

**United Nations Environmental Programme
UNEP**

**Second Global Forum on Artisanal and Small Scale Gold Mining
3 – 5 September 2013
Lima, Peru**

Final report¹

¹ The present report has been reproduced without formal editing

Background and overview

- i. In January 2013 over 140 member governments of UNEP agreed to a convention to control global mercury pollution. The use of mercury in artisanal and small scale gold mining is a key sector covered by Minamata Convention on Mercury. Countries with ASGM in their territories will be required to reduce, and where feasible eliminate, mercury use.
- ii. UNEP and its partners in the Global Mercury Partnership convened the Second Global Forum on ASGM from 3 to 5 September 2013 in Lima, Peru. The Forum was attended by almost 100 participants, representing governments, intergovernmental and non-governmental organizations.
- iii. The Second Global Forum provided technical and policy information to governments and other stakeholders that assist countries in meeting their obligations related to ASGM under the Minamata Convention on Mercury. The Forum also was an opportunity for countries to share experiences and engage in a dialogue on the broader range of issues associated with ASGM.
- iv. The Forum reviewed the challenges and opportunities surrounding the ASGM sector; provided an overview of the implications of the Minamata Convention on Mercury; discussed national strategic planning approaches to reducing mercury uses in the sector; provided training on inventory development; discussed technical and formalization guidance which play an important role in addressing ASGM issues; and discussed success stories, including large-scale and small-scale models of working together.
- v. The participants expressed the importance of working together within their regions in an effort to have more coherency during implementation of regional strategies and actions.
- vi. It was acknowledged that the meeting was beneficial for the participants as it brought together experts from different areas of ASGM facilitating exchange of experience and future coordination.

Key messages from the Global Forum

The following key messages emerged from the Forum:

- a. The Minamata Convention has brought attention to the ASGM sector and its requirements are consistent with the approach of the UNEP Global Mercury Partnership. It reiterates that solutions need to be developed based and tailored to National circumstances.
- b. This sector should be seen as an important economic development activity, rather than only a source of social conflicts. ASGM is more than means of subsistence, it is an entrepreneurial activity. It provides livelihood to around 10-20 million miners around the world, but causes high environmental and health risks.
- c. The role of inventories remains important as developing inventories helps Government understand the significance of the sector. Developing an ASGM inventory is challenging and obtaining precise results may be unrealistic. Identifying the specific techniques used to extract gold, the type of ore mined and using multiple sources of information to triangulate results can all contribute to developing reasonably reliable inventories.
- d. National strategic plans need to be developed with the engagement of main stakeholders including those along the gold supply chain. Specific strategies to remediate environmental and health liabilities should be considered according to local opportunities and threats.
- e. Formalization is the key for Governments to address the problems and capitalize on the opportunities of the sector. There is increasing evidence of stratification within the sector, restating the need for further coalescence. Formalizing the sector should not be at the expense of rights of others or in ways that condone criminality. There should be a balance of rights and responsibilities. Formalization is a continuous process which will contribute to eliminate illegal and social conflicts.
- f. There is a lot of progress being made in developing techniques that either eliminate the need for mercury or significantly reduce the mercury releases. The successful deployment of these techniques depends upon building confidence amongst the ASGM communities. There are clear market incentives for miners e.g. fair trade gold or rising cost of mercury etc to adopt practices enabling the transition away from mercury.
- g. It is important to understand the health impacts of ASGM. Government intervention will need to include clear public health strategies to increase awareness about the dangers of mercury.
- h. Incentives are a key factor to reduce mercury consumption in artisanal and small scale mining through formal credit markets, subsidies and model financing schemes. Moreover, the creation of a new market through fulfillment of green standards is another important alternative to reduce mercury uses (e.g. fair trade gold); it could also contribute to poverty alleviation and inclusive mining development. There is increased donor attention, including the financial mechanism set out in the convention, but these are not alternatives to finding local resources for increasing the sustainability of this profitable activity.

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I. Opening of the meeting

1. The Forum was opened on Tuesday, September 3rd 2013.

2. Mr. Manuel Pulgar Vidal, Minister, Ministry of Environment. Peru, welcomed the participants. He remarked the importance of the ASGM sector due to its contribution to the Peruvian economy. ASGM provides around 15% to 20% of total gold production in the country. However, economical benefits are coupled with negative environmental and social impacts mainly caused by mercury use. He highlighted the importance of establishing a new social and economical balance in Peru as one of the biggest challenges. Finally, he said Governments must develop appropriate definitions about ASGM in order to develop specific regulations to implement good practices and formalization. Mining which uses mercury should have a special regulation.

3. Ms. Jane Dennison , on behalf of the United States Department of State, welcomed the participants and emphasized the importance of the Forum regarding the potential to generate commitment in all stakeholders to reduce, and where feasible eliminate, mercury uses in ASGM. Ms. Dennison remarked that the Forum has given an opportunity to countries to strengthen international collaboration.

4. Mr. David Piper, on behalf of UNEP indicated its institutional support to government and decision makers in order to give pragmatic options for mercury uses. He highlighted that ASGM represents a big challenge for the Governments since it is a complex sector with different social, environmental and economic factors. He emphasized the importance of these Forums as they give an opportunity to present the range of challenges and opportunities in this sector.

II. The ASGM challenge

5. Mr. Ludovic Bernaudat from UNIDO gave an introduction of ASGM sector. There are estimated to be 10 million small-scale gold miners from 70 countries. These activities have had a boom in the last few years because of the increasing prices of gold around the world. ASGM is a highly variable sector with complex social dimensions which can bring positive and negative impacts to communities. According to Mercury Watch around 1,600 tons per year of mercury is used in ASGM. This is considered as the single largest emission source in the world, surpassing fossil fuel combustion. Mercury is used in ASGM because it is cheap, easily accessible and easy to use. He also stated that generally miners are not aware of the dangers of mercury.

6. Ms. Susan Egan, from Natural Resources Defense Council, presented the challenges of reducing mercury use in this sector. It is a problem which has many variables; therefore it should be tackled from different angles, such as technical, legal and financial. She also emphasized the importance of sharing information between all stakeholders, in order to reach the common objectives of the UNEP Global mercury partnership (i.e. to reduce mercury use in ASGM by 50% by 2017).

III. Outcome of intergovernmental negotiation process: Minamata Convention

7. Mr. David Piper from UNEP highlighted some of the important articles related to ASGM in the Minamata Convention on Mercury, such as Article 2, 7 and Annex C. Overall, the convention emphasizes the need to protect human health and environment from anthropogenic emissions and releases of mercury and mercury compounds. In countries where mercury is used in the ASGM sector, those countries must develop a comprehensive National Action Plan to reduce or where feasible eliminate mercury use in the sector; in particular, countries should take steps to eliminate the worst practices such as whole ore amalgamation and open burning of amalgam.

IV. Panel session one: Experiences in Developing National Action Plans

8. The first panel session focused on common issues that different countries have identified when developing National Action Plans. The following presentations were given. They are available on the UNEP website.

<i>Panelist</i>	<i>Organization/Country</i>	<i>Topic</i>
• Juan Fernando Caicedo	UNEP	Introduction to National Action Plan Development
• William Batista Jinete	Ministry of Environment and Sustainable Development / Colombia	National strategic Plan to reduce mercury uses in ASGM in Colombia
• Geri-Geronimo R. Sañez	Department of Environment and Natural Resources / The Philippines	National Strategic Plan for the phase-out of mercury in ASGM in the Philippines
• Ernesto Ráez Luna	Ministry of Environment / Peru	ASGM and Illegal mining in Peru

9. The session was opened by Mr. Juan Fernando Caicedo from UNEP. He briefly talked about some of UNEPs on-going projects supporting the development of National Action Plans and summarized the different steps to develop a National Action Plan (based on UNEPs guidance document on National Strategic Planning).

10. Mr. William Batista from Ministry of Environment and Sustainable Development Colombia, explained the National Strategic Plan to reduce mercury in ASGM in Colombia. The objective of this plan is to reduce and/or eliminate mercury uses in ASGM in the next five years. The Colombian Government has implemented a complementary strategy to improve the environmental performance of ASGM through cleaner production implementations mainly through resource efficiency, minimization of mercury uses, improving processes and implementing new and cleaner technologies. Some successful cases indicated mercury's reduction of up to 97% in the pilot ASGM projects.

11. Mr. Geri-Geronimo Sañez, from the Department of Environment and Natural Resources of The Philippines described the strategic plan for the phase-out of mercury in ASGM in The Philippines. He said that the Government of Philippines is committed to address ASGM sector through the establishment of clear objectives to reduce mercury use. The objectives of the plan are well identified with clear and realistic goals to 2021 through the elimination of major inefficient and unsafe practices. He explained the strategies and activities implemented to formalize ASGM. The process included mainly the creation of a National Steering Committee and Interagency Technical Working Group. He commented that the government is developing next projects with UNIDO's support in order to improve the health and environment of ASGM communities.

12. Mr. Ernesto Ráez (Ministry of Environment of Peru) explained the current situation of ASGM and illegal mining in Peru. Peruvian Government has defined mining activities according to different characteristics to establish appropriate policies for each type of ASGM. This activity is considered as the main illegal economy in Peru after illegal drug trade. Ministry of Environment is carrying out actions to prosecute illegal miners, designing strategies to develop sustainable economies and specially working on the formalization of the sector. He remarked all these actions will contribute to ensure the sustainability of vulnerable communities and ecological areas.

13. In the discussion, participants expressed the need to establish clear definitions of mining activities in each country similar to what the Government of Peru has done. It was suggested that these definitions will be different for different countries depending on the specific situation of the country.

14. Finally, Mr. Ernesto Ráez highlighted the importance of implementing controls throughout mining supply chain in order to formalize this sector and eliminate the illegal mining. It could be through establishment of green market to trade “green gold”. It is a new initiative that Peruvian Ministry is developing together with Swiss Cooperation (SECO).

V. Panel session two: Importance of inventory development

15. The session focused on the importance of developing mercury use inventories in ASGM countries which will be part of the Minamata Convention on Mercury. The session was facilitated by Mr. Anthony Persaud (Artisanal Gold Council).

<i>Panelist</i>	<i>Organization/Country</i>	<i>Topic</i>
• David Piper	UNEP	National Action Planning
• Anthony Persaud	Artisanal Gold Council	ASGM inventory Development

16. Mr. David Piper (UNEP) underlined the importance of inventories in the National Action Plans. Understanding the sector, the size and scope of the problem will contribute to prioritizing actions (such as technical interventions, development of policies, understanding economics of the sector, revealing trends, and/or identifying hotspots and sectors of industry that need highest priority attention). Generally the first inventory does not achieve good quality information. However the first inventory provides a basis of information upon which to build subsequent inventories, and it allows a rough initial ranking of priorities.

