining areas, land tenure and resource use conflicts, exploitation of workers especially minors and absence of social security benefits for miners. The presenter explained that in order to understand and solve the issues in the sector the government is developing a National Strategic Plan on ASGM. He indicated that there is a need to approach the issue from a development perspective and focus on the policymakers, making sure they understand the importance of the sector. These changes will require addressing difficult social aspects and long term action will depend on the availability of funding. In conclusion the presenter noted that the strategic plan is a promising work in progress, and it should be kept in mind that there was no silver bullet to fix the problem.

Discussion
Susan Keane (Natural Resources Defense Council), the co-lead of the Artisanal and small scale gold mining partnership area facilitated the discussion period.
6. There was some discussion around the origin of the gold in Fair Trade labeling schemes. Mr. Schein responded by noting that the only way to fingerprint gold is radioactivity tracing, which is not feasible. The certified miners have reporting obligations to the Fairtrade labeling organization (FLO), and the sites are routinely audited. When asked whether there are any
specific guidelines or criteria in the selection of the sites where they do gold mining. Mr. Schien responded by saying that environmental considerations are one of four aspects of the FLO standards and environment is addressed in the best way possible.

7. There was a discussion about a global strategy for the production and supply of gold. Mr. Telmer explained that there are no good estimates of how much gold is available to ASGM and that for this reason the formalization and inclusion of the ASGM miners in the society is important. Most miners do not want to become legal as they would have to pay taxes. In order to convince miners to be part of the system, governments must find ways to either increase their productivity or develop innovative taxation systems.

8. Commenting on the implementation of the National Strategic Plan for Philippines, Mr. Cuna noted that the most important aspect at the national level is the understanding of the problems by the members of ASGM communities. The importance of voluntary basis initiative being backed by governments was highlighted and the strategic plan was identified as an important tool for promoting that. It was also recognized that governments have a role to play in the provision of services to this sector.

9. Mr. Cuna further commented on the linkage of small scale mining with large scale mining, noting that there are some cases of conflict between the two sectors but usually they get along well.

10. A question was raised about the panel view of ASGM in conflict countries and the links to the informal economy. The presenters explained that for mining, stability is essential because of the investment needs. In the Philippines, certificates are issued to ASGM miners for their operations. Local people usually prefer small scale mining to large scale mining as the revenues are more directly and rapidly redistributed to the local community.

11. One of the participants asked the representative of Cartier about obtaining more ‘clean’ gold sources. She responded that the problem was with the limited supply. If the supply was to increase, Cartier would be buying more ‘clean’ gold.

12. There was a concern raised over the issue of human rights in gold mining and the actions taken to bring the miners into the formal economy. Mr. Schein responded by noting that human rights are the first aspects of the FLO standards. He said that the way to get more miners seeking certification is to get more consumers requesting Fairtrade and Fairmined gold hence creating a demand for this gold. ARM hopes to eventually reach 20-25 tonnes of FLO certified gold per year.

13. Responding to a question on International Labor Organization’s role in child labor in mining, the representative from ILO, Ms. Susana Gonzalez, noted that the organization had started an international programme for the elimination of child labor which began in 2005.

14. Ms. Veerle Van Wauwe from the Transparency S.A was invited by the facilitator to comment on the ASGM activities going on in Peru, given her organization’s experience there. She said that the government lacked the infrastructure to deal with the strong influx of people in the ASGM sector. She noted that the financial sector has to get involved in order to assist with the necessary investment.
Concluding remarks

15. Concluding the session, the ASGM partnership area co-lead, Mr. Ludovic Bernaudat (UNIDO) expressed his gratitude to the participants for taking the time to participate in the meeting. He noted that this session was very informative as they learned about the sector and the innovative market-based approaches that are being implemented and came as a key complement to the more traditional technology transfer and local awareness raising activities. He observed that numerous innovative examples exist, need to be promoted and replicated. These include improvements at the production stage but also acting at all levels of the value chain, all the way to the consumer. Overall, the issues raised by the sector are multifaceted and require multi-stakeholder approaches.
Appendix 1: list of participants

