UNITED NATIONS DEVELOPMENT PROGRAMME

COUNTRY: Honduras

PROJECT DOCUMENT[1]

Project Title:	Environmental Sound Management of Mercury and Mercury Containing Products and their wastes in Artisanal Small-scale Gold Mining and Healthcare.
UNDAF Outcome(s):	**UNDAF** **Outcome 1: Government, private sector and local communities adopt good practices for the management of ecosystems, mitigation of and adaptation to climate change for the preservation of natural capital, the reduction of economic losses and the generation of employment opportunities for the most vulnerable sectors of the population**
UNDP Strategic Plan Environment and Sustainable Development Primary Outcome:	Outcome 1: Growth and development are inclusive and sustainable, incorporating productive capacities that create employment and livelihoods for the poor and excluded. Output 1.3. Solutions developed at national and sub-national levels for sustainable management of natural resources, ecosystem services, chemicals and waste.
UNDP Strategic Plan Secondary Outcome: NA	
Expected CP Outcome(s): Effect 3.2: The Government of Honduras, the private sector and communities in the áreas of intervention adopta good practices of ecosystem management, solid waste management and climate change mitigation and adaptation, which allow the preservation of natural capital, the reduction of economic losses and the generation of income opportunities for vulnerable sectors of society.	
Expected CPAP Output (s):3.2.1: Good practices implemented for natural resource management, and generation and use of renewable energy by local communities and local and regional authorities in the área of influence of the United Nations System, which generate benefits and empowerment for communities and increase their resilience to climatic phenomena.	
Executing Entity/Implementing Partner:	UNDP
Implementing Entity/Responsible Partners:	Secretary of Natural Resources and Environment (SERNA), through its Centre for the Study and Control of Pollutants (CESCCO) and its department of chemicals management (DGPQ).

[1] For UNDP supported GEF funded projects as this includes GEF-specific requirements

Brief Description

In January 2013, a UN agreement was reached for the establishment of a globally legally binding Convention on Mercury "*The Minamata Convention on Mercury*". The Minamata Convention is a global treaty to protect human health and the environment from the adverse effects of mercury. The Convention was adopted and opened for signature on 10 October 2013, at a Conference of Plenipotentiaries (Diplomatic Conference) in Kumamoto, Japan. As of 1 December 2014, 128 countries (including Honduras) have signed the Convention, while 9 countrieshave ratified the Convention. The Convention will enter into force 90 days after it has been ratified by 50 nations.

The overall goal of the project is to support Honduras in undertaking Mercury related assessments and implementing Mercury activities in the areas of ASGM and healthcare that will contribute towards achieving the objectives of the Minamata Convention and developing the required capacity in Honduras to implement provisions of the Convention when it enters into force.

The objective of the proposed project is to "Protect human health and the environment from Mercury releases originating from the intentional use of mercury in artisanal small-scale gold mining (ASGM), as well as the unsound management and disposal of Mercury containing products from the healthcare sector".

The project will focus on reducing the use of Mercury in two (2) priority sectors (Artisanal and Small-scale Gold Mining and Healthcare) by implementing several pilot mercury management and reduction activities.

At national level the project will support the creation of an enabling environment by improving the regulatory and policy framework pertaining to the Environmentally Sound Management (ESM) of Mercury, Mercury containing products and their wastes. The project will also further develop technical capacity for (risk) assessments, inventories and monitoring of Hg releases, use of Mercury-free devices in healthcare, use of socially and environmentally sound mining artisanal practices, creation and operation of interim storage for mercury containing wastes, life-cycle management of Hg (incl. spill clean up, collection, transport, etc.), awareness raising, among else.

Through implementation of these components, the project expects to reduce mercury releases by 40 kg/yr. These releases would otherwise be added to the "global pool" of Mercury, putting environmental and human health at risk everywhere. Importantly, setting-up sound and sustainable mercury management and phase-out/down schemes for priority sectors will enable a steady and gradual reduction in the use of Hg, ultimately achieving complete phase-out.

All the project efforts combined, are expected to result in a Mercury reduction of approximately 1,000 kg a year. This reduction will predominantly be achieved as a result of the ASGM activities of the project.

Programme Period:	2015 - 2019	**Total resources required (US$):**		7,519,854
Atlas Award ID:	00081014	**Total allocated resources (US$):**		7,519,854
Project ID:	00090481			
PIMS #:	5229	**GEF**		**1,300,000**
Start Date:	April 2015	**Co-financing**	UNDP	50,000
End Date:	April 2019		INHGEOMIN	3,034,854
Mgmt Arrangement:	NIM		HES	85,000
PAC Meeting Date:			CESSCO/SERNA	750,000
			RECYCLE	2,300,000
		Total Co-financing:		**6,219,854**

Agreed by (Government of Honduras):

Date/Month/Year

Agreed by (UNDP):

Date/Month/Year

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LIST OF ACRONYMS

ALCOMINH	Alliance of Mining Communities in Honduras
APR/PIR	Annual Project Review / Project Implementation Review
ASGM	Artisanal and Small Scale Gold Mining
AWP	Annual Work Plan
BAT	Best Available Technologies
BEP	Best Environmental Practices
BRI	Biodiversity Research Institute
CCAD	Central American Commission on Environment and Development
CDN	Centro de Negocios
CESCCO	Center for the Study and Control of Pollutants
CETESB	Sanitation Company of São Paulo-Brazil. Regional Center of the Stockholm Convention for Latin America.
CO	Country Office
CNG	National Commission for the Sound Management of Chemicals
CP	Country Programme
GEF	Global Environment Facility
HCWM	Healthcare Waste Management
HC	Health Centre
HCF	Healthcare Facility
HES	Honduras Environmental Services
HEU/UNAH	University Teaching Hospital / National Autonomous University of Honduras
Hg	Mercury
HMCR	Mario Catarino Rivas Hospital
I-RAT	Individualized Rapid Assessment Tool
INECC	National Institute of Ecology and Climate Change-Mexico. Regional Center of the Stockholm Convention for Latin America.
INHGEOMIN	Honduran Institute of Geology and Mines
M&E	Monitoring and Evaluation
MoE	Ministry of Environment (also see SERNA)
MoH	Ministry of Health (also see SESAL)
MoU	Memorandum of Understanding
MSD	Medical Stores Department
MSW	Municipal Solid Waste
NGO	Non-Governmental Organization
NIP	National Implementation Plan
PAC	Project Approval Committee
PA	Project Assistant
PB	Project Board
PC	Project Coordinator
PCU	Project Coordination Unit
PIF	Project Identification Form
PPG	Project Preparation Grant
PPE	Personal Protection Equipment
PPP	Public Private Partnership
PPR	Project Progress Report

PRF	Project Results Framework
PRTR	Pollutant Release and Transfer Register
PTS	Persistent toxic substance
QPR	Quarterly Progress Reports
RCU	Regional Coordination Unit
SAICM	Strategic Approach to International Chemicals Management
SMC	Sound Management of Chemicals
SOP	Standard Operating Procedures
SERNA	Secretary of State in the Ministry of Energy, Natural Resources, Environment and Mining
SESAL	Secretary of State for Health (see also MoH)
SINAVIS	System Health Monitoring of Honduras
TOR	Terms of Reference
UNAH	National Autonomous University of Honduras
UNDAF	United Nations Development Assistance Framework
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNIDO	United Nations Industrial Development Organization
UNICEF	United Nations Children Education Fund
UNITAR	United Nations Institute for Training and Research
WHO	World Health Organization
WTO	World Trade Organization
WCO	World Customs Organization

LIST OF WEBSITES

GEF/UNDP/WHO/HCWM Global Medical Waste Project	http://www.gefmedwaste.org
World Health Organization (WHO)	http://www.who.int/water_sanitation_health/medicalwaste/en/
Healthcare Without Harm (HCWH)	http://www.noharm.org https://noharm-global.org/issues/global/mercury-health-care
WHO/HCWH "Mercury free health care"	mercuryfreehealthcare.org

I. SITUATION ANALYSIS

1.1 Context and Global Significance

Mercury is a neurotoxin and can exist in various forms, with each of its forms (elemental, inorganic and methyl mercury) having different severe toxic effects on human and environmental health. Exposure to elemental Mercury, Mercury in food, and Mercury vapors may pose significant health problems including kidney, heart and respiratory problems, tremors, skin rashes, vision or hearing problems, headaches, weakness, memory problems and emotional changes. Like POPs, Mercury remains in the environment for decades, it is transported long distances and is deposited in the air, water, sediments, soil and biota in various forms. Atmospheric Mercury can be transported long distances, is incorporated by microorganisms and is concentrated up the food chain. It is because of these characteristics, that Mercury is regarded as a global pollutant. Reducing mercury use in processes and products is the most direct way to reduce mercury exposures and releases to the environment.

Because of the global threats to human health and the environment from Mercury, the Minamata Convention on Mercury, which was adopted in October 2013, aims to reduce releases of Mercury from all sources, including gold mining, dental amalgam, chlor-alkali plants, coal combustion, waste incineration, smelting and many products containing mercury. The Convention was adopted and opened for signature on 10 October 2013. As of 1 December 2014, 128 countries (including Honduras) have signed the Convention, while 9 countries have ratified the Convention. The Convention will enter into force 90 days after it has been ratified by 50 nations.