17. Mr. Anthony Persaud gave a presentation of the ASGM inventory development process and expressed the challenges surrounding it. He provided information about UNEP’s Mercury Toolkit and Global Mercury Assessments. According to recent UNEP’s evaluation, the amount of mercury emitted from the ASGM sector is over 700 tons more than estimated in 2005. These figures could reflect an increased use of mercury, or could be reflected an improvement in knowledge about mercury use, as every day there is more information about mercury use in the sector. Finally, he emphasized the importance of getting information about the sector from an economic and social context.

18. It was mentioned that the government should ensure trust between mining communities and public servants through incentives (economical and/or social). It is also necessary to build capacities and conduct “training of trainers” to ensure confidence and sustainability of actions.

19. Mr. David Piper commented that the UNEP toolkit for identification and quantification of mercury releases can be a good starting point for developing inventories.

20. Finally, Mr. Anthony Persaud was the moderator of a break out session, where participants were divided in three groups to discuss inventory development. Participants were given information from a variety of sources, regarding ASGM and gold production in a hypothetical community. Participants were asked to make an estimate of mercury use based on this information.

VI. Panel session three: Technical approaches to reducing mercury use

21. The third session focused on technical approaches to reduce mercury use in ASGM. The following table summarizes the panelist and presentations regarding technical approaches.

<i>Panelist</i>	<i>Organization/Country</i>	<i>Topic</i>
• Ludovic Bernaudat	UNIDO	Reducing/replacing Hg in ASGM operations
• Luis Fernandez	University of Stanford	Studies of the effects of mercury on the environment and on health
• Yves Bertran Alvarez	Alliance for Responsible Mining	Sustainable mercury reduction practices
• Richard Gutierrez	Bantoxics / The Philliphines	Mercury Phaseout: The Philippine Experience
• Patience Singo	SDC / Mongolia	Mercury Reduction in Mongolian ASGM

22. Mr. Bernaudat (UNIDO) presented technical alternatives to implement in short, medium or long terms in order to decrease or eliminate mercury use in ASGM. However, it is important to work and choose the correct technology according to each context because what works in a country does not necessarily work in other.

23. Mr. Luis Fernández (Stanford University) highlighted an innovative technology to capture mercury in ASGM which was designed by US EPA and was implemented in Brazil and Peru with good results². This new technology gives economic benefits because it captures up to 80% of mercury, which can then be recycled. It also provides health benefits by reducing significantly human exposure to mercury releases. In addition, this technology is comparatively cheap and easy to implement, operate and maintain.

24. Mr. Yves Bertran from Alliance for Responsible Mining presented sustainable mercury and reduction practices, based on lessons learned in a pilot project in Senegal. He emphasized the importance of considering the social context in developing technical alternatives. The activities must be developed with local miners because they understand and identify their own difficulties. He also told the participants about a new project in West Africa (Burkina Faso, Mali and Senegal) aimed to reduce mercury uses and give technical assistance in formalization issues.

25. Mr. Richard Gutierrez (Bantoxics, The Philliphines) talked about his experience in Philippines which focused on the improvement of health and the environment in ASGM, by working together with mining communities. The project underscored the need to “sit on the table with miners before implementing” mercury reduction activities, and the need to include legal and social context. Finally, to ensure the sustainability of the project the Government played a key role throughout the process.

26. Mr. Patience Singo gave a presentation about Mongolia’s experience in mercury reduction in ASGM describing the implemented actions, success factors, constraints and concerns. He emphasized the importance of promoting formalization to eliminate illegal ASGM.

27. Participants expressed concern about the technologies that require intensive cyanidation because it contributes negatively to health. The creation of new markets in clean technologies is a key factor to contribute economic growth with environmental benefits.

² Video: <http://www.youtube.com/watch?v=-rg4utXDuf8>

VII. Panel session four: Legal and social issues

28. This fourth session focused on legal and regulatory issues.

<i>Panelist</i>	<i>Organization/Country</i>	<i>Topic</i>
• Lina Villa Córdoba	Alliance for Responsible Mining	Key lessons learned in formalization approaches based on experiences in Latin America, Africa and Asia.
• Tamrat Mojo Beyene	Ministry of Mines / Ethiopia	ASGM formalization Case study of Ethiopia
• Victor Vargas Vargas	Ministry of Energy and Mines / Peru	Mining in Peru
• Yuyun Ismawati	BaliFokus / Indonesia	Indigenous People and ASGM
• Olinda Orozco Zevallos	Red social / Peru	ASGM in Peru: Challenges and proposal

29. Ms. Lina Villa Cordoba (Alliance for Responsible Mining) presented the lessons learned in formalization approaches in Latin America, Africa and Asia. Ms. Villa underlined the importance of creating a conducive climate for formalization. This will enable the Government to combat crime associated with ASGM. In this sense, it is important to involve different stakeholders to accelerate formalization process. It is important to realize that formalization is not only the Government's responsibility, but a responsibility for entrepreneurs. For example, private initiatives regarding "green gold" that permits miners to sell gold to better clients, could be scaled up worldwide. She concluded by saying ASGM should be seen as an opportunity, and not as a source of social problems.

30. Mr. Tamrat Mojo Beyen (Ministry of Mines Ethiopia) presented a case study of Ethiopia in ASGM formalization. He emphasized the government's strategy through legal, administrative, and social services as well as financial support in order to improve the supply chain of gold. One key factor of this successful model is based on the subsidies offered by the Government to ASGM e.g. The Government pays a higher price for gold than in the international market. An important lesson learned from the experience in Ethiopia is that formalization can be done successfully.

31. Mr. Victor Vargas (Ministry of Energy and Mines Peru) focused on the Government's efforts in formalization of ASGM in Peru. The process is slow as there are around 70,000 miners who are involved in the process. He added that there is a deadline to accomplish formalization for all miners until April 2014.

32. Ms Yuyun Ismawati (BaliFokus / Indonesia) presented a case study of the participation of indigenous people in ASGM. She underlined the importance of empowerment of indigenous communities to ensure cultural values and indigenous rights are secured.

33. Ms. Olinda Orozco (Red Social, Peru) commented on the current formalization process in Peru. She mentioned that this process should be accompanied by incentives to promote formalization of miners grouped in associations coming from common territories. It was underlined that ASGM is an entrepreneurial activity, rather than basic social subsistence activity. Hence projects should consider ASGM as an entrepreneurial business sector.

VIII. Panel session five: Health issues related to ASGM

34. The fifth session covered issues related to health, labour, gender and small scale gold mining interactions.

<i>Panelist</i>	<i>Organization/Country</i>	<i>Topic</i>
• Ana Boischio	Pan American Health Organization (PAHO)	Health conditions and services in ASGM settlements and public health strategy.
• Zuleica Castilhos	CETEM / Brazil	Case study of of Brazil
• Myrienne Richard	Artisanal Gold Council	Practical approaches to public health in ASGM communities
• Ludovic Bernaudat	UNIDO	Health issues in ASGM. UNIDO's journey and position

35. Ms. Ana Boischio (PAHO) described mercury, methyl mercury and mercury bio-accumulation effects on the environment and health. There is a direct negative impact on miners' health due to contact and exposure to dust and accidents as part of their work routine. Finally, she presented health aspects of the article 16 considered in Minamata Convention and some pilot projects developed in Mongolia and Indonesia to assess impacts of ASGM activities in health.

36. Ms. Zuleica Castilhos from CETEM Brazil, provided information about human health risk assessment by mercury in Sao Chico-Brazil and the results of CETEM research. According to CETEM research, Sao Chico's miners showed high mercury levels in hair, urine and blood in comparison with non-miners. Besides, miners showed high frequency of tremors and stand problems. Miners are the most susceptible stakeholder to negative effects of mercury. For that reason, she highlighted the importance of collecting epidemiological information on mercury-based health impacts in ASGM in order to design proper health care solutions.

37. Ms. Myrienne Richard from Artisanal Gold Council mentioned that it is critical to understand the mining context to elaborate a correct diagnosis and ensure sustainable interventions. Research activities should be complemented with practical sustainable development projects. According to Artisanal Gold Council successful experiences are those that implement changes in the entire ASGM chain value. There is a need to align Minamata Convention articles with the sector's own priorities and expectations. The ASGM sector needs a proper platform to share current ASGM information.

38. Mr. Bernaudat presented UNIDO's projects to contribute mercury reduction in the sector such as ASGM projects in Tanzania (1994), the Philippines (1998) and Ghana (2002), and the production of guidelines for health and environmental assessment. UNIDO shares the vision of reducing or eliminating the use of mercury, and there is renewed the institutional commitment of UNIDO on this issue.

39. In response to discussion of health concerns, participants suggested that health monitoring and research should continue to design preventive actions and treatment options. Since indigenous communities are exposed to mercury contamination, it is necessary to involve them in the national and local action plans.

IX. Panel session six: Financing the transition away from mercury

40. The session focused on financing a transition away from mercury.

<i>Panelist</i>	<i>Organization/Country</i>	<i>Topic</i>
• Anil Sookdeo	Global Environment Facility	How to Access the GEF Trust Fund
• Jane Dennison	United States Department of State	Criteria for selecting partners Bilateral funding of ASGM projects
• Ludovic Bernaudat	UNIDO	How to finance mercury-reducing projects in ASGM

41. Mr. Anil Sookdeo (Global Environment Facility) provided information of GEF Trust Fund. He said that sound management of Chemicals is an important issue for GEF and especially now that the Minamata Convention has been signed, projects related to mercury would be given priority. An important information for countries is that GEF funds can be used for the development of National Action Plans and to support the formalization process of ASGM.

42. Jane Dennison (United States Department of State) explained the key issues for successful fund raising. She highlighted a donor is likely to be much more receptive to a project idea if the government has considered the issue deeply and has a strategy for addressing the issue (in this case reducing mercury use in ASGM). A carefully thought out request for assistance can be very persuasive. However, each donor has preferred kinds of projects, depending on size, capacity, and specialization.

43. Mr. Bernaudat described UNIDO's mechanisms to support projects worldwide. He highlighted that donors are not interested in duplicating projects hence, sharing information is important through for example ASGM partnership platform.

44. In response to questions, Mr. Sookdeo indicated each project proposal for GEF is treated separately; hence, the specific information and requirements depends on the type of projects. To get more information, he recommended visiting the following website: www.thegef.org

X. Panel session seven: Creation of new platforms for coordination cooperation and reporting

45. The seventh session covered issues related to new platforms for coordination, cooperation and reporting.

<i>Panelist</i>	<i>Organization/Country</i>	<i>Topic</i>
• Antonio Restrepo	Amazon Cooperation Treaty Organization – ACTO	Mercury Surveillance themes in the Amazon Region
• Francisco Sánchez		
• Ernesto Ráez Luna	Ministry of Environment / Peru	Collaborative platforms control for illegal mining to ASGM sustainability.