Government Representatives

1. Xhixho Dorina, Albania
2. Ismayil Alakbarov, Azerbaijan
3. Budoor Ahmed, Bahrain
4. Johanne Forest, Canada
5. Gedeón Jaramillo Rey, Colombia
6. Mario Vega Hernández, Costa Rica
7. Raffaele Rainone, Italy
8. Anne Keah, Kenya
9. Seung Hee Kim, Republic of Korea
10. Mady Chababy, Madagascar
11. Victoria Romero, Mexico
12. Bilal Ahmad, Pakistan
13. Jorge Félix Corrales Hidalgo, Panamá
14. Bilal Ahmad, Pakistan
15. Iuti Zevallos, Peru
16. Elizabeth Te, Philippines
17. Leizel Fernandez, Philippines
18. Mohamad Arnous, Syria
19. Pauline Davies, Uruguay
20. Fernando Lugris, Uruguay
21. Boris Richard, Switzerland (Federal Department of Foreign Affairs)
22. Thomas Heimgartner, Switzerland (Federal Department of Foreign Affairs)
23. Chameso Mucheka, Zimbabwe
24. Enos Mafeunba, Zimbabwe
25. Jane Dennison, United States
26. Kenneth J. Davis, United States

United Nations system, intergovernmental organizations and MEAs

25. Rizzolio Diana, UNEP/GEN
26. Laura Schibler, UNEP/GEN
27. Gianfranco Caci, UNEP/GEN
28. Robert Bolješić, UNEP
29. Daniel Luka CURNIER, UNEP
30. Hassan Partow, UNEP
31. Ivo Mulder, UNEP/FI
32. Roy Brooke, Joint UNEP/OCHA Environment unit
33. René Nisenhuis, Joint UNEP/OCHA Environment unit
34. Ruth A. Etzel, Department of Public Health and Environment
35. Anida Yupari Augado, UNCTAD
36. Ludovic Bernaudat, UNIDO
37. Stefano Sensi, OHCHR
38. Joanna Tempowski, WHO
39. Celia Solari, University for Peace
40. Monica Zavagli, Ramsar Convention on Wetlands Secretariat
41. Cathleen Cybèle, Ramsar Convention on Wetlands Secretariat
42. Alexander Kasterine, ITC
43. Martin Georg Hahn, ILO
Non-governmental organizations

45. Otto Simonett, Zoï Environment Network
46. Nickolai Denisov, Zoï Environment Network
47. Victor Novikov, Zoï Environment Network
48. Stephan Robinson, Green Cross Switzerland
49. Andrea Walter, Green Cross Switzerland
50. Jean-Baptiste Ronat, Médecins Sans Frontières
51. Alexander N.S. Mabelle, Iqsensato
52. Margo Kowalczyk, Business & Human Rights Resource Centre
53. Helmut Lubbers, Ecoglobe
54. Yves Lador, Earthjustice
55. David Azoulay, Ciel

Academic institutions

56. Meg Harbourd, University College, Oxford
57. Peter Larsen, IHEID
58. Annika Oskarson

Private sector

59. Fouad Farfara, Momitrad Sarl Salé Maroc
60. Van Wauve Veerle, Transparence s.a
61. Christopher H. Cordey, Wholebeauty
62. Christophe Joner, Metalor Technologies SA
63. Zeto Steiner, Metalor Technologies SA

Others

64. Nicolas Hofer
65. Andrea Barahona
66. Evelyn Mütze
67. Rachel Grisendi
68. Juliana Galan

Speakers

69. Kevin Telmer, Artisanal Gold Council (AGC)
70. Nawal Aït-Hocine, Cartier International SA
71. Patrick Schein, S&P Trading /Alliance for Responsible Mining (ARM)
72. Juan Miguel Cuna, Philippines Department of Environment & Natural Resources
73. Ludovic Bernaudat, United Nations Industrial Development Organization
74. Susan Keane, Natural Resources Defense Council
Addressing the Social and Financial Challenges of Artisanal and Small Scale Gold Mining

Geneva Briefing - Thursday 23 September 2010 from 14.30 – 17.00, IEH II

**Purpose of briefing:** To raise awareness, foster a dialogue and build collaboration with international organizations, the private sector and non-government organizations of the issue and challenges associated with artisanal and small scale gold mining.