To support Honduras in developing the required capacity to implement the provisions of the Minamata Convention when it enters into force, and to initiate Mercury related inventories and Mercury phase-out activities, the proposed project will focus on reducing the use of Mercury in two (2) priority sectors (Artisanal and Small-scale Gold Mining and Healthcare). Following the “National Assessment of the Use of Mercury in Honduras” (2011), these two sectors were identified among the three priority sectors (1. ASGM, 2. Energy Generation and 3. Mercury in products) in terms of extent of Mercury use and releases in Honduras.

Artisanal and small-scale gold (ASGM) mining represents the largest use of mercury globally (the sector is estimated to use around 1400 ton/year). ASGM activities are widely dispersed over 70 countries, directly involve over 10 million miners, including approximately 3 million women and children, and produce about 15% of the world’s gold. Most of this gold is produced using mercury amalgamation techniques, resulting in mercury vapor inhalation exposure of miners, processors, and surrounding communities, as well as releases to land, water bodies, and air, while a significant portion of the mercury vapor is being transported regionally and globally.

In Honduras, ASGM is an important source of income, especially in rural communities where alternative livelihoods are limited. Despite the low levels of gold production achieved at individual level, the large numbers of miners involved makes that a national scale total production is significant. Considering the use of Mercury is the dominant and preferred method among miners to extract gold (easy to use, inexpensive and freely available), the Government of Honduras has recognized that the application of Mercury in this sector creates considerable risks to human health and the environment.

Mercury is also used in a variety of products, including dental amalgam, medical devices like thermometers and blood pressure cuffs, electrical switches and relays, and fluorescent lamps. Mercury use in products can result in releases to the environment at various stages of the life cycle. Atmospheric emissions and resulting global impacts from mercury-containing products are primarily due to waste management practices at the end of the product's life. In Honduras, the unsound management of Mercury containing wastes (CFLs, thermometers, dental amalgam, relays, among else), was identified as the third most significant source of Mercury releases.

Healthcare facilities (HCFs) are also a significant source of atmospheric releases of Mercury. Mercury spills and the breakage/disposal of Mercury-containing devices, such as thermometers and sphygmomanometers, are the principal ways by which Mercury from health facilities enters the environment. The use of Mercury-containing devices in healthcare is widespread, mostly due to limited availability of low cost Mercury-free devices, unfamiliarity with their use as well as occasional donations from abroad.

Mercury is also used in the healthcare sector in the form of dental amalgam. The use of dental amalgam is a significant source of Mercury discharge into the environment, including scrap amalgam and amalgam waste. In Honduras such wastes are predominantly discharged with wastewater into the sewerage, as there are often no solutions available to deal with such waste streams[2].

However, alternatives to most Mercury-containing products are generally available at reasonable prices, and eliminating products containing Mercury or decreasing Mercury content in products results in a reduction of atmospheric emissions of Mercury from waste streams, while proper handling and recycling will also reduce emissions.

The project will promote best practices, techniques and technologies to be applied in the ASGM sector to implement gradual steps towards going Mercury-free. The project will also support the health sector in phasing-down the use of Mercury containing medical devices and products, while improving practices for Mercury containing wastes. The goal of the project will be for Honduras to adopt the necessary measures and build the required capacity in order to reduce releases of Mercury and meet future obligations under the Minamata Convention[3].

Data from the baseline analysis which was conducted during the project's preparation phase (see section "*Mercury Release Baseline*") suggests that in Honduras the ASGM sector releases up to 20,000 kg of Mercury per year, while the healthcare sector releases up to 428.9 kg Hg/yr[4]. The hospitals that have been pre-selected for project participation currently release up to 14.8 kg/Hg/yr, while the mining community envisaged to participate in the project currently uses approximately 5,000 kg Hg/yr.

[2] Dental mercury should also be considered a source of air borne emissions from cremation of dental amalgam.

[3] The Minamata Convention stipulates that i) Each party shall not allow, by taking the appropriate measures, the manufacture, import or export of mercury added thermometers and sphygmomanometers by 2020 (Annex A, Part I)[3] and ii) take measures to phase-down the use of dental amalgam by introducing 2 of 8 stipulated measures.

[4] Mercury releases from the breakage of Mercury containing medical devices (thermometers and sphygmomanometers) were calculated using an average release factor of 2.8 g/bed/year, based on data from seven countries; "Baseline Mercury Data from the Health-care Sector," Annex 3B of "Demonstrating and Promoting Best Techniques and Practices for Reducing Health-care Waste to Avoid Environmental Releases of Dioxins and Mercury," UNDP Project Document, 2007. Assuming that Ghana counts 22,164 beds, Madagascar 8,146 beds, Zambia 26,961 beds and Tanzania 45,207 beds.

Through implementation of these components, the project expects to reduce Mercury releases by ~ 1,000 kg/yr. These releases would otherwise be added to the "global pool" of Mercury, putting environmental and human health at risk everywhere. Importantly, setting-up sound and sustainable mercury management and phase-out/down schemes for priority sectors will enable a steady and gradual reduction in the use of Hg, ultimately achieving complete phase-out.

In addition to the benefits of reducing Mercury releases, the proposed project also has a number of "secondary" benefits, in terms of health as well as social and economic benefits.

The burden of disease, as well as the cost implications for Governments' national budget allocations to treat health impacts caused by the inadequate handling, use, storage and disposal of Mercury and Mercury containing wastes is significant. The project will indirectly help reduce human suffering and healthcare costs, but reducing the use and release of Mercury.

As one of the means to reduce harmful releases from the health sector, the project will improve the waste management chain of Mercury containing wastes (clean-up, storage, (interim and long-term) transport, etc.). Improved waste management practices also have important benefits at national level which can include improved environmental health due to reduced water and soil pollution of local resources used by nearby communities or wildlife; creation of job and livelihood opportunities in the area of waste management, treatment and recycling; etc.

Furthermore, the project envisages to shorten/repair the gold supply chain, by organizing mining communities, formalizing negotiations and strengthening the position of the mining cooperative in negotiations with buyers. Ideally ending up with a mining cooperative that is part of a consistent and reliable purchasing agreement and supply chain. This will result in a mining sector that is more organized and formalized, easier to engage with, regulate and enforce. While doing so, this might reduce opportunities for tax seeking behaviour, and improving peace and security in ASGM communities. Ultimately making sustainable mining more economical and socially sustainable for small scale miners.

Finally, the project will contribute to the achievement of the Millennium Development Goals (MDGs) in particular MDG 4: Reduce Child Mortality and MDG 5: Improve Maternal Health[5] as improved management of Mercury and phase-out of the use of Mercury results in healthier mothers and healthier babies; as well as MDG 7: Ensure environmental sustainability, by reducing releases of Mercury leading to reduced environmental pollution.

1.1.1 Honduras and the Minamata Convention

The Government of Honduras has been a strong advocate for a globally, legally-binding instrument on Mercury and the Secretary of Energy, Natural Resources, Environment and Mines (SERNA), through its Center for the Study and Control of Pollutants (CESCCO), representing all National Chemicals Convention Focal Points, has been serving as a member of the Intergovernmental Negotiating Committee (INC) meetings.

The Government of Honduras signed the Minamata Convention on Mercury on 24 September 2014, at the occasion of a high-level special event entitled "*The Minamata Convention on Mercury: Towards its*

[5] Sepsis infection plays a large role in maternal health infections – about 30% seems related to hospital hygiene – including HCWM.

early entry into force and effective implementation" organized during the opening of the sixty-ninth session of the United Nations General Assembly[6].

1.2 Baseline Analysis

A National Assessment of the Use of Mercury in Honduras (2011) was a first comprehensive attempt to determine the use and application of Mercury in all relevant sectors in Honduras and was used to assess the current level of Mercury management in the country. The National Assessment did not provide a detailed national release inventory as per the methodology set-out in the UNEP "*Toolkit for Identification and Quantification of Mercury Releases – 2010*", and detailed data is still necessary for the establishment of a sound release inventory, nevertheless the assessment's findings were used to define national priority actions (short, medium and long-term) and prepare a risk management plan aiming at the gradual reduction of Mercury use for priority sectors.

The national assessment concluded that the main categories from which Mercury releases originate are:

1. Mercury releases and emissions from Artisanal and Small-scale Gold Mining (ASGM) due to unsound gold mining techniques.
2. Electricity generation from fossil fuel burning (~ 12.57 Kg/yr)
3. Unsound Mercury waste management and disposal practices of Mercury containing wastes (CFLs, thermometers, dental amalgam, relays, among else), which are disposed of in municipal landfills along with regular household waste.

Unfortunately, the national assessment, except in the case of electricity generation, did not contain any Hg release estimates.

Considering the similarity of issues involved, the Government of Honduras opted to address challenges related to Hg use in category 1 and 3 through a combined project approach.

1.2.1 The Situation of Artisanal and Small Scale Gold Mining in Honduras

ASGM is an important source of income in Honduras, especially in rural communities where alternative livelihoods are limited. ASGM commonly uses large amounts of Hg to process the ore, often in very unsafe conditions. In Honduras, the use of Hg for the extraction of gold in ASGM is currently not prohibited[7], nor is support provided to artisanal miners in adopting best practices to reduce Hg use or phase it out altogether. Despite the low levels of gold production achieved at individual level, the large numbers of miners involved makes that a national scale total production is significant. As the demand for gold continues to increase due to high gold prices, the use (and thus release) of Mercury continues to increase as it is the dominant and preferred method among miners (easy to use, inexpensive and freely available).