• Salvador Mondlane	Communities and Small Scale Mining (CASM) Africa regional representative	Platforms for coordination cooperation and reporting
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46. Mr. Antonio Restrepo introduced the Amazon Cooperation Treaty Organization (ACTO) activities since 1978 in the Amazon Region. Mr. Francisco Sanchez (ACTO) gave additional information of ACTO working on mercury assessments. He explained different actions in the Amazon Region to achieve an integrated management system. These actions include activities to create a group on cooperation not only in technical issues, but also in social, health and environmental topics in ASGM.

47. Mr. Ernesto Ráez (MINAM) provided a summary of platforms to control illegal mining and to ensure the sustainability of ASGM in Peru. He indicated Peru is involved in sub-regional and binational platforms to control mining in the Amazon Region. ASGM is a priority in the country. Therefore, the Government of Peru has designed a national agreement against illegal mining aiming to develop responsible mining and develop actions for mercury's remediation.

48. Mr. Salvador Mondlane (Communities and Small Scale Mining (CASM) Africa representative presented the platforms for coordination cooperation worldwide. He showed different examples of platforms in ASGM sector, sharing lessons learned. He indicated the importance of considering the involvement of government in the design of platforms because they are a key actor to ensure the sustainability of the platform.

XI. Morning Regional Consultation

49. Participants were requested to join one of three regional working groups: Africa, Asia and Latin America. Government participants answered a series of questions in order to facilitate regional dialogue. Each participating Government discussed their sectoral, environmental, legal and social national situation. Moreover, there were other questions related to Minamata Convention (obligations and ideas to achieve objectives, etc.). After the regional working groups, the participants provided their summaries and conclusions to UNEP (see annex 3).

XII. Break out group on cooperation, technical assistance and info exchange

50. The participants were divided into two break-out sessions (Africa and Asia, and Latin America). During each session participants discussed how to facilitate follow-up and develop new platforms to work together and exchange experiences. The summary of discussions are available in annex 2.

51. Mr. David Piper highlighted the importance of sharing experiences and information through regional platforms. He indicated that UNEP has started with some initiatives to establish a platform which provides information not only to Global Mercury Partnership, but also people interested and/or working in the ASGM sector.

XIII. Concluding remarks

52. Mr. David Piper thanked participants for their active involvement in the Forum and he highlighted key message from the forum to consider for the future.

53. Finally, Mr. Mariano Castro, Deputy Minister of Environment of Peru, declared closed the Second Forum of ASGM at 17.00 hrs on Thursday, 5th September 2013. Additionally he expressed his gratitude to UNEP for organizing this important Forum.

Annexes

Annex 1

Final Agenda

Second Global Forum on Artisanal and Small Scale Gold Mining
Lima, Peru
3 – 5 September 2013
Meeting Location: Hotel Meliá
Av. Salaverry 2599, Lima – Peru

DAY 1

8:15 – 9:00	Registration
9:00 – 9:15	Welcomed remarks
9:15 – 9:45	Participant introductions
9:45 – 10:15	THE ASGM CHALLENGE GLOBALLY Moderators: Natural Resources Defense Council (NRDC) and United Nations Industrial Development Organization (UNIDO)
10:15 – 11:15	OUTCOME OF INTERGOVERNMENTAL NEGOTIATION PROCESS: MINAMATA CONVENTION Moderator: UNEP
11:15 – 11:30	Break
11:30 – 13:00	SESSION 1: EXPERIENCES IN DEVELOPING NATIONAL ACTION PLANS Moderator: Natural Resources Defense Council Panelists: <ul style="list-style-type: none">- Representatives from Asia and the Pacific (Government of The Philippines)- Representatives of the Latin America and Caribbean region (Government of Colombia and the Government of Peru)
13:00 – 14:00	Lunch
14:00 – 16:30	SESSION 2: IMPORTANCE OF INVENTORY DEVELOPMENT Moderator: Artisanal Gold Council Panelist: <ul style="list-style-type: none">- UNEP- Artisanal Gold Council

	- Presentations and group discussion
16:30 – 18:00	Plenary
 DAY 2	
8:30 – 9:30	MORNING REGIONAL CONSULTATIONS Regional groups will be tasked with reviewing a series of questions in preparation for the day ahead.
9:45 – 10:00	OPENING DAY 2 Moderator: UNEP
10:00 – 11:30	SESSION 3: TECHNICAL APPROACHES TO REDUCING MERCURY USE Moderator: Sustainable Artisanal Mining (SAM) Project Panelist: - UNIDO - Alliance for Responsible Mining - Bantoxics
11:30 – 11:45	Break
11:45 – 13:30	SESSION 4: LEGAL AND SOCIAL ISSUES Moderator: Natural Resources Defense Council Panelist: - Alliance for Responsible Mining - Government of Peru / Red Social - Government of Ethiopia - Balifokus Discussion and questions (including summarized results of answers to morning regional consultations relevant to this panel session)
13:30 – 14:30	Lunch
14:30 – 17:30	SESSION 5: HEALTH ISSUES RELATED TO ASGM Moderator: Artisanal Gold Council Panelist: - CETEM, Brazil - Pan American Health Organization (PAHO) - UNIDO - Artisanal Gold Council Panel session and discussion
17:30 – 18:00	PLENARY
 DAY 3	
8:30 – 9:30	MORNING REGIONAL CONSULTATIONS Regional groups will be tasked with reviewing a series of questions in preparation for the day ahead

9:45 – 10:00	<p>OPENING DAY 3 Summarize previous day and map out current day</p>
10:00 – 10:30	<p>SESSION 6: FINANCING THE TRANSITION AWAY FROM MERCURY Moderator: UNEP Presenters:</p> <ul style="list-style-type: none"> - Global Environment Facility - UNIDO - United States Department of State <p>Discussion and questions (including summarized results of answers to morning regional consultations relevant to this panel session)</p>
10:30 – 11:45	Break
11:45 – 13:00	<p>SESSION 7: CREATION OF NEW PLATFORMS FOR COORDINATION COOPERATION AND REPORTING Moderator: Sustainable Artisanal Mining (SAM) Project Panelists:</p> <ul style="list-style-type: none"> - Amazon Cooperation Treaty Organization (ACTO) - Government of Peru - World Bank communalities and small scale mining program (CASM)
13:00 – 14:00	Lunch
14:00 – 15:30	<p>BREAK OUT GROUP ON COOPERATION, TECHNICAL ASSISTANC AND INFO EXCHANGE</p> <p>Discussion and questions (Why do we need new platforms for coordination and cooperation?)</p>
15:30 – 16:30	<p>PLENARY</p> <p>Report back from break –out groups and ideas for future information exchange / cooperation</p>
16:30 – 17:00	SUMMARY FINAL DISCUSSION

Annex 2 Regional Sessions

AFRICA

Sectoral profile questions:

1. How many people are engaged in ASGM in your country?

- Ethiopia: 300,000 – 350,000
- Ghana: 1'000,000
- Senegal: 20,000 – 50,000
- Sudan: 1'000,000
- Tanzania: More than 800,000
- Rough numbers by ARM: Mali 400,000, Senegal 70,000, Burkina Faso 400,000
DRC: 600,000

2. Where does mining take place within the country?

- Ethiopia: Throughout the country
- Ghana: Concentrated geographically
- Senegal: South East (región Jédougou and Tambacounda)
- Sudan: 5 states out of 17 states
- Tanzania: Concentrated geographically (12 regiones)
- Rough numbers by ARM: Mali: disseminated practically through the whole country, Senegal: Specific region, Burkina Faso: Specific region, DRC: : disseminated practically through the whole country

3. Who does the mining?

- Ethiopia: Family landowners, migrant workers, immigrant workers, workers hired by landowners, women and children are involved in the work.
- Ghana: Family landowners, migrant workers, immigrant workers, workers hired by landowners, women and children are involved in the work.
- Senegal: Migrant workers, immigrant workers, women and children are involved in the work.
- Sudan: migrant workers.
- Tanzania: Migrant workers, immigrant workers, workers hired by landowners, women and children are involved in the work.
- Rough numbers by ARM: Western Africa: family landowners, migrant workers, immigrant workers, workers hired by landowners, women and children are involved in the work and DRC family landowners, immigrant workers, workers hired by landowners, women and children are involved in the work.

4. How many women and children are involved in the sector?

- Ethiopia: 25% of the total ASGM communities are women
- Ghana: Up to 50% women
- Sudan: None women – none children
- Tanzania: 1,000 women not know children
- Western Africa: 20 – 30% women and 10% children
- DRC: 15% women and 15% children

5. How much gold do these miners produce each year?

- Ethiopia: 7 – 8 MT
- Ghana: 31.31 MT

- Senegal: 1 MT
- Sudan: 10 MT
- Tanzania: 2 MT
- Western Africa: Mali (12-18MT), Burkina Faso (15-25MT)
- DRC: 0.51MT

6. *What price do miners get for gold?*

- Ethiopia: 1,400-1,500 USD per ounce, it fluctuate based on the daily world gold price
- Ghana: 1,250 USD per ounce, averagely 1- 2% below spot price
- Senegal: 1,364 USD per ounce, 25 % below spot price
- Sudan: 1,300 USD per ounce
- Tanzania: 24 – 42 USD per gram, Not known % below spot price
- Western Africa: 65-85% of the spot price
- DRC: USD 992.2 per ounce, 29.16 % below spot price.

7. *How do the miners get access to mercury?*

- Ethiopia: Do not use mercury.
- Ghana: Gold shop, mine owner and individual vendors and/or importer.
- Senegal: Bordering countries (Burkina Faso).
- Sudan: Gold Shop and traders.
- Tanzania: Mine owners, not know illegal importation through porous border
- Western Africa: Gold shop, mine owner, bold buyer.
- DRC: Intermediary persons..