14h30 – 14h45 **UNEP Welcome and Introduction**

14h45 – 15h05 **Introduction to the issue of Artisanal and Small Scale Gold Mining** (Presenter: Kevin Telmer, Artisanal Gold Council)

15h05 – 16h15 **What are possible solutions to the ASGM financial and social challenges?** (Panel presentations)

Proposed Presentations (10-15 minutes each):

i) Supply chain approaches – Jewelry example  
   (Presenter: Ms. Nawal Ait-Hocine, Cartier)

ii) Gold branding – Fairtrade and Fairmined gold example  
    (Presenter: Mr. Patrick Schein, President S&P Trading / Executive Board Member - Alliance for Responsible Mining (ARM))

iii) Government approaches at the national level  
     (Presenter: Mr. Juan Miguel Cuna, Philippines Department of Environment & Natural Resources)

iv) Independent local initiatives  
    (Video presentation: Crispin Clean T Mine)

16h15 **Panel Questions and Answers**  
    (Facilitated by Ms. Susan Keane, Natural Resources Defense Council)

Facilitated discussion on ASGM and the role of the various stakeholders  
Discussion on possible next steps / areas for collaboration

17h00 **Close**  
    (Mr. Ludovic Bernaudat, United Nations Industrial Development Organization)
Background - Social and financial challenges in artisanal and small scale gold mining

Gold plays a central role in the global economy.
- Gold is a reserve asset, accounting for 10% of reserves held by central banks. Gold is also used as an investment tool. In 2008, the overall gold market saw inflows of US$ 106 billion, of which US$ 32 billion represented investment flows.¹

Artisanal and Small Scale Gold Mining (ASGM) is an informal but globally significant industry.
- Twelve percent of the global supply of gold is produced annually by ASGM.² This sector is likely to grow due to the sustained high price of gold, which reached $1,250 an ounce in June 2010.
- ASGM is broadly described as the extraction of gold by miners working in small or medium sized operations, using rudimentary techniques. Simple practices with little economic investment are used.
- ASGM directly employs around 10 million, and indirectly as many as 50 to 100 million people globally, almost all of whom live in developing countries. The sector provides an important mode of employment and income where alternatives are not easily found, and often forms the basis for a relatively sophisticated but informal local economy.
- This sector is extremely decentralized and generally informal. It often takes place in remote areas with little or no government presence.

Serious social and environmental challenges are associated with ASGM.
- ASGM cuts across many development issues, including poverty, economic development, gender, child labor and environment. For example, child labor, environmental damage and human rights abuses often arise from marginalized ASGM activities and can affect the reputation and operational capacity of corporations and their investors.
- Regulatory approaches tend to have limited effectiveness in addressing challenges associated with this informal sector.

A global mercury treaty is a mechanism for engaging with the ASGM sector.
- Governments unanimously agreed at the UNEP Governing Council in 2009 to the negotiation of a global legally binding instrument on mercury to protect human health and the environment from the harmful effects of mercury. Negotiations, facilitated by UNEP, began in June 2010 and are to be completed by 2013.
- Global treaty negotiations for mercury are raising the profile of the ASGM issue because this sector is the largest demand sector for mercury globally. Mercury is used to extract gold because it is cheap, easily accessible, quick and easy to use.
- The future convention on mercury is likely to restrict the supply and trade of mercury. Limiting supply of mercury could compel miners to change their practices. At the same time however, the mercury treaty itself will not fix all of the other challenges linked to the ASGM issue. It will be imperative to provide other types of social support to miners to avoid creating a black market for mercury, negatively impacting the income of miners and increasing the transparency of the gold supply chain.
- It is important for the international community and financial institutions to be aware of changing (global) regulation on the use of mercury in the ASGM sector and consider their possible role in supporting an overall effective global solution, and many worthwhile initiatives are underway.
- Involvement of a broad network of stakeholders from the outset can help tackle some of the challenges associated with ASGM. A market-based approach is needed to complement the ongoing intergovernmental negotiations process.