The project will work with the country's largest and highest priority ASGM community,, which is located in the Municipality of El Corpus, Choluteca. According to a 2012 report by INHGEOMIN (the national

[6] http://unep.org/newscentre/Default.aspx?DocumentID=2796&ArticleID=11001&l=en#sthash.ittYPeBF.dpuf

[7] However at the El Corpus site the President has indicated that Mercury use should be reduced. At this time there´s political willingness to support actions towards phasing out mercury in ASGM, particularly in this part of the country.

Ministry of Mines) the Municipality of Corpus has around 25,000 inhabitants, their main source of income being agriculture and mining, although many inhabitants are unemployed much of the year. Of the inhabitants a little more than 1,300 are directly employed in mining, while approximately 4,000 inhabitants are indirectly employed.

The mines at Corpus were first mined in 1585, however, mining was a relatively unpopular means of earning until gold prices began to inflate a decade ago. According to the INHGEOMIN Tegucigalpa office, the Corpus mining concession is 1684 hectares. Recent growth in mining (in terms of numbers of miners) is presented in table 1 below:

Table 1: El Corpus mining population growth [2006 – Present][8]

Year	# of miners
2006	176
2011	500
Present	1300+

A 2012 census of 647 people directly involved in mining and 297 people that were not directly involved in mining (including 9 women) found that 50% of miners were under 30 years of age, 7% were underage, and 40% also used agriculture to help sustain their family. It also showed a troubling income distribution (see table 2):

Table 2: Overview of income brackets of population involved in ASGM[9]

Monthly USD income	% of Corpus population
50-250	72%
250-500	12%
500-3000	13%
3000-6000	1%

The lowest income bracket is where the miners, rastra operators and ore movers reside. It is important to note that all of the reports and studies that produced the above data are quite approximate and often self-contradictory.

Despite information challenges, we can fairly confidently say that Corpus produces approximately 1 tonne per year of gold, and emits at least 5 tonnes of mercury in the process.

ASGM mining safety

Miners excavate tunnels with explosives, but absent or deficient mine safety and planning yields unacceptable risks and accidents in areas which are prone to earthquakes and landslides. A recent mine collapse in July 2014 at El Corpus resulted in 8 people killed and 3 rescued[10]. On 15 October 2014 another accident occurred at Macuelizo, Santa Bárbara, as a result of which one miner passed away[11]. These types of accidents, although sad, have focused national attention on such ASGM sites and are spurring the government to further regulate ASGM and support miners in forming cooperatives and obtaining legal status.

[8] *Source*: INHGEOMIN (2012). Assessment of the Artisanal Mining Activity in the San Juan River Basin at El Corpus. Choluteca, Honduras. C.A.

[9] *Source*: INHGEOMIN (2012). Assessment of the Artisanal Mining Activity in the San Juan River Basin at El Corpus. Choluteca, Honduras. C.A.

[10] http://www.bbc.com/news/world-latin-america-28241698

[11] http://www.laprensa.hn/inicio/758423-410/entierran-a-minero-que-muri%C3%B3-soterrado-en-macuelizo

In the case of El Corpus, after the July incident, the Government promised the miners legal title to the land on the condition that they would organize into cooperatives. Since then, most of the miners (>700) quickly formed a cooperative in order to take advantage of the offer, and the administrative council of the cooperative was voted on in late July. However water use and environmental licenses were still pending at the time of the development of the project's proposal. That said, the cooperative has been recognized by the government and is in the process of full legal formalization.

It is important to note that miners who abstained from the cooperative have done so out of ignorance and fear of a favor (afraid that the Government would take away "their" land to which they do not have a legal title) that is common among many ASGM communities (see also ANNEX I: Risk Analysis and Risk Mitigation Measures).

ASGM mining operations

Miners manually crush the ore to 4-5 inch pieces and sort out the high grade quartz veins by hand at the mine site, subsequently they pack the ore into 45 kg bags for transport to the processing centres ("rastras") that dot the landscape. There are about 70 operational rastras in Corpus at present, each processing 3-5 tonnes of ore per day and consuming 500g or more of mercury daily. Most of the rastras are located on the land of farmers who rent the processing facilities or charge the miners to process their ore for them. The Rastra mills are very primitive and inefficient, therefore it should be relatively easy to match or beat their gold recovery with chemical free and less energy intensive technologies. Of course miner training is critical to ensure the long term sustainability of cleaner processing at these sites.

Mercury emissions and gold production are difficult to estimate precisely in the informal context of ASGM in Honduras. Reliable numbers will only come from a rigorous and methodical survey as planned as part of this project.

However, reasonable estimates can be triangulated using an INHGEOMIN survey from 2012, raw data from a 2014 INHGEOMIN rastra survey, and interviews with miners and government officials from a 2014 field consultation.

In summary[12]:

- Approximately 70 rastras are operating at any given time, processing 90000 tons of ore per year for the 1300 people involved in mining. Over 400 of these people operate processing facilities, which are the prime emitting source of mercury in the community.
- Approximately 1 ton (~$40 million USD) of gold is produced by Corpus miners annually (Government most recent (reasonable) estimate, although likely an underestimate by up to 30%.
- Approximately 5 tons of Mercury is emitted by Corpus miners, although actually Mercury emissions could range from 2 (unlikely) to 10 (more likely) tons a year. The actual figure depends on the ratio of Mercury:Gold used. A 5:1 ratio would be consistent with the mineral processing practices used in el Corpus. Most Mercury is probably released in tailings, followed by releases

[12] Details of each survey and comments on their accuracy and contribution to the estimates quoted in this project document have been provided in a report prepared by Paul Cordy (September 2014).

to water. Perhaps only 5% is lost by evaporation. However, this 5% can cause the greatest harm to human health as it is often evaporated in open air or indoors without filtration, leading to immediate and long-term passive exposure. However, several lines of evidence suggest that 9 tons of Mercury emissions annually is possible. If true, then the project's potential reductions would be even greater.

- Operating costs consume at least 60% of the profits from gold produced; El Corpus spends 0.25 million US$ on Mercury and 1.8 million US$ on Diesel annually. This would suggest that economic barriers to alternative technologies might be low if necessary financing can be accessed to obtain cleaner equipment.

El Corpus ASGM rastra costs and profits

Based on the assumptions/calculations from various data sources, yearly costs for Mercury amount to 250,000 US$[13] for El Corpus (all rastras combined).

Rastras cost about 10,000 US$ to build and are also expensive to run. El Corpus spends approximately 420,000 US$ in maintaining the rastras annualy (resurfacing the mill with new rocks), and about 1.8 million US$ in diesel to turn the mills using old truck engines (which must be maintained and replaced every couple of years at unknown costs). In Table 3 below, are the average approximate costs in operating/maintaining a rastra summarized.

Table 3: Average annual throughput and costs of a single Corpus Rastra in 2014 [INHGEOMIN, 2012]

Average annual throughput and costs	
ore (tonnes)	**1,320**
Au (kg)	**20**
Hg (kg)	**132**
Hg cost ($)	**3,500**
Au ($)	**Up to 800,000**[14]
Diesel ($)	**25,000**
Maintenance ($)	**6,000**

As there is little evidence of long term tailing storage anywhere in the community, it is assumed that Mercury contaminated tailings are dumped into rivers (approximately 45,000 tons to 90,000 tons of tailing a year). Let alone the environmental impact of dumped tailings, the high gold values in these tails (~10 gramme/tonne) means that significant potential income is being wasted continuously.

In 2012, INHGEOMIN estimated the value of 2012 production to be approximately 150,000 US$ per year per rastra. Net profits, however, are around 60,000 US$ per rastra per year (based on miners' estimates of operating costs taking about 60% of their profit.)

32% of the gold is sold to local buyers, while 21% is sold to national buyers that come to town to buy from miners.

Project target: The project aims to reduce Mercury use (or better to say "loss") in the El Corpus by 20%. This would imply a reduction of 1 ton per year.

[13] 27.7 US$ per Kg of Mercury

[14] Gold price: 40,000 US$/kg

1.2.2 The Situation of Mercury Containing Healthcare Waste

In Honduras, there are currently no solutions available to manage, storage or dispose of Mercury containing waste in an Environmentally Sound Manner (ESM)[15]. The majority of Mercury containing products is discarded along with regular municipal waste and ends up in landfills or disposal sites not fit to store Mercury wastes, or is discarded through the sewerage system (e.g. dental amalgam). Ultimately this Mercury is being released to the environment.

The "*National Assessment of the Use of Mercury in Honduras*" conducted in 2011 was the first comprehensive attempt to determine the use and application of Mercury in all relevant sectors in Honduras and was used to assess the current level of Mercury management in the country. Although the National Assessment did not provide a detailed national release inventory as per the methodology set-out in the UNEP "*Toolkit for Identification and Quantification of Mercury Releases – 2010*", the national assessment concluded that unsound Mercury waste management and disposal practices of Mercury containing wastes (CFLs, thermometers, dental amalgam, relays, among else), was the third most important source for Mercury releases in the country (after ASGM and electricity generation).

In terms of atmospheric releases of Mercury, Healthcare facilities (HCFs) are considered a significant source. Mercury spills and the breakage/disposal of Mercury-containing devices, such as thermometers and sphygmomanometers, are the principal ways by which Mercury from health facilities enters the environment. Mercury is also used in the healthcare sector in the form of dental amalgam, which is often discharged into the environment, when scrap amalgam and amalgam waste are flushed away through the sewerage system.