8. *How much do the miners pay for mercury?*

- Ghana: 2,020 USD to 2,286 liter or 127.43 -145.55 per kg
- Sudan: Not know
- Tanzania: Not know

9. *Are miners sensitive to price of mercury? (Would they use less if it cost more?)*

- Ghana: No
- Senegal: No
- Sudan: No
- Tanzania: No
- Western Africa: Yes
- DRC: Yes

10. *Do you have an estimate of how much mercury miners use to produce gold*

- Ghana: Yes. 0.57 gr. Hg/1gr. gold produced³
- Senegal: No
- Tanzania: No
- Western Africa: Yes. 1.3 – 1.4 gr. Hg/1 gr. Gold produced
 - They work exclusively on concentrate ore. The loose amalgams are usually 60% Hg – 40% Au. To that it was added 10 – 20% loss in the ore.
- DRC: No

10. *What are the common technologies and practices used by the miners?*

Country	crushing and	crushing and grinding	crushing and grinding,	mercury-free, chemical-free	chemical leaching	chemical leaching

³ This estimation was done by University of Mines and Technology in Ghana

	grinding with mercury (e.g. whole ore amalgamation)	with mercury (e.g. whole ore amalgamation)	followed by concentration, with mercury added to concentrates	processes such as gravity concentration (using sluices, centrifuge, shaking table etc)	process (such as cyanide leaching) on ore	process (such as cyanide leaching) on tailings
Ethiopia				X		
Ghana		X		X		X
Senegal		X		X	X	X
Sudan		X				
Tanzania		X				
Western Africa		X				X
DRC	X	X	X			

11. If mercury is used, how is amalgamation performed? How is the amalgam burnt?

- Ghana: The concentrate from panning is mixed with the mercury to form an amalgam and this is squeezed through a cloth to remove excess mercury, the amalgam is then heated in an open fireplace, open hearth or in a retort to leave the spongy gold behind. This is then sold to gold dealers.
- Sudan: Pan open burning.
- Tanzania: Miners remove rocks from pits (digging). They crush the ore followed by concentration of gold by pouring water over the powder and pass it through sluice box (sluicing). Mercury is used for the separation of fine gold particles from dirt and other minerals (amalgamation). The amalgam is then burned to evaporate the mercury and recover the gold. This operation is mostly carried out in closed areas such as residential rooms and sometimes in the field in open air.
- Ghana: Sometimes
- Senegal: Sometimes
- Sudan: Sometimes
- Tanzania: Sometimes
- Western Africa: Sometimes. Rarely
- DRC: Sometimes. Commonly.

11. How do miners purify the gold?

- Ghana: By the use of Nitric acid.
- Senegal: Lavage/tamisage
- Sudan: No

12. What is the level of local knowledge about alternatives to mercury?

- Ghana: Low.
- Senegal: Low
- Sudan: Low
- Tanzania: Low
- Western Africa: Low

13. Are programs or trainings available regarding alternatives available?

- Ghana: Yes

- Sudan: Yes
- Senegal: No
- Tanzania: Yes
- Western Africa: Yes
- DRC: Yes

14. If so, what are the adoption rates for these alternatives?

- Ghana: Low
- Sudan: High
- Tanzania: Low
- Western Africa: High
- DRC: Low

15. How well do miners understand the dangers of mercury?

- Ghana: Know but don't care
- Senegal: Know but don't care
- Sudan: Don't know
- Tanzania: Know but don't care
- Western Africa: Don't know.
- DRC: Know but don't care / Know but have no alternative

16. Who buys the gold from the miners?

- Ethiopia: Licensed and legal gold traders buy gold at the mining site and sell to the national bank of Ethiopia
- Ghana: Owners, gold shops, certified gold buyers, and business men. Both in the field and at gold shops
- Sudan: from gold buyers in the field
- Tanzania: Brokers and dealers buy gold from miners who have a mining license. Small brokers buy gold directly at the mines or from miners in gold shops.
- Western Africa: Mainly gold buyers onsite or in villages
- DRC: Les négociants, les Mini-marchés and les comptoirs agréés

17. Do the gold buyers purify the gold?

- Ethiopia: Gold traders/buyers only melt dust gold and make gold bars.
- Ghana: Yes. They use any mercury capture methods when purifying the gold: Yes
- Sudan: No
- DRC: No.

Environmental questions:

1. What are the kinds of impacts you know about or have observed?

Country	Deforestation	Mercury contamination	Cyanide contamination	Sedimentation or other impact on water bodies	Other
Ethiopia					
Ghana	X	X	X	X	
Senegal	X	X	X	X	VIH proliferation,ea

					ryly school leaving
Sudan					Noting observed
Tanzania	x	X		X	Air pollution and health impacts. Difficult to estimate numbers of acres or hectares
Western Africa	X	X	X	X	
DRC	X	X		X	

2. Are there any special studies or data collected on environmental contamination or health impacts from ASGM performed in your country?

- Ghana: Effect of mercury on people of Dumasi, a “galamsey” (illegal ASGM) village- A study sponsored by UNIDO- Results have been included.
- Senegal: No
- Sudan: No
- Tanzania.
 - From 2002 to 2007, the Global Mercury Project (GMP) launched the biggest initiative in Tanzania funded by UNIDO, GEF and UNDP. Implementation of the UNIDO Global Mercury Project took place in areas adjacent to Lake Victoria in Rwamagaza area Geita District. The project aimed to reduce mercury pollution, introduce cleaner gold extraction methods by introduction of retorts to the artisanal and small scale gold miners in order to recover mercury from gold mercury amalgam. The project also monitored mercury pollution and promoted awareness to miners on hazardousness of mercury.
 - The National Mercury Inventory for the United Republic of Tanzania conducted by the Vice President’s Office in January 2012.
- Western Africa: No
- DRC: No.

Legal questions:

1. What is the legal /regulatory status of small scale mining?

- Ethiopia: Legal
- Ghana: Legal
- Senegal: Legal / illegal
- Sudan: Legal
- Tanzania: Legal
- Western Africa: Legal / extra-legal
- DRC: illegal

2. What is the legal status of mercury use in your country?

- Ethiopia: Not legal
- Ghana: Legal

- Senegal: Not legal
- Sudan: not legal
- Tanzania: According to the National Environmental Management Act No 20 of 2004 (EMA) and the Mining (Environmental Protection for Small Scale Mining) Regulations both address the use of mercury in licensed small scale Mining. The EMA stipulates that any one generating hazardous waste will be responsible for its disposal and liable for any damage to human health, living beings and the environment.
- Under the Mining Regulations requires any Primary Mining License (PML) holder to conduct an environmental and social investigation and submit Environmental Management Plan to zonal mines office prior starting mining work. The Plan must describe mining and processing methods, emissions and discharge, waste disposal strategy and how he/she will use and store chemicals. The Regulations also provides for disposal of tailings in a manner approved by inspector. The regulations emphasize:- the use of retort when burning mercury gold amalgam; provision of employees with protective gears and construction of washing or settling ponds areas where amalgamation may take place at least 50 metres from water sources.
- Western Africa: Senegal (legal), Burkina Faso (not legal) and Mali (not legal)
- DRC: not legal

3. How are miners typically organized?

Country	individuals or family groups	owners with paid labor or shared profit model	cooperatives	Others
Ethiopia			X	micro and small enterprise
Ghana	X	X	X	
Senegal	X	X	X	
Sudan	X		X	
Tanzania	X	X		
Western Africa	X	X		
DRC	X	X	X	

3. How do miners typically access capital?

- Ghana: From gold buyers, banks and financial institutions, sponsors
- Senegal: Self-funding.
- Sudan: No understood.
- Tanzania: Some access capital through individual efforts including bank loan
- Western Africa: Private loans at high rate
- DRC: Very difficult to access

4. Besides the artisanal and small scale miners, who are the key stakeholders at national regional and local levels, including government and community-based organizations active in mining communities?

- Ethiopia: Civil society organizations: AID organization, Micro finance institutions Health Ministry, Education Ministry, Industry Ministry, Ministry of Mines, Regional mining agencies, Cooperative and Micro and small scale enterprise agencies, National bank of

Ethiopia, Geological survey of Ethiopia, Ministry of women, youth and children, Customs and revenue authority, Regional and Local Government, Provincial Government.

- Ghana: Civil society organizations: Wassa Association of Communities Affected by Mining, (WACAM), Health Ministry: Ministry of Health, Ministry of Mines, Ministry of Lands and Natural Resources, Provincial Government, Municipal and Metropolitan Assemblies, large Scale Mines, others: Minerals Commission of Ghana, Inspectorate Division of the Minerals Commission.
- Senegal: Organizations Non-governmental, Organizations de la social society, Ministry of Health, Ministry of Education, Ministry of Industry, Ministry of mines and local government.
- Sudan: Ministry of Health and Ministry of Mines.
- Tanzania: Non-governmental organizations (AGENDA for Environment and Responsible Development), civil society organizations, Artisanal Miners Association, Ministry of Health and Social Welfare, Ministry of Education and Vocational Training, Ministry of Industry, Trade and Marketing, Ministry of Energy and Minerals, Ministry of Regional administration and Local Government, Ministry of Labour and Employment and large scale Mining.
- DRC: Ministry of Mines

Questions related to Minamata Convention obligations:

1. *Has your countries developed a national inventory of mercury use in ASGM:*

- Mali, Senegal and Burkina Faso: Yes
- Tanzania: Yes
- Sudan: No
- Ghana: No
- DRC: No

2. *Was the “UNEP toolkit to estimate the releases of mercury to air, land and water from various sources?*

- Mali, Senegal and Burkina Faso: Yes
- Tanzania: Yes

3. *What do you see as the gaps in the inventory?*

- Tanzania: Other coal uses, use of pipelines gas (Consumer quality), biomass fired power and heat production, pulp and paper production, incineration of Municipal/general waste incineration of hazardous waste, incineration of medical waste and open fire waste burning (on landfills and informal. They are very large uncertainties in the approach, especially in the evaluation of the number of miners and their production (on which the inventory is based). It is recommend much more specific evaluations on pilot site for each typical setting in order to reduce uncertainty (ARM).

4. *What activities has your Government initiate to prepare for the Minamata Convention? Specifically, what activities address obligation under ASGM Article 7.*

- Ghana: None
- Sudan: NIP underdevelopment
- Tanzania: Revising and launching the National Strategic Plan on Mercury Management.

Ideas for assistance

What specific kinds of assistance would be most helpful to your country in implementing obligations under the Convention?	Need NOW	Need in future
Technical assistance		

Training on doing mercury inventories	Ghana Senegal Sudan Tanzania	
Training on alternative mining techniques to reduce or eliminate mercury use and release	Ghana Ethiopia Senegal Sudan Tanzania	
Training on mercury capture during purification	Ghana Sudan Tanzania	
On-line training of miners and processors	Senegal Tanzania	Ghana Sudan
Policy development		
Setting up formalization system	Ghana Senegal Tanzania	
Land tenure/property rights/cadastre system	Tanzania	Senegal
Facilitation of National Action Plans	Ghana Senegal Tanzania	
Marketing approach		
Developing supply chains to maximize mercury-free	Ghana Senegal Sudan Tanzania	Senegal
Addressing health impact issues	Ghana Senegal Sudan Tanzania	
Training for environmentally-sound management of mercury	Ghana Senegal Sudan Tanzania	
Mercury storage		
National Action Plan on storage- facilitation	Ghana Senegal Sudan Tanzania	
Training, technical criteria of facilities	Ghana	

	Senegal Sudan, Tanzania	
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ASIA

Sectoral profile questions:

1. How many people are engaged in ASGM in your country?

- Indonesia (NGO): Approximately 1 million people directly and 5 million people indirectly
- Philippines 300,000 (Government), (NGO): 350.000
- Cambodia 5,000-6,000
- Vietnam 3000-4000 (Government)
- Mongolia (Government) 30.000, (NGO) more than 30.000

2. Where does mining take place within the country?

- Indonesia (NGO): In 2010 more than 800 hotspots spread all over the country and identified in 23 provinces out of 33 provinces of Indonesia, including in small islands.
- Philippines 30 provinces (Government), (NGO): in at least 30 provinces
- Cambodia: concentrated to the northern part of Country where nearby border, forest and mountain areas.
- Vietnam: North East, North West, North Central, South Central and Highlands
- Mongolia (Government) Mining operations take place in rural areas of 20 provinces of Mongolia, (NGO): Almost throughout rural areas of Mongolia

3. Who does the mining?

- Indonesia: Family landowners, Migrant workers, immigrant workers, workers hired by landowners, women, children involved in the work, indigenous peoples
- Philippines: Family landowners, Migrant workers, immigrant workers, workers hired by landowners, women, children involved in the work
- Cambodia: migrant workers, immigrant workers, women, children
- Vietnam: No information
- Mongolia: Migrant workers, women, rural people, herders, exherders, individuals organized into partnership, herders, ex-herders

4. How many women and children are involved in the sector?

- Indonesia (NGO): No exact data yet
- Philippines 18000 Women and children (Government)
- Cambodia
- Vietnam 400 Women, 0 children (children might be involved in illegal mining) (Government)
- Mongolia (Government) 9.000 women, (NGO): 1. 000 womens, no information for childrens.