¹ World Gold Council data.
² "Squeezing Gold from a Stone" available on the UNEP Hazardous Substances website: www.unep.org/hazardoussubstances/
Appendix 4: Presentations

Introduction to the issue of Artisanal and Small Scale Gold Mining
Presenter: Kevin Telmer, Artisanal Gold Council

Outline

• Artisanal and Small Scale Gold Mining
  – What it is
  – History and Background
  – Why it is important
• Types of Solutions
• Future Scenarios

Slide 1

Introduction to Artisanal and Small Scale Gold Mining:
Who is Involved and Approaches to Solutions

Kevin Telmer,
Executive Director, Artisanal Gold Council
Prof. University of Victoria

Slide 2

Outline

• Artisanal and Small Scale Gold Mining
  – What it is
  – History and Background
  – Why it is important
• Types of Solutions
• Future Scenarios

Slide 3

ASGM
• Exploitation of small deposits
• Low capital input
• Labour-Intensive
• Poor Access to Markets and Support Services
• Low Standards of Occupational Health and Safety
• Significant Environmental Impact

Slide 4

Alluvial ASGM

Slide 5

How is Mercury Used and Lost?

Gold + Sand
Add mercury to dissolve gold
Tailings

Form Amalgam
Apply Heat
Sponge Gold

50% Au, 50% Hg
3% Au, 30%Ag, 50% Hg

Slide 6

Mercury Losses Vary With Style of Operation

• Much more mercury lost when whole ore is amalgamated
• Even worse when CN is used after mercury – a growing trend

Whole Ore
BAD

Gravity Separation

Tailings
Gravity Concentrate

BETTER
Why is Mercury Used?

- Very easy
- Very independent – 1 person can do it
- Highly effective under field conditions
- Accessible
- Cheap
- Facilitates precise transactions
- Produces quick capital (1 day)
- Divides profits
- Miners are not aware of the risks
- No choice

Mozambique, 2009
Toronto

- Beginning of modern mining sector based on ASM
- King Edward Hotel Stock Exchange (1903)
- Royal Canadian Mint (1903)
- Railway to Cobalt, Ontario built
- Newspapers, the Financial Post & Northern Miner were created
- Geological knowledge began to be heavily employed
- Ontario and Quebec Mineral Sectors were born
- Inco, Noranda, Placer Dome...

Modern Times:
Serra Pelada (The Naked Hill), Brazil, 1979

High intensity whole ore amalgamation

Canada, 1890s
Adressing the Social and Financial challenges of Artisanal and Small Scale Gold Mining

Slide 25
Brazil, 1990s

Gold in Development / Poverty Relief
- Gold represents an excellent method of transferring wealth from rich to poor countries
- Small producers often get 70% or more of international price in remote areas - This is not true for any other product
- Gold mining is a good development opportunity
- ASGM needs to be brought into formal economy to maximize benefits – but can be a complex problem (Hernando de Soto problem)
- Improved practices and reputation are essential to make this happen
- Reducing mercury use is key to realizing this opportunity, particularly in light of UNEP’s forthcoming Global Mercury Treaty

Slide 27
Scale and Economy of ASGM
- 330 tonnes of gold from 70 countries
- 10 billion USD at 900$/ozt
- 10 million miners (3 million women and children)
- $1000/miner - unevenly distributed
- Secondary economy, perhaps 50 million people at 50 billion USD/a
- Roughly double the population of Canada at a GDP PPP 40 times lower

Slide 29
Consumption/Emission Intensity ASGM vs LSGM
- The Formal Mining Sector out performs the ASGM sector in some areas and vice-versa
  - More energy efficient (joules/unit gold)
  - Release less greenhouse gasses (CO2e/unit gold)
  - Produce less waste rock and tailings per unit gold
  - Release 5 times more mercury
  - 40 times more mercury per unit of gold produced
  - Those who use CN use about twice as much per unit of gold
  - Do not practice waste management

Slide 26

Slide 28
Mercury Watch

Slide 30
Remaining ASGM Gold Resources
- Not well known but at least 20 years, likely much more
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Slide 31

**Perspectives**
- The breadth of society that interacts with Artisanal and Small Scale Gold Mining (ASGM) is much broader than is generally recognized
- Current ASGM production is around 12% - larger than any single producer
- Risk (reputational and operational) for LSGM (Large Scale Gold Mining) is increasing due to ASGM