The use of Mercury-containing devices in healthcare is widespread, mostly due to limited availability of low cost Mercury-free devices as well as unfamiliarity with their use. With healthcare coverage increasing (also applying to dentist services) and a population that is becoming more effluent, the use of Mercury containing products and the production of Hg containing wastes is growing further. It is expected that without the proposed project, the Mercury waste stream will continue to grow.

However, alternatives to most Mercury-containing products are generally available at reasonable prices. Eliminating products containing Mercury or decreasing Mercury content in products results in a reduction of atmospheric emissions of Mercury from waste streams, while proper handling and recycling will also reduce emissions.

Baseline: In 2012 a USAID/CCAD/USEPA/SERNA/MoH/INC project entitled "*Pilot project on the reduction of Mercury sources*", supported the San Felipe General Hospital and National Heart Institute of Tegucigalpa to replace amalgam by resin and Mercury-based thermometers by digital thermometers. The project supported *Mercury Inventories*, developed a *Manual on Mercury Spills* and a *Manual on the Handling of Materials and Equipment containing Mercury*, a *Procurement Plan for Mercury-free Products* and a *Plan for Staff Training and Education*. The project also established temporary storage spaces of Mercury-containing wastes at the two institutions.

Although the project was quite successful and created awareness and capacity at these HCFs as well as some experience at national level, the experiences were not replicated beyond the two pilot facilities. Most likely this was due to the fact that at national level, no regulatory measures were taken to develop

[15] Dental mercury should also be considered a source of air borne emissions from cremation of dental amalgam.

and adopt phase-out plans or degree/standard that would encourage HCFs to start phasing out Mercury-added products. Secondly, there were no long-term solutions put in place for Mercury waste storage, handling and ultimate disposal, resulting in the fact that HCFs ended with Mercury waste at the facilities for an indefinite period of time.

Proposed Alternative: The Government of Honduras signed the Minamata Convention on Mercury on 24 September 2014. When the Minamata Convention has been ratified by the Government of Honduras, and the Convention enters into force (90 days after it has been ratified by 50 nations), the Convention will have to be domesticated.

In accordance with the Convention, Mercury-added products, such as thermometers and sphygmomanometers, will have to be phased out by 2020 in accordance with Article 4 – paragraph 1. From that date onwards, the manufacture, import and export of Mercury-added products will no longer be allowed. The Convention also expects countries to introduce a minimum of 2 measures with the objective to phase down the use of dental amalgam, in accordance with article 4 – paragraph 3.

To support the Government of Honduras in meeting its future obligation under the Minamata Convention, the project will provide the following support to the health sector:

- Improve capacity at institutional level to assess and monitor Hg releases, Hg levels in populations, and generate data and scientific information in order to take action on priority issues.
- Strengthen the capacity of the National Commission for SMC to meet future commitments under the Minamata Convention.
- Stengthen the policy and regulatory framework to reduce reliance on Mercury, and Mercury added-products and improve the environmental sound management of Mercury.
- Reduce Hg releases from priority Healthcare Facilities through the adoption of BAT/BEP practices and the phase-out of Mercury containing devices.
- Establish interim financially sustainable storage options for Hg-containing wastes and identify long-term storage/disposal options.

In specific the project will work with two (2) HCFs, to demonstrate the phase-out and phase-down of Mercury added products. The project will also initiate replication activities in two (2) additional hospitals during the course of project implementation.

The two project hospitals, which have been selected in close consultation with the Ministry of Health and SERNA, are *the University Teaching Hospital of the National Autonomous University of Honduras* (HEU/UNAH) and the *Mario Catarino Rivas Hospital* in San Pedro Sula, Cortés (HMCR). The hospitals count 1004 and 541 beds respectively. The replication hospitals have not yet been selected.

Although no detailed data is available on the quantity of Mercury containing products used by these facilities, both make use of Mercury containing thermometers, sphygmomanometers, lab reagents, vaccines and dental amalgam.

In order to establish a baseline for the project, Mercury releases from the breakage of Mercury containing medical devices (thermometers and sphygmomanometers) were calculated using an average release factor of 2.8 g/bed/year, based on data from seven countries conducted as part of the

UNDP/WHO/GEF Global Medical Waste Project[16].
Mercury releases from the use of dental amalgam were estimated using UNEP's Simplified Toolkit for Identification and Quantification of Mercury Releases (Level 1)[17] based on population size.

The results of the estimates have been presented in table 4 below.

Table 4. Project Mercury baseline

Mercury – National Level		
Mercury used for ASGM [kg/yr][18]	20,000[19]	
Mercury containing medical devices [kg/yr]	16.9[20]	
Mercury in Dental Amalgam [kg/yr]	412[21]	
ASGM El Corpus Community		
Mercury used for ASGM [kg/yr]	5,000	
HCF Level		
	Facility 1: **University Teaching Hospital of the National Autonomous University of Honduras (HEU/UNAH)**	**Facility 2:** **Mario Catarino Rivas Hospital in San Pedro Sula, Cortés (HMCR)**
No. of beds	1004	541
Mercury releases from medical devices* [kg/yr]	2.8	1.5
Mercury releases from dental amalgam [kg/yr]	6.8[22]	3.7[23]
Project Baseline: Mercury: 5,014 kg/yr		

[16] "Baseline Mercury Data from the Health-care Sector," Annex 3B of "Demonstrating and Promoting Best Techniques and Practices for Reducing Health-care Waste to Avoid Environmental Releases of Dioxins and Mercury," UNDP Project Document, 2007.

[17] Available at: http://www.unep.org/chemicalsandwaste/Mercury/MercuryPublications/GuidanceTrainingMaterialToolkits/MercuryToolkit/tabid/4566/language/en-US/Default.aspx

[18] Based on the assumption that the $40 million annual gold revenue estimated for Corpus equal approximately 1 ton of gold, it can be assumed that more than 5 tonnes of Mercury is being released through its extraction (Mercury:Gold ratio is generally more than 5:1 for the kind of processing applied in El Corpus).

[19] Rough estimate, assuming El Corpus represents 25% of the releases in the Honduras

[20] Population in Honduras: 8,598,561. 0.7 hospital beds per 1,000 inhabitants = 6,018 hospital beds. Assuming each bed releases 2.8 grams of Mercury a year, 6,018 hospital beds release 16.8 kg/yr. Population figures taken from the The World Fact Book (last update June 22, 2014), available at: https://www.cia.gov/library/publications/the-world-factbook/geos/ho.html

[21] UNEP Level 1 Toolkit for Identification and quantification of Mercury Releases, available at: http://www.unep.org/chemicalsandwaste/Mercury/MercuryPublications/GuidanceTrainingMaterialToolkits/MercuryToolkit/tabid/4566/language/en-US/Default.aspx

[22] Figures estimated based on 412 kg Mercury in dental amalgam for the country's entire population (8,045,990 inhabitants), with 1,337 inhabitants per bed, assumed that hospitals take care of 10% of the dental practices in the country.

[23] Idem

1.2.3 General Environmental and Health legislation

Table 5 below provides an overview of the legislation in place which pertains to the use of Mercury.

Table 5. Overview of regulatory instruments pertaining to the use of Mercury

Title Regulatory Instrument	Description	Remarks
General Environmental Law and its general regulation (1993)	States the obligation to regulate toxic substances with a life cycle approach in coordinance with the Ministry of Health.	A specific regulation for industrial chemical products was proposed in 2008 with USAID funding which includes register of chemicals, hazardous waste producers and standarized classification of chemicals, labelling, among other issues. The register of chemicals pose an important challenge, however, it has been considered that a gradual approach toward registration could be adopted, starting with prioritized chemicals (e.g. cyanide or mercury).
General Mining Law and its regulation	Previously the mining regulations of 1998 did not mention ASGM. The new Mining Law states a classification of artisanal and small scale metallic mining. Artisanal mining will be considered when pleasure ore is exploited upto 10 m^3 /day/person or 30 m^3 /day/group of 30 people. Small scale mining upto 200 tonnes of ore a day or 50 m^3 of pleasure gold/day.	Approved in 2013
"National regulation for the Management of Hazardous Wastes from Healthcare Facilities (No.07 Agreement, February 28, 2008)	Each HCF should have a Healthcare Waste Management Programme (HCWMP) in place as per the "National regulation for the Management of Hazardous Wastes from Healthcare Facilities". However this regulation lacks provisions related to Hg containing products, and thus facility specific programmes do not address the ESM of Hg containing wastes	Currently under revision by the Ministry of Health, to include Hg management as well as spills management and temporary storage.
Law on "Incandescent Bulbs Replacement with CFLs"	The law promotes the use of energy efficient light sources (CFLs), which is resulting in an increase in the generation of Hg containing discarded light sources.	This law lacks an ESM approach and does not contain any provisions with respect to the waste management, storage and disposal on Mercury containing wastes/products nor any provisions related to the import/use of low-Hg content lamps.
"National Policy for the Environmentally Sound Management of Chemicals" (March 2012)	The National Policy is based on a Life Cycle Management (LCM) approach and includes guidelines for waste management. In order to facilitate implementation of the policy, the SAICM project also supported the	Approved in 2013

	developed of a SAICM Implementation Plan, which includes specific outcomes related to waste management, including prioritized activities for ESM of Mercury wastes and Mercury containing products.	
Executive Decree for the Creation of the National Commission on the Environmentally Sound Management of Chemicals (CNG)	Among else, the CNG is expected to address national issues related to Mercury under the permanent committee of industrial chemical products.	Approved in 2013
National Policy for the Integrated Management of Solid Waste	A National Policy for the Integrated Management of Solid Waste is being developed by the Secretary of Natural Resources and Environment, while a regulation on the Integrated Management of Solid Waste was adopted in 2010.	Under development
National Plan on Mercury (2011)	A National Plan on Mercury was developed but requires updating.	Requires updating in line with the requirements of the Minamata Convention and approval from high level decision makers.
Health code		
National Standard on Health Surveillance (2014).	Protocols and guidelines for sanitary surveillance of mercury is required.	Approved in 2014
General Regulation of Environmental Health		
Regulation for the Sanitary Control Facilities & Products of Health Interest	Standards/ thresholds are required for mercury containing products.	