5. How much gold do these miners produce each year?

- Indonesia (NGO): about 65-130 MT (metric tones) per year
- Philippines 30 MT (Government), (NGO): 20 MT
- Cambodia

- Vietnam 1.3 Tonnes (Government)
- Mongolia (Government) 90 grams, (NGO): 3 MT

6. *What price do miners get for gold?*

- Indonesia (NGO): 20-60% below spot price – depending on the quality of gold
- Philippines 1800/gram (Government)
- Cambodia
- Vietnam 500-900 USD/ounce (Government)
- Mongolia (Government) 1028\$/ounce, (NGO): 1030\$/ounce, 27% below spot price.

7. *How do the miners get access to mercury?*

- Indonesia: mine owners, gold mining auxiliaries shops and individual
- Philippines: Gold shop, dentist, mine owner
- Cambodia: gold shops, mine owners
- Vietnam: From authorized shops trading in chemicals
- Mongolia: middle man, goldsmith, Boroo river where LSM used to operate, individuals, middlemen

8. *How much do the miners pay for mercury?*

- Indonesia (NGO): between UDS 50-100 per kilo – depending on the mercury market price
- Philippines: (Government) 4-10 USD/gram, (NGO): US150 or more
- Cambodia
- Vietnam 160 USD/liter (Government)
- Mongolia (Government) 500\$/kilo, (NGO): 350-400 / liter of per kilo

9. Are miners sensitive to price of mercury? (Would they use less if it cost more?)

Yes Vn, Ph, Ph(NGO), Ind(NGO)_____ No __Mon, Mon(NGO)___

- Indonesia: Yes
- Philippines: Yes
- Cambodia:
- Vietnam: Yes
- Mongolia: No

10. *Do you have an estimate of how much mercury miners use to produce gold*

- Indonesia (NGO): about 500 to 1500 grams mercury / 1 gram gold produced
- Philippines 10-25 (with WOA), 1-3 (with amalgamation after grinding), (NGO): Whole Ore: 1:10-25 Panning 1:1-3
- Cambodia
- Vietnam 15g HG: 1g Gold (Government)
- Mongolia (Government) 50g mercury / g of gold, (NGO): 2g mercury / g of gold
- *How did you make this estimate?*
 - Ind(NGO): observations and interview with miners/owners of ballmills plants.
 - Mon(NGO): got information from miners.
 - Ph(NGO): Interviews and Field research

11. What are the common technologies and practices used by the miners?

Country	crushing and grinding with mercury (e.g. whole ore amalgamation)	crushing and grinding with mercury (e.g. whole ore amalgamation)	crushing and grinding, followed by concentration, with mercury added to concentrates	mercury-free, chemical-free processes such as gravity concentration (using sluices, centrifuge, shaking table etc)	chemical leaching process (such as cyanide leaching) on ore	chemical leaching process (such as cyanide leaching) on tailings
Philippines	X	X	X	X	X	X
Indonesia	X	X	X	X	X	X
Cambodia	X	X	X	X	X	X
Vietnam						X
Mongolia		X	X	X	X	X

12. If mercury is used, how is amalgamation performed? How is the amalgam burnt?

- Indonesia: The amalgam burnt on the sites near the sluices box, at the ballmills plant (which located near the rice fields and agriculture lots), at the gold shops which usually near food stalls and where children are around, at the backside of the houses, etc.
- Philippines: various means
- Cambodia
- Vietnam
- Mongolia: processing plant owners sell tailings to mining companies for processing Amalgam burn in stove.

13. Are retorts used when amalgam is burned?

- Indonesia: rarely and never in most hotspots
- Philippines: rarely
- Cambodia: Never
- Vietnam
- Mongolia (Government) usually, (NGO): rarely

14. How do miners purify the gold (if they do)?

- Indonesia: open direct burning.
- Philippines: blow torching (Government) Direct Smelting and/or acid(NGO)
- Cambodia
- Vietnam Export it (Government)
- Mongolia (Government) Miners use diluted nitric acid, (NGO): Heat concentrates and smelt when use mercury

15. *What is the level of local knowledge about alternatives to mercury?*

- Indonesia:
- Philippines: Low
- Cambodia: Low
- Vietnam: Low
- Mongolia: High

16. *Are programs or trainings available regarding alternatives?*

- Yes for all countries

17. *If so, what are the adoption rates for these alternatives?*

- Indonesia: Low
- Philippines: Low
- Cambodia:
- Vietnam:
- Mongolia: Low

18. *How well do miners understand the dangers of mercury?*

- Indonesia: Know but do not care
- Philippines: Know but do not care
- Cambodia: Know but have no alternative
- Vietnam: Know but do not care
- Mongolia: Know but have no alternative

19. *Who buys the gold from the miners?*

- Indonesia: Goldshops, gold financiers, mercury traders, and individual brokers
- Philippines: At gold shops/field, bought by gold shops and jewellers
- Cambodia: The Mine owners, gold shop and in the field
- Vietnam: Exported abroad
- Mongolia: Middle men in the field, Mongol bank

20. *Do the gold buyers purify the gold?*

- Indonesia: Yes
- Philippines: Yes
- Cambodia: Yes
- Vietnam: Yes
- Mongolia: No

Legal/social questions

1. What is the legal /regulatory status of small scale mining?

- Indonesia: illegal
- Philippines: legal
- Cambodia: illegal
- Vietnam: legal
- Mongolia: legal

2. What is the legal status of mercury use?

- Indonesia: legal
- Philippines: illegal
- Cambodia: illegal
- Vietnam: illegal
- Mongolia: illegal

3. How are miners typically organized?

Country	individuals or family groups	owners with paid labor or shared profit model	cooperatives	Others
Philippines	X	X		
Indonesia	X	X	X	informal group working together under one leader/financier.
Cambodia	X	X		
Vietnam	X	X		
Mongolia	X	X		Partnerships

3. How do miners typically access capital?

- Indonesia: From the leaders/bosses of the group and from the financiers
- Philippines: gold dealers/buyers
- Cambodia: borrow the money and pay back by gold latter for surviving
- Vietnam:
- Mongolia: through mining operations, miners acces capital by doing mining for the Mon

4. Besides the artisanal and small scale miners, who are the key stakeholders at national regional and local levels, including government and community-based organizations active in mining communities?

- Indonesia: BaliFokus. Indonesia Toxics-Free Network, Aliansi Masyarakat Adat Nusantara (AMAN), Yayasan Tambuhak Sinta (YTS), Blacksmith Institute, WALHI, ICEL (Indonesian Center for Environmental Law), Lead Coalition. Directorate General of Disease Control and Environmental Health, Prof. dr. Tjandra Yoga Aditama, Sp(K), MARS, DTM&H, DTCE, Directorate of Coal and Environmental issues, Dr. Lana Saria. LGs of West Lombok, Central Lombok, Lebak Regency, Sumbawa Regency, Palu City, Gorontalo Regency, Solok Regency, Bombana Regency, West Nusa Tenggara Province, Central Kalimantan Province, West Kalimantan Province, Aceh Province, West Sumatra Province, Central Sulawesi Province, Gorontalo Province, North Sulawesi Province and many more. Newmont Batu Hijau, Southern Arc, Aneka Tambang, Bandung Institute of Technology, Universitas Mataram, Universitas Indonesia, Universitas Tadulako, Universitas Palangkaraya, Lembaga Ilmu Pengetahuan Indonesia/Indonesian Science Institute (LIPI), Badan Pengkajian dan Penerapan Teknologi (BPPT), Puslitbang Tekmira (Research and Development of Mineral and Resources Technology).
- Philippines: Ban Toxics – Atty. Richard Gutierrez, Environmental Management Bureau – Atty. Juan Miguel Cuna (Director, EMB), Dir. Leo Jasqreno – DENR-MGB
- Cambodia:
- Vietnam:
- Mongolia: Mongolian small-scale miners’ national federation, Step without borders NGO, Development solution NGO, MONFEMNET Mining trade union, Center for human rights and citizens, Health Ministry, Ministry of Health, Toxicology center, Mineral Resources Authority, ASM unit, Ministry of Mining, Mineral Recourses Authority of Mongolia, Aimag and soum governors (aimag and soum mean administrative units at local level), National operator company, Altan Dornord Mongol company, Special Mines LLC.

Questions related to Minamata Convention obligations

1. Has your countries developed a national inventory of mercury use in ASGM:

- Indonesia: Yes
- Philippines: Yes
- Cambodia: Yes
- Vietnam: No
- Mongolia: No

2. Was the ‘UNEP toolkit to estimate the releases of mercury to air, land and water from various sources’ used for this estimate?

- Indonesia: Yes
- Philippines: Yes
- Cambodia: Yes
- Vietnam: No
- Mongolia: No

3. What do you see as the gaps in the inventory?

- Indonesia: Mercury trade and export-import of mercury data are not available
- Philippines: illegal sources of mercury, might be conservative
- Cambodia: needs to be updated
- Vietnam:

- Mongolia:

4. *What activities has your Government initiate to prepare for the Minamata Convention? Specifically, what activities address obligation under ASGM Article 7.*

- Indonesia: Indonesia is in the process of developing the National Implementation Plan to Eliminate and Phase-out Mercury
- Philippines: National Strategic Plan on ASGM is completed
- Cambodia: National Strategic Plan on ASGM is completed
- Vietnam:
- Mongolia:

Ideas for Assistance, information exchange or regional coordination

Is sustainability or replicability of successful projects an issue in your country?