Slide 32

**Solutions**
- Technology Transfer
- Financial Mechanisms
- Enabling Policy

Slide 33

**Approach to Solutions**
- Profit is an important incentive for creating sustainable change in any ASGM operation.
- Asking miners to change their behaviour in a way that induces a pay cut has been universally unsuccessful
- Interventions where better practices have come along with increased profits have thrived
- Field work is the source of innovation and progress

Slide 34

**Technical Solutions**
- Alternative processing:
  - Lower mercury (step 1) - Mercury Recycling
  - emissions control (fume hoods, retorts)
  - mercury re-activation
- Zero mercury (step 2)
  - Gravity separation and or chemical leaching

Slide 35

**Alternative Processing: Concentration vs whole ore**
Whole ore amalgamation replaced by concentration;
500 times mass reduction; Au recovery of 65% => CN

Slide 36

**Who can be Involved in the transition to cleaner gold?**
- ASM communities and their local governments
- Multiple national government stakeholders
  - Mining
  - Environment
  - Health
  - Trade
  - Education
  - Treasury (federal gold reserves)
- Gold industry from bottom to top (producers, traders, buyers, nations heavily involved in gold mining)
- Jewellers and luxury goods market
Thank you!

Questions

- Are there practical solutions to the ASGM problem and how much do those solutions cost?
- What have been some successful approaches?
- Where are the problems most severe in the world?
- Do these correspond to places companies work?
- Does work on ASGM align with other Agency priorities?
- How could involvement be tied to the development of the UNEP mercury treaty?
- What countries should Canada consider taking a lead role developing treaty mechanisms for ASGM?
Supply chain approaches – Jewelry example
Presenter: Ms. Nawal Ait-Hocine, Cartier

OVERVIEW: WHO IS CARTIER?
• For more than 160 years, the image of the precious
• A tradition of excellence in particular in creativity and craftsmanship
• Long-lasting creations with a patrimonial value

WHAT DOES CARTIER REPRESENT?
• Most issues associated with precious materials happen upstream of Cartier and its suppliers
• Cartier accounts for a tiny proportion of the total precious materials used…
  - ... Yet, people aspire to Cartier, a brand with broad symbolic value…
  - And a leader in jewellery design
  - ...that means we have a responsibility to reassure our customers of the ethical provenance of our pieces

THE SCOPE OF OUR RESPONSABILITIES
• Our own practices
• Those of our suppliers and our supply chain, which may have an impact on our reputation
• By extension, the practices of the entire industry, that have an impact on the reputation of jewellery products

THE APPROACH CHOSEN BY CARTIER
1. An "industry" approach, promote responsible business practices
2. Concrete action through our purchases
3. A "corporate" approach vs. A product approach
Adressing the Social and Financial challenges of Artisanal and Small Scale Gold Mining

Slide 7

**THE APPROACH CHOSEN BY CARTIER**

1. An « industry » approach, promote responsible business practices
2. Concrete action through our purchases
3. A « corporate » approach vs. A product approach

Slide 8

**RESPONSIBLE JEWELLERY COUNCIL**

- Since 2005
- Ethical, social, environmental
- For all companies, from mine to retail
- Worldwide
- Develop a label of good practices that anyone can use
- Anticipate new regulations
- A unique system designed by the industry
- A voluntary system

Slide 9

**RESPONSIBLE JEWELLERY COUNCIL**

- 240 members
- Adherence to a Code of practices (with a specific mining supplement)
  - Internal practices
  - Impact on the supply chain
- Members commit to be independently verified by RJC accredited auditors in order to be certified

Slide 10

**THE APPROACH CHOSEN BY CARTIER**

1. An « industry » approach, promote responsible business practices
2. Concrete action through our purchases
3. A « corporate » approach vs. A product approach

Slide 11

**BURMESE GEMSTONES**

- October 5, 2007: a leadership stance on Burmese gemstones
- No more gemstones from Burma
- Before the USA JADE Act (July 2008)
- A decision in conformity with our policy

Slide 12

**REAL ISSUES**

- Artisanal gold mining
  - 10-15 million people of which 30% are children
  - 20 to 30 per cent of world production
- **Mercury**
- **Working conditions**
- **Conflict gold**
REAL ISSUES

- Gigantic operations
- Cyanide
- Tailings
- Lack of community consent and benefits to the community
- Mine closure: what's left?