1.3 Baseline Project

National baseline projects which have been/are being supported by the Government of Honduras, bi-lateral donors, private sector partners and NGOs, which are associated with creating the enabling environment for reducing Mercury use and its releases and/or improving the sound management of chemicals and wastes, are summarized in table 6 below. The table also summarizes baseline projects and their activities which provide co-financing to the project, and which have been certified by co-financing commitment letters.

Finally, the table also presents the Incremental activities financed by the GEF bringing Hg reduction and global benefits, which are discussed in more detail in section 2.4.4.

In section 2.4.7 the coordination with other regional and global initiatives (those not considered baseline projects for this project) have been summarized. These initiatives are considered to provide important insights, lessons-learned and experiences that will improve the implementation of this project.

Table 6: Baseline Projects and Incremental Cost Reasoning

GEF Outcome/Atlas Activity	Baseline projects	Baseline project activities which provide co-financing (certified by co-financing commitment letters)	Co-financing (USD)	Incremental activities financed by the GEF bringing Hg reduction and global benefits	GEF (USD)
Component 1: Strengthen institutional capacities to achieve the ESM of Mercury					
Outcome 1.1: Improved capacity at institutional level to assess and monitor Hg releases, Hg levels in populations, and generate data and scientific information in order to take action on priority issues.	**CESCCO/SERNA**: Evaluation of health status and exposure to metals and viral agents in children and adolescents who work or worked in the Tegucigalpa city dump and a reference group. **UNITAR/CCAD/Government of Spain**: Development of a PRTR system with the aim to systematically collect information on pollutant releases (including Hg) on a sustained basis. **CESCCO/SERNA**: Existing laboratory disposes of equipment that when modified with support of the GEF project, would be able to undertake Mercury analysis in environmental media and biological samples. **National Assessment of the Use of Mercury in Honduras (2011):** First attempt to determine the use and application of Mercury in all relevant sectors in Honduras, priorities identified constitute the departure point of the project. **UNITAR:** Strengthening national governance for SAICM implementation: updating the national chemicals management profile, developing a national SAICM capacity assessment, and holding a national SAICM forum in Honduras. **UNDP/GEF**: Strenghening National Management Capacities to reduce releases of POPs in Honduras	**CESCCO (2015 – 2018):** Monitoring of priority chemicals including Mercury and implementation of the Minamata Convention. **DEI (2015-2018):** Monitoring of prioritized chemicals including Mercury and Mercury added products at import level with harmonized classification system for commodities.	**250,000** **TBD***	▪ Develop National Mercury Release Inventory. ▪ Develop analytical capacity of health & Env. Institutions to monitor Hg releases. ▪ Conduct Hg population risk assessment(s).	**129,950**
Outcome 1.2: Capacity of the National Commission for SMC (CNG) strengthened to meet future commitments under the Global Hg treaty.	**SAICM QSP TF UNDP-UNEP Partnership Initiative:** As part of the project, the National Commission on the Environmentally Sound Management of Chemicals (CNG) was created in 2013 as per a Draft Decree.	**CESCCO (2015 – 2018):** Monitoring of priority chemicals including Mercury and implementation of the Minamata Convention.	**250,000**	▪ Train CNG members on the Minamata Convention's requirements.	**24,300**
		Subtotal Baseline	**500,000**	**Subtotal GEF**	**154,250**
Component 2: Strengthen the regulatory and policy framework to support a reduction in the use of Hg and allow for ESM of mercury containing products and their wastes.					

Outcome 2: Strengthened policy and regulatory framework to reduce reliance on Mercury, and Mercury added-products and improve the environmental sound management of Mercury.	**SAICM QSP TF UNDP-UNEP Partnership Initiative**: The project developed a *National Policy for the Environmentally Sound Management of Chemicals* and a *SAICM Implementation Plan* (including specific outcomes related to waste management and activities for ESM of Hg wastes and Hg containing products); **CESCCO/SERNA**: Development of a National Policy for ISWM on general waste management, which will also contribute to the ceation of an enabling environment for the ESM of Hg. **SESAL:** In August 2014, the WHO/PAHO Handbook for developing waste management plans for healthcare facilities was adopted. **INHGEOMIN**: Review of general mining law in order to make revisions to sections and provisions that are relevant to ASGM as well as the use of Hg in this sector. **UNDP/GEF**: Strenghening National Management Capacities to reduce releases of POPs in Honduras	**World Bank/INHGEOMIN:** "Strengthening of INHGEOMIN for the implementation of the Act and its Regulations". Project aims to i) develop manuals for mine closure, ii) develop operating protocols for cooperative organizations, as well as iii) develop policy and improve enforcement. **International Cooperation Agency of Chile/INHGEOMIN:** "Strengthening of Institutional Capacity for the Development of the Mining Sector in Honduras". Project supports the Ministry of Energy, Natural Resources, Environment and Mining (SERNA). **INHGEOMIN:** Monitoring of mining activities nationwide. **Ministry of Health**: Currently revising the Regulations for the Management of Hazardous Waste Generated in Health Facilities (No. 07 Agreement, February 28, 2008) which includes the management of mercury-contaminated wastes.	**250,000** **137,582** **1,000,000** **TBD***	▪ National Plan for the Environmentally Sound Management of Mercury Developed. ▪ Regulatory instruments to reduce the use of Mercury and Mercury added products drafted. ▪ Proposal for the harmonization of classification codes for Mercury containing products developed. ▪ Standards and technical guidelines for the safe storage, packaging, transportation, data management, inspection and monitoring of Mercury containing wastes developed.	**106,900**
			Subtotal Baseline	**1,387,582**	**Subtotal GEF** **106,900**
Component 3: Reduce mercury releases from priority sectors (artisanal & small scale gold mining and healthcare) to protect human health and the environment					
Outcome 3.1 Reduced Hg releases from priority mining communities as a result of the adoption of BAT/BEP practices and the phase-out of unsound mining practices.	**CDN/FTMG (2002 – 2014):** "*Honduras Opals*" Mining project in Lempira region that aims to create jobs in opal mining and refining and improve working and living conditions of the miners. The project has been working with three opal mining communities to establish cooperatives. The project is supported by the Centro de Negocios Hondureño Alemán, Fair Trade Minerals and Gems (FTMG) as well as many other partners[24]. **Cobra Oro** (private company): Built a mineral processing plant near Choluteca that intends to buy ore from miners and rent milling services to miners that don't want simply to sell their	**INHGEOMIN:** Monitoring of mining activities nationwide.	**1,647,272**	▪ In-depth Hg baseline assessment in 1 priority ASGM community completed (incl. socio-economic analysis). ▪ BAT/BEP introduced to 1 ASGM community to reduce Hg releases and adopt socially and env. sound mining practices. ▪ Capacity of 1 mining	**558,150**

[24] http://www.fairtrademinerals.de/index.php/projekte/honduras-opal/106-honduras-opal.html

	ore. **GIZ/Geo-Nova/Geo-Expert/CDN/ INHGEOMIN/UNAH/ALCOMINH (2014 – 2016):** "*Skills development to create an enabling environment for the environmentally friendly extraction of precious metals*". The project aims to transmit knowledge and technology related to research methods and identification of precious materials, through the provision of tools and equipment for laboratory analysis and research methodologies. **BRI/U.S. DoS project:** "*Development and implementation of artisanal and small-scale gold miner training resources for reducing mercury use and release in South America*". The Biodiveristy Research Institute (BRI) Tropical Program is working with multiple partners and governmental agencies, mining engineers, researchers from the University of British Columbia (Canada) and the Universidad de Colombia – Medellin, and other NGOs to develop a series of training modules on appropriate and more efficient mining technologies for small-scale miners that will be provided and used by the project in Honduras.			community built to improve the gold supply chain. ▪ Replication process of pilot experience in three (3) additional geographical priority areas launched.	
Outcome 3.2 Reduced Hg releases from priority Healthcare Facilities through the adoption of BAT/BEP practices and the phase-out of Mercury containing devices.	**Ministry of Health**: Activities have been launched by the public sector (Ministry of Health) to phase down the use of dental amalgam and replace its use with composite materials. **USAID/CCAD/USEPA/SERNA/MoH/INC:** "*Pilot project on the reduction of Mercury sources*". San Felipe General Hospital and National Heart Institute of Tegucigalpa replaced amalgam by resin and Mercury-based thermometers by digital thermometers.	**UNAH/HEU**: Contribution in terms of staff time allocation, to i) participate in training; ii) conduct the staff preference study for Mercury-free alterantive; iii) Allocation of a interim storage space/room for Mercury containing wastes; iv) Adapt procurement practices and protocol to support the phase-out/phase-down of Mercury-added products. **HMCR**: Contribution in terms of staff time allocation, to i) participate in training; ii) conduct the staff preference study for Mercury-free alterantive; iii) Allocation of a interim storage space/room for Mercury containing wastes; iv) Adapt procurement practices and protocol to support the phase-out/phase-down of Mercury-added products.	**TBD*** **TBD***	▪ In-depth Hg baseline assessment completed for 2 model Healthcare Facilities (HCFs). ▪ Facilities' HCWM programmes updated to include Hg phase-out and management. ▪ Facility staff trained on BAT/BEP practices for Hg management. ▪ Comparative study on Hg-free devices concluded and procurement processes adapted based on staff preferences. ▪ Replication process of pilot experiences launched in 2 additional HCFs.	**143,200**
			Subtotal Baseline	**1,647,272**	**Subtotal GEF**	**701,350**
Component 4: Strengthen technical capacity and infrastructure for the interim storage of Mercury containing wastes						