- Indonesia: Yes
- Philippines: Yes
- Cambodia: Yes
- Vietnam:
- Mongolia: Yes

If so, how can this be encouraged?

A project implemented by BaliFokus, Indonesian NGO, with the funding from US Department of States. It was about the development of the Local Action Plan as part of the implementation of the National Action Plan on ASGM and mercury and the development of the technical informed choices catalogue of sustainable ASGM practices from the upstream level to the downstream level. Still on going. Another project by Ban Toxics, NGO based in Philippines with the community of Balbalan, Kalinga.

Do you see coordination of assistance as important in your country?

- Indonesia: Yes
- Philippines: Yes
- Cambodia: Yes
- Vietnam:
- Mongolia: Yes

If so, what is the best mode for coordination, in your view?

- Indonesia: Through bilateral and or multi-lateral cooperations facilitated by UN agency(ies).
- Philippines:
- Cambodia:
- Vietnam:
- Mongolia: workshops, trainings

Are regional workshops truly useful?

- Indonesia: Yes
- Philippines: Yes, but are expensive
- Cambodia: Yes
- Vietnam: yes
- Mongolia: Yes

Would on-line coordination be more cost-effective and useful?

- Indonesia: Yes
- Philippines: Not sure
- Cambodia: Yes
- Vietnam:
- Mongolia: Yes

Are there coordination networks in place now that could be expanded to include ASGM?

- Indonesia: We can use the existing mercury technical working group but need to be expanded to include health practitioners, civil society representatives, local government representatives, provincial government representatives, miners representatives and large scale mining representatives. Some Indonesian agencies, universities and NGOs are in the consultation process to establish a knowledge platform on ASGM which will cover the technical, social, economy and health issues.
- Philippines: : National Steering Committee on ASGM
- Cambodia: it's very weak
- Vietnam:
- Mongolia:

LATIN AMERICA

Responses provided by 6 governments (Bolivia, Brazil, Colombia, Ecuador, Peru, Suriname) and 1 NGO (University of Sao Paulo, USP)

Sectoral profile questions:

1. How many people are engaged in ASGM in your country?

- Brazil: 150,000 (formal/informal) [USP: 300,000-500,000]
- Colombia: at least 100,000 (mining census - ASGM)
- Peru: 250,000-300,000 (total estimate) - 77,000 'units' (juridic/individuals) in process of formalization
- Ecuador: 10,000
- Suriname: 20,000 miners (40,000 service providers)

General comments:

- Uncertainty levels are still very high
- It is very important to have more complete information, updated, develop census

2. Where does mining take place within the country?

- Brazil : Concentrated - Amazonia mostly, and some other state (Minias Gerais)
- Bolivia: Throughout the country

- Colombia: Concentrates (95%) on 13 department (Antioquia, Chocó, Bolívar, Caldas)
- Peru: Throughout the country, particularly in South (2/3) (Madre de Dios, Puno, Arequipa, Ayacucho)
- Ecuador: concentrated in southern region (3 provinces: Zamora Chinchipe, El Oro y Zamora)
- Suriname: concentrated around the Green Stone Belt Area, South-East (50,000km²)

3. Who does the mining?

Country	family landowners	migrant workers	immigrant workers	workers hired by landowners	women	children involved in the work	Others
Bolivia	x	x	x		x	x	
Brazil							Garimpeiros
Brazil-USP	x	x			x		
Colombia	x	x	x	x	x	x	
Ecuador	x	x	x	x			
Peru	x	x		x	x		
Suriname	X	X	X	X			

- Peru: the modalities can vary between alluvial mining and Philo
- Suriname: all modalities exist, except women and children; lot of migrant workers from Brazil (garimpeiros)

4. How many women and children are involved in the sector?

Women :

Colombia: 3,681

Peru-1,500

Brazil-little amount

Children:

Brazil-no children

Colombia – no official data - Colombia has a special program named “programa de erradicación trabajo infantil”

Ecuador: is difficult to quantify– Some practices include children

Bolivia: in some cases you can find children involved

Suriname: no children or women

The group concludes that: It is important to determine the social structure of the sector and the relations of production. E.g. Peru: if they are organize for family groups or individuals, average age, etc., it is conditioned by the type of mining, and variables such as the level of violence.

5. How much gold do these miners produce each year?

Bolivia: 7MT (oficial) –(7-8MT?)

Brazil: 20MT - oficial

Colombia: 50MT (80% by small-scale miners) –excluding illegal

Ecuador: 15MT (legal and informal)
 Peru: >40MT (legal and informal)
 Suriname: 20-30MT (includes mechanized/not only artisanal)

- In general, governments have official data of legal miners, but the volume of illegal and informal mining is difficult to quantify.

6. *What price do miners get for gold?*

Colombia: reference price from national Central Bank
 Brazil: price set by the London Stock Exchange (USP: 7-10% below spot price)
 Ecuador: depends of mineral (980USD/ounce; 15% below spot price)
 USP: not agree to sell for less than 10% below market value
 Peru: depending on international price (6-7% deduction); depends on quality of the mineral
 Suriname: 10% below spot price (in the field); 4-1% below (in the city)

7. *How do the miners get access to mercury?*

Country	gold shop	dentist office	mine owner	other
Bolivia				illegal trade
Brazil				commerce is not reported to the government / USP: clandestine buyers; gold shop from other States
Colombia	X		x	authorized improters
Peru	X			mining materials suppliers
Ecuador			X	Hardware store ('ferreterias')
Suriname				Smuggle

- Ecuador: The miners get access to mercury through borders
- Colombia: pipetas 34kg/2500usd – the miners get access to mercury through borders and legally.
- Suriname: need a permit to import; legal but governments are not giving permits– informal imports from Guyanas taking place

8. *How much do the miners pay for mercury?*

Bolivia: NA
 Brazil: \$ 404,00 /kg(\$300 / kg – USP)
 Colombia: \$ 5.000.000 / 34,5 kg
 Ecuador: USD120/liter
 Peru: 500-600 Soles / kg
 Suriname: USD250/liter

9. *Are miners sensitive to price of mercury? (Would they use less if it cost more?)*

Colombia: Yes
 Brazil: No
 Bolivia: No
 Ecuador: No
 Peru: Yes (but limited, as far as gold price is high)

Suriname: Yes

10. Do you have an estimate of how much mercury miners use to produce gold

Colombia: 5-8:1 (mineria veta); 3:1 (alluvial)

Brazil (USP): 2-5:1

Bolivia: 7:1

Peru: 2:1

Suriname: 1:1

10. What are the common technologies and practices used by the miners?

Country	crushing and grinding with mercury (e.g. whole ore amalgamation)	crushing and grinding, followed by concentration, with mercury added to concentrates	mercury-free, chemical-free processes such as gravity concentration (using sluices, centrifuge, shaking table etc)	chemical leaching process (such as cyanide leaching) on ore	chemical leaching process (such as cyanide leaching) on tailings	other
Bolivia	X	x				
Brazil		X				using sluices or centrifuge followed by concentration, with mercury added to concentrates; and crushing and grinding with mercury eventually
Brazil-USP	X	Sometimes	no	No	No	
Colombia	X	x	x	x	X	
Ecuador	x	x	x	x	x	
Peru	X?	x	x	x	x	
Suriname	x	x	x			

11. If mercury is used, how is amalgamation performed? How is the amalgam burnt?

Bolivia: Mostly manually (also with fine cloth), or in “tolocas”; open burnt

Peru: manually or with specialized amalgamation equipment

Brazil (USP): mostly via carpets and mixers

Ecuador: crushing and grinding; mercury is added to concentrates

Colombia:

Suriname: open air/torching

Retorts are used when amalgam is burned:

Bolivia: yes

Peru: sometimes

Brazil: sometimes

Colombia: yes, usually

Ecuador: yes, usually
Suriname: sometimes

11. How do miners purify the gold?

Brazil: by burning it (USP: mostly sold without purification)
Colombia: melting with Au and Cu + acid solution
Ecuador: Panela, detergent, petrol, among other
Peru: no

12. What is the level of local knowledge about alternatives to mercury?

Bolivia: low
Brazil: low
Ecuador: low
Peru: low
Suriname: low

13. Are programs or trainings available regarding alternatives available?

Bolivia: Yes
Brazil: No
Colombia: yes
Peru: yes
Suriname: yes, but not yet implemented

14. If so, what are the adoption rates for these alternatives?

Bolivia: Low
Colombia: high
Peru: low
Suriname: low

15. How well do miners understand the dangers of mercury?

Bolivia: Know but don't care / know but no alternative
Brazil: know but have no alternative / know but don't care
Colombia: know but have no alternative
Ecuador: know but have no alternative
Peru: Know but don't care / know but no alternative
Suriname: Know but don't care / know but no alternative

16. Who buys the gold from the miners?

Brazil: "houses of gold", accredited by the Central Bank, and cooperatives (USP: also clandestine buyers)
Colombia: gold shops, and direct buyers or intermediates at the mine
Ecuador: negociantes y pequeñas tiendas en ciudades cercanas
Peru: initiates at mine
Suriname: licensed buyers in the city (Paramaribo)

17. Do the gold buyers purify the gold?

Brazil: yes. Capture methods: yes.
Colombia: yes. Capture methods: yes

Ecuador: no
 Peru: imanes para el Fe contenido en oro refogado
 Suriname: yes. Capture methods: yes

Environmental questions:

1. What are the kinds of impacts you know about or have observed?

Country	Deforestation	Mercury contamination	Cyanide contamination	Sedimentation or other impact on water bodies	Other
Bolivia	x	x		x	
Brazil	x	x		x	
Colombia	x	x	x	x	Gases producto de la purificación del oro
Ecuador	x	x	x	x	eliminación directa de relaves y efluentes en los ríos, contaminación del suelo, desvió cauce natural de ríos (área aluviales), modificación del paisaje, alteraciones componente biótico, manejo inadecuado de desechos peligrosos.
Peru	x	x	x	x	Soil disturbance
Suriname	x	x		x	

2. Are there any special studies or data collected on environmental contamination or health impacts from ASGM performed in your country?

Bolivia: Yes (Estudio del Banco Mundial sobre Minería Artesanal en Bolivia)

Brazil: Yes [Although the studies are isolated among themselves, the researches conclude about 100% increasing of mercury concentration with time peacock bass (*Cichia sp.*) collected in the Tapajós River and Lake Maica from 1992 to 2001. Therefore, since the species of high tropic level are affected, entire food chains may also be affected (Source in Portuguese).