PROMOTE THE DEVELOPMENT OF EXEMPLARY PRACTICES

- Cartier has signed a unique sourcing deal
- An Italian company operating in Honduras: GOLDLAKE
- An innovative company
- With an alluvial mine: EUROCANTERA

GOLDLAKE’S MISSION

- Our mission is to deliver gold to the market with the assurance that at every step in the value chain we have a positive impact on the people, communities and the natural environment touched by our operations.

- We believe that in business, innovation, coupled with an ambition to make a difference in people’s lives and to protect our natural world, results in benefits for all.

DUAL, INTEGRATED PRODUCTION

- 70% mining company
- 30% artisanal

KEY POINTS: environment

- NO cyanide
- NO mercury
- ONLY water and gravitational force
- Zero waste: 100% recycling including gravel and clay
- Reforestation program
Slide 19

**KEY POINTS: social**
- Free clinic for 8 villages
- 4000 consultations/year
- 80 km of roads to break isolation
- Disease prevention campaigns
- Equipment, training and assistance for artisan miners

Slide 20

**THE AGREEMENT**
- 3 years
- Year 1: all production
- Year 2 and 3: Cartier can buy 50% of excess production above year 1

Slide 21

**WHY THIS STEP IS IMPORTANT**

A SMALL FRACTION OF OUR GOLD SUPPLY BUT ...
- Supports Goldlake’s development - rewards leaders and forward thinkers
- A strong signal to the market that practices must change?
- An incentive to develop yet more solutions?
Gold branding – Fairtrade and Fairmined gold example
Presenter: Mr. Patrick Schein, President S&P Trading / Executive Board Member - Alliance for Responsible Mining (ARM)

Slide 1

Slide 2

Slide 3

Slide 4

Slide 5

Slide 6

Fairtrade and Fairmined Gold

• Fairtrade-Fairmined Gold is exclusively available from ASM
• Minors must be formalised and organised (Legal mineral rights are a must)
• Requires consultation and consent of local community authorities and grievance mechanisms to be in place
• Payment of all taxes and royalties
• Management of toxic substances (no whole ore amalgamation – obligatory use of retorts)
• No support to illegal activities or armed conflict
• Strict health and safety requirements
• NO child labor
• Rights for women miners
• Traceable gold

Why Fair Trade Model?

• It directly raises awareness of consumers and campaigns for changes in the rules and practices of conventional international trade
• Economic incentive for positive transformation: TRADE NOT AID – It’s a Business Model
• Allows access to differentiated markets
• Recognizes change is a process: minimum and progressive requirements
• Long term vision
• Pays a fair price
• Pays a FT premium to producers
• Ensures traceability
• Ensures community development & environmental sustainability
• Bottom up, democratic & transparent processes

NETWORK OF PILOTS

• Bolivia: Cumbre del Sajama with Cotapata Cooperative
• Colombia: Oro Verde at Tadó and Cordones, Choco
• Colombia: University of Nariño and Corporativos with Cordillera and Asociación Curibamba, Nariño
• Peru: Red Social y AMASUC with CANELAS, MINCUELA, SOTRAMI
• Women miners from Cuatro Horas and Pilkanama, Central-South Peru
• Ecuador: Escuela Superior Politecnica (ESPOL) with the Bellarica Cooperative, South Ecuador
• Regional coordination by: ARM
• Inspection and certification by FLO Cert, in 2010

Our Strategy

To create an international certification system for responsible sourced minerals coming from artisanal and small scale mining and to develop differentiated markets for these products.

Strategic Objectives

• Standard Setting
• Producer support
• Advocacy for improved public policy and consumer awareness

Our Mission

...to work towards the transformation of artisanal and small scale mining into a socially and environmentally responsible activity, facilitate an economically just supply chain and educate the consumers as to their power to directly improve the quality of life of artisanal miners by purchasing fair trade jewellery and minerals.