Outcome 4: Interim financially sustainable storage options for Hg-containing wastes established and long-term storage/disposal options identified.	**SAICM QSP TF UNDP-UNEP Partnership Initiative**: The project developed: National guidelines on the ESM of hazardous wastes (Hg, POPs and PCBs); National regulation for the remediation of contaminated sites. **UNDP/GEF**: Strenghening National Management Capacities to reduce releases of POPs in Honduras	**UNAH**: Construction of a centralized temporary storage facility for reagents waste which is expected to be adapted to also allow for the storage of Mercury containing wastes. **HES (2015-2018):** "*Expansion of Services and Improvement of Facilities*". Private sector company specialized in the management of hazardous waste located in San Pedro Sula, Cortes, is implementing activities that support the management of mercury, mercury-added products and residues. The company is also expecting to do an investment of 75,000 US$ in the same field over the period 2015 – 2018. **RECYCLE (2015 – 2018 & 2015 – 2021):** "*Private Landfill Sula Valley*". Recycle is a private sector company, specialized in the management of hazardous waste. Recycle will invest in treatment technologies for waste, including chemical and Mercury containing wastes.	**TBD*** **85,000** **2,300,000**	▪ Assessment of infrastructure, capacity and cost recovery approaches for Hg waste storage conducted. ▪ Technical capacity of key actors for various Hg LCM stages developed and CRAs put in place. ▪ Interim storage spaces established for healthcare Hg waste. ▪ Pilot demonstration of ESM and interim storage of other Hg-containing wastes initiated at national level.	**99,500**
		Subtotal Baseline	**2,385,000**	**Subtotal GEF**	**99,500**
Component 5: Monitoring, learning, adaptive feedback, outreach, and evaluation					
Outcome 5 Project results sustained and replicated	Not relevant under the baseline project	**CESCCO (2015 – 2018):** Monitoring of priority chemicals including Mercury and implementation of the Minamata Convention.	**125,000**	▪ Mid-term and terminal evaluation conducted by independent national and international evaluation experts	**120,000**
		Subtotal Baseline	**125,000**	**Subtotal GEF**	**120,000**
Project Management Costs					
Project Management Costs	Not relevant under the baseline project	**CESCCO (2015 – 2018):** Monitoring of priority chemicals including Mercury and implementation of the Minamata Convention. **UNDP (2015 – 2018)**: Services to be provided by the Honduras UNDP Country Office	**125,000** **50,000**		**118,000**

	Subtotal Baseline	**175,000**	**Subtotal GEF**	**118,000**
	TOTAL BASELINE	**6,219,854**	**TOTAL GEF**	**1,300,000**

* Co-financing indicated with an "*", was at the time of project submission still pending. However considering sufficient co-financing was obtained as per approval of the PIF (3,960,000 US$), it was decided to go ahead with project submission. That said, the project development team is confident that co-financing indicated with an "*" will be mobilized as additional co-financing prior to the project's start or otherwise leveraged during project implementation.

Besides this GEF project, in Honduras three (3) national GEF funded POPs projects have been implemented or are under implementation in support of the Stockholm Convention.

Table 7: GEF projects on POPs launched or implemented in Honduras

GEF ID	Project Title	Agency	Type of Project	GEF Grant	Co-financing	Status
2323	Initial Assistance to Enable Honduras to Fulfill Its Obligations Under the Stockholm Convention	UNDP	EA	450,000	205,000	Completed
3806	Strengthening National Management Capacities and Reducing Releases of POPs in Honduras	UNDP	FP	2,650,000	6,630,000	Under Implementation
5162	Enabling Activities to Review and Update the National Implementation Plan for the Stockholm Convention on Persistent Organic Pollutants (POPs)	UNIDO	EA	189,420	260,000	Under implementation

In addition to national projects, Honduras is participating in the following two (2) regional projects:

Table 8. GEF regional projects on POPs with Honduras as participating country

GEF ID	Project Title	Agency	Type of Project	GEF Grant	Co-financing	Status
3778	(Global) Supporting the Implementation of the Global Monitoring Plan of POPs in Latin America and Caribbean States (GRULAC)	UNEP	MSP	890,000	1,065,000	Under Implementation
5554	(Regional) Strengthening of National Initiatives and Enhancement of Regional Cooperation for the Environmentally Sound Management of POPs in Waste of Electronic or Electrical Equipment (WEEE) in Latin-American Countries	UNIDO	FSP	9,500,000	35,000,000	Council Approved

1.4 Barrier Analysis

This section describes the threats, fundamental causes and barriers for the environmentally sound management of Mercury in the ASGM sector as well as the healthcare sector in Honduras.

In Honduras, several challenges at national and local level currently prevent the Environmental Sound Management (ESM) of Hg in these two sectors:

Regulatory and Policy Barriers:

- Lack of legislation enabling the phase-out of Hg (ASGM) and use of mercury-free or low-content Hg products. Aspects related to the ESM of Hg and Hg containing products need to be further incorporated through the development of regulations, standards and guidelines. While capacity (monitoring, technical, financial, etc.) needs to be enhanced to enforce the country's regulatory SMC framework pertaining to Hg.
- Absence of plans/strategies on ESM of products and wastes containing Mercury. The development and adoption of such plans/strategies is urgently needed for priority sectors (medical devices, dental amalgam, CFLs, etc.). E.g each HCF should have a Healthcare Waste

Management Programme (HCWMP) in place as per the "National regulation for the Management of Hazardous Wastes from Healthcare Facilities". However this regulation lacks provisions related to Hg containing products, and thus facility specific programmes do not address the ESM of Hg containing wastes. Similarly, the law on "Incandescent Bulbs Replacement with CFLs" promotes the use of energy efficient light sources (CFLs), which is resulting in an increase in the generation of Hg containing discarded light sources. Unfortunately, the law lacks an ESM approach and does not contain any provisions with respect to the waste management, storage and disposal on Mercury containing wastes/products nor any provisions related to the import/use of low-Hg content lamps.

- Lack of practical guidance for artisanals and small scale miners (e.g. manuel, training videos on BAT/BEP) to meet the requirements of the new mining law.

Economic Barriers:

- Limited availability of low Mercury alternatives. Import restrictions for max. Hg content in consumer products would help ensure that products with (a high) Hg content face import restrictions, encouraging distributors and users to make the shift to cost-effective alternatives.
- Absence of cost recovery mechanisms for ESM of Hg containing wastes. This results in too limited financial resources to cover costs for the sound management, collection and storage of mercury wastes. Absence of regulations (and their enforcement) mandating ESM of Hg containing wastes, and the small scale of the country influences the quantities of mercury containing wastes being collected and in turn impacts the scale of activities and thus cost-effectiveness.

Awareness and Training Barriers:

- Lack of reliable data on imports of Hg and Hg containing devices. Data available from various sources is often conflicting, and its quality insufficient to establish trends and release estimates.
- Low level of awareness on the ESM of Hg and Hg containing products as well as associated health hazards among populations at risk. Resulting in a low level of protection measures and waste segregation and serious health risks being faced by anyone in close contact with Hg containing products and wastes (mining communities, HC workers, dentists, waste handlers, etc.).
- Absence of knowledge on adopting best practices in priority sectors. No support is being provided to artisanal miners in adapting best practices, severely jeopardizing their health but also the environment.

Technical Barriers:

- Lack of storage and disposal options for Mercury containing wastes . The majority of mercury containing products is discarded along with regular municipal waste and ends up in landfills or disposal sites not fit to store Mercury wastes, or is discarded through the sewerage system (e.g. dental amalgam).

1.5 Stakeholder Analysis

In this section, the roles of various project stakeholders in the project's priority sectors are presented as well as the roles and responsibilities that key project stakeholders will assume during the project's implementation. For details please refer to table 9.