Colombia: na

Ecuador: Yes

Peru: Yes

Suriname: Yes

Legal questions:

1. What is the legal /regulatory status of small scale mining?

Bolivia: illegal

Brazil: Legal

Colombia: legal / extra-legal / illegal

Ecuador: illegal

Peru: legal (formal ASGM miners)

Suriname: extra legal / illegal

2. What is the legal status of mercury use in your country?

Bolivia: not legal

Brazil: Legal

Colombia: legal

Ecuador: not legal

Peru: legal (formal miners)

Suriname: not illegal (need permit to import, but permits given by Ministry of Trade – not being issued)

3. How are miners typically organized?

Country	individuals or family groups	owners with paid labor or shared profit model	cooperatives	Others
Bolivia	X		x	
Brazil	X		x	
Colombia	X	X	X	
Ecuador	x		x	
Peru	X	X	X	“Cachorro” – en especie
Suriname	X	X	X	

3. *How do miners typically access capital?*

Bolivia: Self-funding.

Brazil: The “garimpeiros” access credit through investors (USP – they use own funds)

Colombia: loans by national banking institutions; private investors and/or multinationals

Ecuador: By means of associations, they ask for credits, or in many situations money that is given in illegal form

4. *Besides the artisanal and small scale miners, who are the key stakeholders at national regional and local levels, including government and community-based organizations active in mining communities?*

Bolivia: NGOs, Min of Mining, large scale mining

Brazil: Min of Mining, Min of Environment (USP: provincial govt and large scale mines: detractor to the activities).

Peru: Min of Mining

Colombia: NGOs, Central and regional governments

Suriname: NGOs – WWF Guianas; Ministry of Public Health; Ministry of Natural Resources

Ecuador: NGOs, Min of Health, Min of Industry, local and regional government

Questions related to Minamata Convention obligations:

1. *Has your countries developed a national inventory of mercury use in ASGM:*

Yes: Bolivia(not at national level);

No: Colombia (but Register being developed); Brazil (not-concluded); Suriname; Ecuador (but a general inventory using the UNEP toolkit was conducted)

2. *Was the “UNEP toolkit to estimate the releases of mercury to air, land and water from various sources?*

Yes: Colombia;

No: Brazil; Bolivia;

3. *What do you see as the gaps in the inventory?*

Brazil : some gaps in raw data and weakness in coordination at state level

Brazil-USP: miners and cooperatives not aware of the inventory initiative

Bolivia: inventory is currently limited to a specific region

4. *What activities has your Government initiate to prepare for the Minamata Convention? Specifically, what activities address obligation under ASGM Article 7.*

Ideas for assistance

What specific kinds of assistance would be most helpful to your country in implementing obligations under the Convention?	Need NOW	Need in future
Technical assistance		
Training on doing mercury inventories	Bolivia	

	USP Suriname	
Training on alternative mining techniques to reduce or eliminate mercury use and release	Bolivia Brazil USP Colombia Ecuador Peru Suriname	
Training on mercury capture during purification	Brazil USP Peru Ecuador Suriname	Bolivia
On-line training of miners and processors	Suriname Colombia Ecuador Peru	Bolivia USP Brazil
Policy development		
Setting up formalization system	Bolivia Brazil Ecuador USP Suriname	
Land tenure/property rights/cadastre system	Bolivia Brazil Ecuador USP Colombia Suriname	
Facilitation of National Action Plans	Bolivia Brazil Ecuador USP Suriname	Colombia
Marketing approach		
Developing supply chains to maximize mercury-free	USP Colombia Ecuador Peru	Bolivia Brazil Suriname
Addressing health impact issues	Bolivia Brazil USP Colombia	

	Ecuador Peru Suriname	
Training for environmentally-sound management of mercury	Bolivia Brazil USP Ecuador Peru Suriname	
Mercury storage		
National Action Plan on storage- facilitation	Bolivia Ecuador Suriname	Brazil USP
Training, technical criteria of facilities	Bolivia USP Colombia Ecuador Suriname	Brazil

Annex 3

Summary of the Break-out Session

Region	What is the best platform in your region?	What are the common areas of collaboration?	How do we get platforms functional and sustainable?	How will finance platforms?
Latin America	The region identified two types of platforms: - International platform which allows exchange information worldwide. - Regional platform which allows discuss, exchange information of similar conditions. Finally, the group	- Formalization ASGM - Development of policies - Clean technologies and equipment - Environmental Legislation - Environmental Education - Training Centers - Chemical analysis laboratories to strengthen	- Creating synergies or/and getting advantage the actual ones - Easy access to users - Leadership and management responsibility to an entity, agency or program with expertise - Development Regional and international levels - Development working with Communities	- International cooperation - Free online platforms

	<p>highlighted the importance of working in different spacious to create synergies and avoid duplication of efforts</p>	<p>monitoring activities</p> <ul style="list-style-type: none"> - Health - Smuggling - Development technical guide 	<p>-Institutionalization</p> <ul style="list-style-type: none"> - Create national implementation mechanisms to scale-up experiences. 	
Asia / Africa	<ul style="list-style-type: none"> -Platform, network or pull of experts on ASGM hosted by a regional institution e.g. UNECA, UNEP, African Union, etc. reporting back to the global platform, which consists of Africa, Latin America and the Caribbean and Asia and the Pacific. -Asian platform linked with the current projects -On-line discussion forum / network 	<ul style="list-style-type: none"> - Transboundary water pollution by ASGM - Market structure and prevention of illegal flows of “conflict” and/or chemicals - Information exchange on ASGM issues- Knowledge sharing on technology, environment, legal, social issues, etc. - Study tours - Formalization and strategic plans including the preparation of the implementation of the Minamata Convention (e.g. workshops for capacity building for countries in preparation of the action plans). 	<ul style="list-style-type: none"> - Incorporate activities of the network within the sustainable development plans in each country - Host platform in regional bodies Relate platform to already established sub-regional structures 	<ul style="list-style-type: none"> - Platform will be funded by: GEF, UNEP, UNIDO, Governments and private sector e.g. miners and related industries. - Incorporate development partners since the beginning of the process Government to be involved since the beginning of the process both financially (e.g. taxes from the mining industries, mineral development funds, etc.) and with human resources Platforms will be coordinated by: Regional coordination and focal points with linkages with sub-regional structures. Institutionalization of activities e.g. steering committees usually led by Ministries in charge of the environment Using already existing platforms rather than creating new ones.

Annex 4

Mass Media impacts

In the following information there are some evidence about Peru's mass media impacts after Second Global Forum on artisanal and small scale gold mining.

“La Convención de Minamata obligará a reducir el uso de mercurio”

La reunión que se realizó del 3 al 5 de setiembre es preparatoria a una cita de compromiso internacional contra el uso del mercurio.

La Convención de Minamata, documento del Programa de las Naciones Unidas para el Medio Ambiente y el Desarrollo (PNUMD), fue aprobada en enero. Esta señala una serie de compromisos para reducir el uso del mercurio en diversas actividades, especialmente la minería.

Esta convención se va a firmar el mes próximo en Japón, justamente en la ciudad de Minamata, y entrará en vigor cuando la ratifiquen 50 de las naciones signatarias.

¿Cómo ha visto usted la participación, no solo en el avance del problema de la minería ilegal, sino en la decisión política para afrontar este tema?

Yo veo compromiso y esfuerzos en los países signatarios, que serán más de 140. Este nuevo tratado para controlar el uso del mercurio abarca no solo la minería sino también la industria y otros sectores. Va a cumplir la promesa de controlar las sustancias tóxicas y mejorar el medio ambiente y la salud pública.

En el proceso de las Naciones Unidas, hay varios convenios legales para controlar sustancias como el plomo, y ahora es el turno del mercurio. Con este y varios otros convenios se están dando los pasos para mejorar no solo el ambiente y la salud pública en los países desarrollados y ricos, sino también en todos los países en vías de desarrollo.

¿Esta reunión ayudará a tomar la decisión final?

En la reciente reunión de Lima



ESTRAGOS. La llamada enfermedad de Minamata atacó a Japón.

participaron representantes de más de 40 países. La cita fue para dialogar y debatir cómo cumplirán los países con las metas que impone este nuevo convenio.

Muchas naciones están empezando desde la nada y la van a

firmar, están de acuerdo con las metas pero hasta ahora no saben exactamente cómo las cumplirán, cómo implementarlas. Esta reunión fue dirigida a un grupo técnico para compartir experiencias y ahondar en las formas en que un país puede hacer sus inventarios del mercurio, tomar decisiones y diseñar recursos para financiar estos esfuerzos.

¿En nuestra capital se han sentado entonces las bases y creado las capacidades para que este convenio pueda ser firmado e implementado?

Exactamente. Esta convención, además, es importante porque es obligatoria y es la primera vez que hay un entendimiento firmado que es obligatorio y no voluntario, como en el caso de otros esfuerzos que no llegaron a mucho.

¿Con la firma de la Convención de Minamata los países se comprometerán a reducir la utilización de mercurio y eso significa que tendrán que implementar un sistema en cada país?

Exacto. La idea es reducir al mínimo el uso del mercurio.

UN GRAVE SÍNDROME

Minamata es un lugar donde se padeció el primer gran desastre por contaminación de metilmercurio que generó la llamada enfermedad de Minamata, un síndrome neurológico grave y permanente causado por el envenenamiento con ese neurotóxico. Eso ocurrió en los años 50, murieron 46 personas y las mascotas y los pájaros mostraban similares síntomas. Mujeres asintomáticas dieron a luz niños con graves problemas neurológicos. Recién en 1968, el Gobierno Japonés anunció que la causa de la enfermedad era la ingestión de pescado y de mariscos contaminados con mercurio, como resultado de los vertidos de la petroquímica Chisso. Se calcula que entre 1932 y 1968 se vertieron en esa bahía 81 toneladas de mercurio.

Source: *El Comercio - Peru*, September 7th, 2013.

ENTREVISTA AL ECOLOGO TROPICAL LUIS E. FERNÁNDEZ (A2 y 4)

“El mercurio de la minería ilegal afecta más a los indígenas”

Muerte lenta. Contaminación en niños nativos de Madre de Dios es hasta 4 veces más alta que la de adultos en la ciudad.

Peligrosa dieta. Peces tienen elevados índices del metal. Doncella, zúngaro y dorado son las especies más afectadas.



SELVA EN RIESGO. Como director del Proyecto Carnegie de Mercurio en el Ecosistema Amazónico, Fernández ha evidenciado inquietantes verdades en torno a la contaminación que afecta a los pobladores.

“El agua está afectada también por otros contaminantes”

El agua que llega a los centros poblados proviene de ríos contaminados por la minería ilegal. ¿La calidad del agua está afectada?

Hemos encontrado que los niveles de mercurio en el agua pueden no ser muy altos, pero ocurre que hay pescados con niveles muy altos y eso hace que el veneno se concentre en la cadena alimenticia. La biomagnificación del mercurio es muy eficiente y, por lo mismo, peligrosa. Puedes tener niveles muy bajos, indetectables para la máquina de análisis, pero si tienes una cadena alimenticia compleja, el mercurio se va concentrando, magnificando, aumentando.