Presenter: Mr. Patrick Schein, President S&P Trading / Executive Board Member - Alliance for Responsible Mining (ARM)
Adressing the Social and Financial challenges of Artisanal and Small Scale Gold Mining

Slide 7: Social Development Challenges
- The right to be legal
- Getting organised
- Developing democratic governance
- Literacy and numeracy
- Getting women miners in the picture
- Transparency and accountability in organisations
- Political incidence

Slide 8: Economic Development Challenges - 1
- Strengthening administrative capabilities: strategic planning, risk management, accounting and democratic governance practices
- Capacity to develop an annual plan for the use of the premium-long term shared vision.
- Developing economies of scale and exporting directly
- Access to credit and pre-financing for purchase of Au and cleaner technology

Slide 9: Economic Development Challenges - 2
- Getting banks to work with ASM - credit (formal, semi-formal and informal)
- Getting governments to work with ASM - enabling legislation and public policy
- Getting LSM to work with ASM as part of the local community and a strategic aspect of closure planning.
- Getting professionals to work with ASM - where is the academia? in knowledge creation, technology, organisation, business models

Slide 10: Labour Development Challenges
- Informal work arrangements
- Women’s and disadvantaged groups’ rights
- Child labour - AIDS orphans dilemma specially in Africa
- Perception of risk - health and safety issues
- Mining rescue and equipment cost
- Social security

Slide 11: Environmental Development Challenges
- Access to clean technologies and efficient processing to end whole ore amalgamation
- Technological solutions to separate the Hg and Cn circuits
- Sanitation and access to drinking water
- Tailings management
- Top soil management for rehab
- Access to credit to improve efficiency of operations and get cleaner technologies
- Access to the appropriate retorts for Hg recovery
- Use of Hg by women and children

Slide 12: Environmental requirements and Ecological Gold
**Mercury and Cyanide:**
Miners must use safe and responsible practices for management of toxic chemicals in gold recovery and tailings, following UNEP/UNIDO guidelines.
Where possible, no mercury or cyanide should be used for gold recovery.

**FT and FM Ecological GOLD:**
No mercury or cyanide and strict ecological restoration practices. Ecological gold is scarce because without chemicals there is a drastic reduction in gold recovery.
Proposition*: Guarantees a better deal for small-scale mining communities.

Promise: When you buy Fairtrade and Fairmined jewellery, you are supporting well-managed community mines that are environmentally and socially responsible.

Benefit: Precious jewellery with a proven impact and a positive story

Reason to believe: The jewellery has a certified stamp of origin showing it’s been carefully extracted from a limited number of small scale mines, so it can be traced right from the miner to the jeweler. You can access the unique story of every mining community that is ‘Fairtrade and Fairmined’ certified.

Passion

It’s forged the world’s first ethically sources, fairtrade and Fairmined jewellery. Fairtrade and Fairmined gold is ethically sourced and has been carefully and sustainably extracted from small-scale mines. This certified gold is used to create beautiful, ethical and sustainable jewellery, which is then sold to people around the world who want to make a positive impact on the planet and support fair and responsible mining practices.

Commitment

To actively demonstrate fair sourcing practices, we source our gold from ethical and sustainable mines. We choose only the finest materials and work with small-scale miners who use environmentally friendly methods to mine responsibly. We ensure that every piece of jewellery is certified and traceable, from the mine to your doorstep.

A Future

In which miners can improve their livelihoods

Fairtrade and Fairmined gold is ethically sourced from small-scale mines, where miners receive fair compensation for their work. This ensures that miners can improve their livelihoods and support their families. By choosing Fairtrade and Fairmined jewellery, you are supporting miners who are working towards a more sustainable future for everyone.
Next Steps & Challenges?