Table 9. Overview of national stakeholders

Name of Entity (type)	Key function and mandate relevant to key project sectors	Relevant responsibilities during the implementation of the project (outputs)
SERNA Including it Center for the Study and Control of Pollutants (CESCCO-Department of Chemicals Management (DGPQ)); Executive Mining Direction (**INHGEOMIN**)	National environmental authority with competence in waste and chemical management, and regulation of mining activities.	Project National Executing Agency. ▪ Will be involved in the implementation and monitoring of all project activities.
Ministry of Health: Including its Regulatory Secretariat; Department for Hospital Management and Health Regulations; Secretariat for Integrated Networks and Health Services; Medicines, Supplies and Equipment Logistics Unit (Procurement); Unit for Health Surveillance; National Laboratory Network.	Responsible for regulations and governance related to public health. In charge of public health centers. Responsible authority for health surveillance and mercury waste management in health centers.	▪ Development of regulatory instruments to reduce the use of Mercury-added products in health care (2.2) ▪ Development of a national plan for the ESM of Mercury (2.1) ▪ Reduction of Hg releases from HCFs (3.2) ▪ Dissemination of Lessons-learned and experiences at national level (5.2). ▪ Development of interim storage spaces of Mercury containing HCW (4.1.3)
Ministry of Industry and Commerce (MSIC)	Leads the international and national commercial policy in Honduras. Competent authority for the World Trade Organization.	▪ Development of proposal for the harmonization of classification codes for Mercury containing products (2.3)
Secretary of Finances and its Directorate for Revenue (DEI) (Customs)	Competent authority for the World Customs Organization.	▪ Increased monitoring capacity of customs and revenue authorities(1.14). ▪ Development of proposal for the harmonization of classification codes for Mercury containing products (2.3)
University Teaching Hospital of the National Autonomous University of Honduras (HEU/UNAH)	Project facility and responsible for the implementation of hazardous waste management plans as defined under their administrative procedures.	▪ Adoption of BAT/BEP practices for Mercury management and phase-out of Mercury containing devices (3.2.) ▪ Establishment of interim storage space for Mercury containing waste (4.3)
Mario Catarino Rivas Hospital in San Pedro Sula, Cortés (HMCR)	Project facility and responsible for the implementation of hazardous waste management plans as	▪ Adoption of BAT/BEP practices for Mercury management and phase-out of Mercury containing devices

	defined under their administrative procedures.	(3.2.) ▪ Establishment of interim storage space for Mercury containing waste (4.3)
Municipality of El Corpus, Choluteca	Responsible for assuring that mining activities are carried out in an ecological responsible manner within their jurisdiction.	▪ Support the reduction of Mercury releases from the mining community through introduction of BAT/BEP (3.1.1 – 3.1.3)
SESAL	Ensuring surveillance of water quality for human consumption. Ensuring surveillance of mercury added products in health care. Responsible for assuring that HCFs implement hazardous waste management plans.	• Development of regulatory instruments to reduce the use of Mercury-added products in health care (2.2)
Private Sector (e.g. Honduras Environmental Services; RECYCLE; Cobra Oro, Centro de Negocios Hondureño Alemán (CDN)[25], among others)	Involved in various important aspects of the proposed project: Mercury waste producers; Services providers involved in waste collection, disposal and treatment; Distributors and retailers of Mercury containing consumer products and Mercury-free devices; Laboratories for testing and certification, among else.	▪ Support the introduction of sustainable storage and disposal options for Mercury containing wastes (4.1; 4.3; 4.4) ▪ Renting Mercury-free milling services to miners (3.2.1) ▪ Build capacity of ASGM communities to improve the gold supply chain (3.1.3)
NGOs	The project aims to forge lasting partnerships with important social actors for awareness raising and social inclusion of vulnerable groups, in particular NGOs working with artisanal miners and ASGM communities.	▪ Support the reduction of Mercury releases from mining communities through introduction of BAT/BEP (3.1.1 – 3.1.4)
San Juan Arriba Artisanal Miners Cooperative	The proposed project anticipates working with a community of about 5,000 artisanal gold miners located in the Municipality of El Corpus, Choluteca, who will be the main beneficiaries of the ASGM component of the project.	▪ Support the reduction of Mercury releases from mining communities through introduction of BAT/BEP (3.1.1 – 3.1.4)
Basel Convention Coordination Center (BCCC) for Latin America and the Caribbean (LAC), Central American Commission on Environment and Development (CCAD) and Pan-American Health Organization (PAHO).	These organizations are extensively involved in awareness raising on risks related to mercury exposure and mercury waste segregation and storage campaigns and will be involved in the project's implementation for the dissemination of project information and results at national, regional and international level.	▪ Dissemination of Lessons-learned and experiences at regional and global level (5.2).

[25] www.centrodenegocioshonduras.com

II. STRATEGY

2.1 Project strategy related to ASGM

The project's strategy related to ASGM is based on three (3) broad goals:

1. **Repair inefficient gold supply chain and increase formal cooperative and tax revenues**.
2. **Leverage new formal revenues to finance technical and training services.**
3. **Regionalize the supply chain and link producers to markets for green(er) or more ethical gold (increase awareness on Green Gold produced in Honduras).**

1. Repair inefficient gold supply chain.

By more directly connecting producers to refiners, or short circuit the gold supply chain in other ways, profits could support miner development rather than end up with the middle-man (gold buyers, plant operators and other middle-man) who often receives much of the profit from gold. Middlemen often have cash on hand to buy large quantities of gold and pay cash. Lower gold purchase prices are often accepted by miners in exchange for immediate supply of cash. Another advantages of shortening the gold supply chain could result in a reduction of opportunities for tax embezzlement and tax seeking behaviour.

A possibility would be work with an organization/institution/cooperative/legal lender that can offer a better value for gold than the middlemen can while offering the same reliability of purchase (or offer the same value – but better services). Preferably, the same entity would also be able to provide loans and technical assistance to miners and mining cooperatives.

Other ways to shorten the supply chain would be to i) connect the middle-man to a (future) regional refinery to increase profits, ii) form regional multilateral agreements to facilitate export to global refineries, or iii) establish new refineries in the country/region, to shorten the gold supply chain even further.

Honduran gold producers could also sell chemical free gold to an ethical gold investment fund. Such a fund may not be able to offer a 15% premium like ARM/Fairmined offered OroVerde, but there is potentially higher volume. An ethical green gold fund could potentially expect larger demand and increase miners' income by short-circuiting the middleman layers.

2. Leverage new formal revenues to finance technical and training services.

Miners, cooperatives and mills require (regular) training on how to improve their practices. However establishing sustainable continuous training opportunities (beyond the duration of projects) depends heavily on the availability of funding which is necessary to finance training facilities to pay for trainers/facilitators, equipment, facilities and management. Unfortunately, miners tend not to have the disposable income to spend on training, engineering services or new equipment, however the processing centers/rastas often do – and those are also often the main sources of Mercury pollution.

In the long run, training centers have to become self-funding or they will cease to operate. One way of ensuring continuity would be to tax processing centers. They are easier to locate and have the capital to make changes to their processes. Another way to ensure continuity would be to create a regional training network, by linking several ASGM projects which are developing training materials and providing training.

When mining practices are made more efficient and/or the supply chain is shortened, less people will end up being employed. Therefore unemployment created by improved practices has to be absorbed through creating alternative livelihoods in the mining sector (e.g. mine stabilization, planning, metalwork, leadership and safety monitoring for example) or by creating alternative livelihoods outside of the mining sector. The project would need to reorganize labour in the mines and the mills, through rapid training programs and mine reformation. Ultimately this would result in safer mines but also in more diverse job opportunities, in particular for women.

3. Regionalize the supply chain network and increase value added to products.

(see also point 2). By regionalizing the gold supply network (and establishing refining capacity in the region), middleman profits would be reduced.

In addition, local gold producers could be more directly connected to buyers of refined gold and gemstones in the region, and also obtain a premium price for their products through sales to green, ethical, or fair trade buyers. Projects could build jewelry craft centers in these mining towns, adding orders of magnitude more value at the producer level, and diversifying employment.

2.2 Project strategy related to Healthcare

The project's strategy to phase-out Mercury-added products from the healthcare sector is based on five (5) broad goals:

1. **Build national capacity to monitor Hg releases and risks.**
2. **Show best practices in a number of Healthcare Facilities.**
3. **Create confidence in Mercury-free alternatives.**
4. **Back up phase-down/out with national efforts, through introduction of standards/degrees.**
5. **Create solutions for the interim storage and identify possibilities for ultimate disposal.**

1. Build national capacity to monitor Hg releases and risks.

The "*National Assessment of the Use of Mercury in Honduras*" conducted in 2011 was the first comprehensive attempt to determine the use and application of Mercury in all relevant sectors in Honduras. However the National Assessment did not provide a detailed national release inventory to provide an indication of the size of the Mercury problem caused by the Healthcare.

Therefore the project will support the Government in undertaken a National Release Inventory, create analytical/laboratory capacity to monitor Mercury releases, conduct a population risk assessment as well as undertake a detailed baseline assessments for two hospitals. This will provide the Government as well as the Healthcare sector with a good overview of the issues at hand.

2. Show best practices in a number of Healthcare Facilities.
The project will showcase best practices in phasing out/down the use of Mercury-added products, and will do so by working with two highly visible and respected hospitals, one of which is connected to a University and as such educates many of the country's future healthcare professionals. These hospitals are expected to play an exemplary role ("champion"), and entice other hospitals to follow-in their footsteps.

The project will support these hospitals in conducting baseline assessments, improving their Healthcare Waste Management programmes, including Mercury phase-out and phase-down, training facility staff on best practices related to Mercury management, and introduce Mercury-free alternatives.

To keep the ball rolling, the project will initiate replication activities in two additional hospitals during the project's duration.