¿Han encontrado otros elementos contaminantes en el agua?

En algunas de las áreas donde no hay problemas de mercurio está el plomo, que es otro metal pesado muy dañino. Este viene también de las actividades mineras artesanales, ilegales y que son verdaderamente semindustriales. En esos

lugares pues hay quienes trabajan de forma muy simple, arcaica, pero también se ven operaciones muy grandes que usan maquinaria pesada, cargadores frontales.

¿Cómo afecta esa minería artesanal, que en realidad son operaciones grandes?

Esas explotaciones que abarcan grandes extensiones de selva usan mucho material y volúmenes mayores de todo tipo de sustancias. Hay zonas donde se encuentran niveles muchos más altos de plomo y arsénico [un cancerígeno que inclusive afecta a los cromosomas] y otras sustancias venenosas, tanto en los suelos como en las aguas.

¿Hay estudios de estos otros elementos para el caso peruano?

Muy pocos, y por eso es importante encajar el problema del mercurio con todos los demás elementos y problemas relacionados que puedan estar afectando a esas comunidades. Realmente hay poca infor-

mación sacando a la luz lo del mercurio, pero hay otros estudios que hablan de esos otros materiales y cómo afectan el entorno y a las personas. Se necesitan más estudios sobre los niveles de esos otros metales pesados en las comunidades y vincularlos con los síntomas de las enfermedades asociadas a la exposición a esos contaminantes.

¿Cómo debería encararse esa problemática?

En estas investigaciones deben involucrarse grupos de médicos, realizar evaluaciones epidemiológicas, entre otros. Nosotros estamos haciendo ese tipo de estudios científicos para saber la situación en el caso del mercurio. Con los datos obtenidos se tiene que actuar para mejorar la vida de la gente, incluyendo los propios mineros informales, legales, artesanales. Ellos trabajan exponiéndose a estos tóxicos, están también afectados y deben beneficiarse de la información científica que se

Source: *El Comercio* - Peru, September 7th, 2013.

Annex 5

Intervención

del Sr. Djumakadyr A. Atabekov,
Embajador en Misión Especial
y Representante de Kirguizistán
ante el Segundo Foro Global de Excavación
de Oro Artesanal y de Pequeña Escala.

Lima, Perú
3-5 de septiembre de 2013

Sr. Presidente,
Distinguidos delegados,
Sras. y Sres.:

Primeramente quisiera que me permitieran pronunciar algunas palabras introductorias, ya que para un oriundo del lejano Kirguizistán de Asia Central es una circunstancia fuera de lo común encontrarse en la hermosa tierra de los incas y poder extender en nombre de su Gobierno y su pueblo un saludo fraternal al Gobierno y al pueblo del Perú y a los delegados de este Segundo Foro Global de Excavación de Oro Artesanal y de Pequeña Escala y desearles exitos creativos de importancia. Es al mismo tiempo un placer para el expresar el agradecimiento del Gobierno Kyrgyz al PNUMA por querer invitar a dicho Evento Internacional a una delegacion de Kyrgyzstan, la que junta su voz a la de los delegados que valoran altamente al Gobierno peruano por la magnifica organizacion del Foro.

Nuestro Gobierno le expresa su satisfacción a los gobiernos de EE.UU, Noruega y España por su aporte financiero.

El llevar a cabo nuestra conferencia apenas haber pasado unos breves meses de haberse aprobado el <Convenio de Minamata sobre mercurio> hay que considerarlo como un gran interés en los acuerdos alcanzados por CIN-V en Ginebra, en el mes de enero pasado.

Además este Foro adquiere un sentido muy particular como víspera de la Conferencia Diplomática de Plenipotenciarios, los que se proponen a echar “ humo blanco” al Convenio de Minamata”. El Gobierno del Japon el amable anfitrión de la misma, que tendrá lugar dentro de un mes de aquí merece todo respecto.

Sr.Presidente,

Los últimos dos a tres decenios de años los esfuerzos del PNUMA, del Fondo Global Ecológico y de varios Gobiernos han resultado en ampliación de la actividad Internacional proambiental relacionada con ensuciamiento del medio ambiente. En una cierta medida a ello contribuye la actividad práctica del hombre en diversas esferas de su vida y su

existencia, especialmente en el sector productivo. Esto sucede en los trabajos con oro artesanal, ya que este proceso en un principio tampoco se realiza sin el uso de mercurio. Dicho de otra manera el quehacer humano y de los estados con fines del desarrollo ulterior entran en una situación contradictoria entre sí, siendo esta la razón por lo que el PNUMA y FEG en el espíritu y sus principios ecológicos están haciendo un llamado a la comunidad mundial a la búsqueda conjunta de la vías para superar tales contradicciones. Quisiéramos entre tanto prestar atención a que dichas contradicciones no son tales en esencia, pero no dejan de ser factores objetivos interdependientes de promoción del desarrollo progresivo de la sociedad, la que en su camino a la siguiente fase tiene que evitar las consecuencias desfavorables que surjan eventualmente.

En este sentido el Convenio de Minamata sugiere direcciones donde se puede emprender la mencionada búsqueda, incluso en lo que concierne al oro artesanal. Siendo el Convenio el fruto de la conciencia y actos colectivos del PNUMA, FGE, de delegaciones gubernamentales y del CIN, preocupándose por la salud y bienestar del hombre y en mantener nuestra flora y fauna y el medio ambiente en general limpios.

El Gobierno kirguiz comparte los objetivos y tareas expuestas por el Convenio. Sin embargo quiere indicar que sigue estando atento a razones de sus consecuencias en cuanto a la situación de los productores de mercurio, teniendo en cuenta el carácter estratégico del documento. No en vano el problema de todos los organismos vivos y recursos naturales esta explícitamente marcado por la Declaración del Milenio de la NNUU como uno de los seis valores fundamentales del siglo XXI.

Sr. Presidente,

A nuestro entender la Agenda del Foro previamente centra su atención en el problema del medio ambiente y no es lo más significativo, pero aun así no deja de ser menos importante. Las circunstancias de la excavación de oro artesanal están expuestas en el Artículo 7 del Convenio, cuya esencia está bien clara a todos. En cuanto a nosotros quisiéramos solo señalar en este artículo la idea relacionada con el Plan de Acción Nacional y del derecho a mantener la colaboración con otras partes del Convenio.

Acogiendo positivamente dicha idea Kirguizistán es partidario de todo el curso negociador sobre mercurio en el sentido positivo de la elaboración de las seguras alternativas de garantía de la producción primaria de mercurio. Es realmente vital para los empleados y productores del mismo y para la población en general porque al fin y al cabo la estabilidad político social del país es de prioridad. Entendemos que este problema propone obligaciones para todas las partes en acción.

Sr. Presidente,

En cuanto al oro artesanal en la Republica de Kirguizistán y su porvenir hay que decir lo siguiente. El territorio de la Republica se caracteriza por el alto grado de presencia del oro. Se han detectado y se han marcado cerca de mil puntos de hallazgos de oro en todo el país, o sea que en un área de 90 km² hay un punto o lugar. Funcionan siete minas, quince están en procesamiento, dos pozos en construcción. El volumen de oro producido anualmente es de 20 toneladas aproximadamente.

El procesamiento de oro informal se lleva a cabo en Kirguizistán desde principios del siglo XX. Antes de la independencia este tipo de actividad humana estaba sometida a las leyes soviéticas y al sistema centralizado de la URSS.

Actualmente la búsqueda de oro informal en Kirguizistán está un poco más privilegiada. Se aprobó una nueva Ley- <Sobre yacimientos naturales>, la que regula este tipo de actividad humana. Según esta ley los derechos de dicho proceso se les otorgan a las Administraciones Locales a las que se les da el poder de chequear y registrar a hombres y lugares de búsqueda, entregar licencias. La Ley junto con la Disposición Gubernamental de 2008, tomada a su raíz prevé medidas para poner fin al comercio ilícito del metal dorado, así como también cerrar los canales de su tráfico. Además se ha promulgado el método de excavación que es solo por gravitación. En principio esta labor se efectúa en las cercanías de minas en acción. El concentrado con oro obtenido por buscadores se entrega a las llamadas <cajas de recibo de oro> (CRO) en el mismo sitio o en los puntos de recogida, creados oportunamente.

El uso de sustancias venenosas fuertes, o sea ácido cianúrico, amalgamación, etc., está prohibido. Los violadores responden ante la Ley.

El sistema de oro artesanal y de pequeña escala. al igual que toda la rama de minería en Kirguizistán, requieren un perfeccionamiento. Partiendo de tal necesidad las organizaciones públicas, estructuras interesadas, así como la Agencia de Geología y Recursos Minerales, el órgano apoderado en esta área, hoy se ven más activos: se efectúa un trabajo informativo educativo con los administradores locales, se han organizado entrenamientos profesionales sobre la peligrosidad del empleo de la amalgamación, etc.

En 2003 los organismos no comerciales, junto con la Agencia de Geología, llevaron a cabo importantes investigaciones de la actividad de los buscadores de oro y de pequeñas compañías individuales. El objetivo era ayudar al Gobierno en determinar tipos y escala de trabajo de estos, ver la posibilidad de ligar este sector con la economía nacional del país, estimar el carácter y calidad del perjuicio infligido a la naturaleza, hacer un análisis profundo

de la coyuntura del medio ambiente. Los datos obtenidos fueron publicados en cooperación con el BM y distribuidos entre los interesados y comunidades locales. Consideramos que dichos emprendimientos pueden formar una base inicial para crear el Plan de Acción Nacional mencionado anteriormente. El intercambio de información y experiencia con Uds., Sres. Delegados, nos permitirá dar una nueva ojeada a esta tarea.

Sr. Presidente,

El Gobierno de Kirguizistán tiene pleno entendimiento y comparte la preocupación de la comunidad internacional por la situación creada en torno al oro artesanal y al destino del mercurio, y se propone a contribuir hasta que pueda a la causa común pro-ambiental. Al mismo tiempo quisiéramos ser bien claros, que consideramos con muy serio interés los métodos de trabajo en dicho entorno ya discutidos con otros países.

Finalizando estas palabras quisiéramos subrayar una vez más que el Convenio de Minamata sobre el mercurio y el asunto que está aquí presente sobre el tapete son de sentido estratégico para todos nosotros, particularmente para las economías vulnerables como lo es la de la Republica de Kirguizistán. A raíz de ello estamos dando al mismo un razonamiento más, hasta llegar a una idea de que el lapso de tiempo hasta 2025 como punto de sugerencia para la reestructuración de la producción primaria de mercurio, no es suficiente. A nuestro juicio la realización de más consultas e intercambio de experiencias, basándose en el principio de obligaciones y tareas comunes no serán inútiles.

¡Muchas gracias!