- FT & FM Gold launch Feb 2011 for: UK, Canada, Finland
- Expansion in the 20 other countries where FLO Labelling initiatives are present with an objective of 5% of the jewelry market
- Mining communities: expansion in LATAM and introduction in Africa and Asia

Challenges:
- Mercury ban => Criminalization of its use => Is it the good way?
- Public Policy: get the ASGM miner into the picture: Legalization of the ASGM sector

www.communitymining.org | www.fairtrade.net
Government approaches at the national level
Presenter: Mr. Juan Miguel Cuna, Philippines Department of Environment & Natural Resources

1. ASGM IN THE PHILIPPINES: Initiatives to Overcome Social and Financial Challenges
   - Initiatives:
     - Government approaches at the national level
     - Key Issue 1: Understanding the Magnitude of the Problem
     - Key Issue 2: Identify key stakeholders and bring them together
     - Key Issue 3: Mainstreaming
   - Conclusion


3. Distribution of Gold Deposits in the Philippines

4. Mercury Use and Emission in ASGM

5. The Artisanal and Small-Scale Gold Mining Industry
   - More than 30 permits issued for small-scale gold mining covering more than 400 hectares mining areas; the rest are operating without legal mining titles
   - Provides employment to more than 300,000 miners including 18,000 women and children
   - Comprises traditional and gold rush miners
   - Supports the livelihood of about one million people

Sources: U.S. Geological Survey Minerals Yearbook, Mines and Geosciences Bureau
Slide 7

Mercury Trading in ASGM

- Mercury used by miners is supplied mostly by gold dealers
- Prices of mercury vary; price of mercury ranges from P6.00 per gram to P6,000 per kilo
- Some gold dealers who supply mercury either operate dental clinics or are traders of dental supplies

Slide 8

ASGM Social Concerns

- Unregulated migration in mining areas especially in “gold rush areas” causes strain in local resources
- Land tenure and resource use conflicts
- Exploitation of workers especially minors
- Absence of social security benefits for miner-labourers

Slide 9

ASGM Financial Concerns

- Low-priority
- Sourcing funds
- Intermittent
- Lack of Focus

Slide 10

Key Issue 1: Understanding the Issue

- Developing a National Strategic Plan on ASGM (NSP)
- NSP provides framework
- Organize and rationalize

Slide 11

ASGM National Strategic Plan Formulation Process

1. Baseline Data Gathering
2. Constitution of the ASGM Working Group and the National Steering Committee
3. Consultation with Stakeholders and Preparation of Preliminary Draft
4. Revision/ fine-tuning of Draft Plan
5. Submission of the Draft Plan to UNEP
6. Plan Finalization and Endorsement
7. Formalize Agreements for Plan Implementation

Slide 12

Key Issue 2: Bring Stakeholders

a. Artisanal and small-scale gold miners
b. ASGM communities and adjacent villages
c. Government Agencies
   - DENR-Mines & Geo-Sciences Bureau (MGB)
   - DENR-Environmental Management Bureau (EMB)
   - Local Government Units (LGUs)
   - Other government agencies
     - Department of Health (DOH)
     - National Commission on Indigenous People (NCIP)
     - Regional Secretariat (RSP)
     - Department of Labor and Employment (DOLE)
     - Department of Trade and Industry (DTI)
     - Cooperative Development Authority (CDA)
Key Issue 2: Bring Stakeholders

- Multi-sectoral boards (e.g., P/CMBB*)
- Church
- NGOs and other cause-oriented groups
- Gold and mercury traders (including jewellers)
- Large-scale mining companies
- Research and academic institutions

*Provincial/City Mining Regulatory Board

Key Issue 2: Bring Stakeholders

- ASGM Project funding from bilateral and multilateral donors and local funding institutions
  - The World Bank
  - United Nations Industrial Development Organization (UNIDO)
  - United Nations Environment Programme (UNEP)
  - Geological Survey of Denmark and Greenland (GEUS)
  - United States Agency for International Development (USAID)
- Implementation of Quick Start Programme (QSP) for Artisanal and Small-scale Gold Mining (ASGM) under UNEP

Key Issue 3: Mainstreaming

- ASGM Conferences, Meetings and Consultations
  - March 2007: Forum on Small-scale Mining in the Philippines, Makati City
  - June 2005: Community and State Interests in Small-Scale Mining - Sharing Experiences from the Asia-Pacific Region, Manila
  - Benguet Federation of Small-scale Miners Annual Mining Congress

(Continued)

- Inception Meeting – Jan. 19-21, 2010
- ASGM Global Forum
- NSP Plan:
  - Approach from development perspective
  - Popularize the issue - targetted IEC Campaign
  - Focus on policymakers

Conclusion

- Work in progress
- No Silver Bullets
- Immediate Actions Needed

Thank You.