3. Create confidence in Mercury-free alternatives.
Often one of the challenges to the introduction of Mercury-free products and devices is the fact that its ultimate users, are not familiar with their use, accuracy and reliability. Therefore in many healthcare setting there is opposition against a change to Mercury-free products.

Following a best practice from the UNDP/WHO/GEF Global Medical Project applied in Lebanon, in order to create confidence in Mercury-free medical devices, prior to their introduction at the project healthcare facilities, the project will support a comparative staff preference study. Such a study will include the identification and selection of Mercury-free medical devices, are cost-effective and available at national level. Subsequently, these devices will be tested and used by a selected group in the HCFs, who after the testing period will report on their findings. Mercury-free products introduced at the HCFs afterwards will be based on the recommendations of facility staff.

By relying on staff experiences, the project expects that confidence in alternatives will be created.

4. Back up phase-down/out with national efforts, through introduction of standards/degrees.
To ensure the scaling up of facility efforts and replication across the nation, the project anticipates developing a national plan for the Environmental Sound Management (ESM) of Mercury as well as draft regulatory instruments to reduce the use of Mercury-added products in healthcare, such as import restriction on Mercury-added medical devices.

5. Create solutions for the interim storage and identify possibilities for ultimate disposal.
To ensure that the healthcare sector is able to dispose of their Mercury containing waste in a ESM, the project, on the one hand, will support the development of standards and guidelines for the safe storage, packaging, transportation, and monitoring of Mercury containing wastes and on the other hand identify and establish sustainable storage options for Mercury containing wastes. Interim storage solutions will be introduced both at the facilities itself (interim storage) as well as at the centralized location that would also offer storage options for non-project HCFs.

2.3 Policy conformity

2.3.1 Minamata Convention on Mercury

The Government of Honduras has been a strong advocate for a globally, legally-binding instrument on Mercury and the Secretary of Natural Resources and Environment (SERNA), through its Center for the

Study and Control of Pollutants (CESCCO), representing all National Chemicals Convention Focal Points, has been serving as a member of the Intergovernmental Negotiating Committee (INC).

The Government of Honduras signed the Minamata Convention on Mercury on 24 September 2014, at the occasion of a high-level special event entitled "*The Minamata Convention on Mercury: Towards its early entry into force and effective implementation"* organized during the opening of the sixty-ninth session of the United Nations General Assembly[26].

Once the Minamata Convention has been ratified by the Government of Honduras, and the Convention enters into force (90 days after it has been ratified by 50 nations), the Convention will have to be domesticated.

In accordance with the Convention, Mercury-added products, such as thermometers and sphygmomanometers, will have to be phased out by 2020 in accordance with Article 4 – paragraph 1. From that date onwards, the manufacture, import and export of Mercury-added products will no longer be allowed. The Convention also expects countries to introduce a minimum of 2 measures with the objective to phase down the use of dental amalgam, in accordance with article 4 – paragraph 3. With respect to ASGM, the Convention expect parties to take steps to reduce, and where feasible eliminate, the use of mercury and mercury compounds in, and the emissions and releases to the environment of mercury from, such mining and processing. Furthermore, the Convention requires parties to develop and implement a National Action Plan (in accordance with Annex C) and submit such a plan no later than three years after entry into force of the Convention.

The proposed project will support the Government towards meeting its future obligations under the Minamata Convention, but also provide valuable experiences and lesson learned for the implementation of the Convention, particularly in the region.

[26] http://unep.org/newscentre/Default.aspx?DocumentID=2796&ArticleID=11001&l=en#sthash.ittYPeBF.dpuf

2.4 Project Description

2.4.1 Project Goal, Objectives, Outcomes and Outputs/Activities

Project Goal: The overall goal of the project is to support Mercury assessments and Mercury pilot activities that will contribute towards achieving the objectives of the Minamata Convention and Honduras' ability to implement its provisions when the Convention enters into force.

Project Objectives: Protect human health and the environment from Mercury releases originating from the intentional use of mercury in artisanal small-scale gold mining (ASGM), as well as the unsound management and disposal of Mercury containing products from the healthcare sector.

Project Components, outcomes and Outputs/Activities:
The proposed project has six components, as indicated below, with expected outcomes and outputs for each:

Component 1. Strengthen institutional capacities to achieve the ESM of Mercury

This project component aims to strengthen institutional capacities to achieve the Environmental Sound Management (ESM) of Mercury, by improving institutional capacity to assess and monitor mercury releases as well as Mercury levels in risk populations, improve data collection and its management in order to establish trends and decide on priority issues, and improve inter-ministerial coordination and communication on SMC and Hg issues to advance approval and endorsement of regulatory measures developed under the project.

Outcome 1.1	Improved capacity at institutional level to assess and monitor Hg releases, Hg levels in populations, and generate data and scientific information in order to take action on priority issues. **Outputs**: 1.1.1 National Mercury Release Inventory developed 1.1.2 Analytical capacity of health & Env. Institutions to monitor Hg releases developed. 1.1.3 Hg population risk assessment(s) conducted.
Outcome 1.2	Improved inter-ministerial coordination and communication on SMC and ESM of Hg. **Output**: 1.2.1 Capacity of the National Commission for SMC strengthened to meet future commitments under the Global Hg treaty.
GEF funding:	US$ 154,250
Co-financing:	US$ 500,000

Output 1.1.1. National Mercury Release Inventory developed
Considering the limited funding available under the project, it is unfortunately not feasible to support the development of a National Action Plan in accordance with paragraph 3 of Article 7 of the Minamata

Convention (see also GEF's Initial guidance for Enabling Activities for the Minamata Convention on Mercury – GEF/C.45/Inf. 05 October 8, 2013[27]).

As envisaged during the development of the PIF, the project will support the development of a **National Mercury Release Inventory** as per the guidance of the UNEP Toolkit for Identification and Quantification of Mercury Releases[28]. The Mercury Release Inventory will provide a standardized methodology and accompanying database and assist Honduras in identifying and addressing mercury releases. The project will undertake a Level 1 inventory, however for sectors for which additional information is available (e.g. ASGM), the Level 2 Inventory might also be completed.

Output 1.1.2. Analytical capacity of Health and Environmental Institutions developed in order to monitor Hg releases.

Currently there is no capacity available at national level to analyze Mercury in environmental media or biological samples, even though the *Health Regulation Act* stipulates that the Health Surveillance Unit is required to monitor Mercury levels for human health protection purposes.

In order to put the required capacity in place, the project anticipates to strengthen the capacity of CESCCO/SERNA's laboratory through the provision of additions/modifications to its existing equipment to enable it to undertake Mercury analysis in environmental media and biological samples.

In addition, the project will also train laboratory staff and support the development of Protocols for the collection and analysis of mercury in biological samples and environmental media. To ensure the quality assurance of Mercury analysis, laboratory staff will participate in an intercalibration and intercomparison exercise with an international laboratory.

Output 1.1.3 Hg population risk assessment(s) conducted.

A Mercury population risk assessment in El Corpus (Choluteca region) will be undertaken in three phases: protocol validation, execution and reporting.

The risk assessment will be carried out under the lead of the Honduras Health Surveillance System (SINAVIS)[29], in close coordination with the Ministry of Health's Surveillance Unit, the National Surveillance Laboratory, CESCCO/SERNA laboratory and the Health Department of Choluteca region. International expertise will be provided through either international environmental epidemiology experts or South-South cooperation.

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27 http://www.thegef.org/gef/sites/thegef.org/files/documents/GEF.C.45.Inf_.05%20Initial%20Guidelines%20for%20Enabling%20Activities%20for%20the%20Minamata%20Convention%20on%20Mercury%20October%208%202013%20Final.pdf

28 http://www.unep.org/chemicalsandwaste/Mercury/MercuryPublications/GuidanceTrainingMaterialToolkits/MercuryToolkit/tabid/4566/language/en-US/Default.aspx

29 SESAL (2014). Norma Nacional de Vigilancia de la Salud. Gobierno de la República de Honduras, Secretaría de Salud, Unidad de Vigilancia de la Salud. USAID, ULAT y COMISCA. Agosto 2014. 135 p.

The Mercury risks assessment process will include workshops for training, review and validation of the results as well as awareness raising on the study's results. The project will also support the procurement of materials for the collection, transportation, and storage of samples to ensure quality control. Finally, study results will be captured in a report which will be offered to decision makers. In addition a scientific article will be published in an international journal.

Output 1.2.1 Capacity of the National Commission for SMC strengthened to meet future commitments under the Global Hg treaty.

The Government of Honduras signed the Minamata Convention on Mercury on 24 September 2014. Once the Minamata Convention has been ratified by the Government of Honduras, and the Convention enters into force (90 days after it has been ratified by 50 nations), the Convention will have to be domesticated.

Although it is expected that the Government of Honduras, will undertake a Minamata Initial Assessment (MIA) or a National Action Plan (NAP) with the support of the Global Environment Facility (GEF) in the near future, it is important for the project to start preparing the Government of Honduras for the Convention's requirements as they relate to the focus of this project (Mercury added products and ASGM).

In particular, with respect to Article 4 (Mercury added products), the Convention requires the phase-out of thermometers and sphygmomanometers by 2020 and requires countries to take steps to phase down of the use of dental amalgam. Furthermore, with respect to Article 7 (ASGM), the Convention requires countries to take steps to reduce, and where feasible eliminate, the use of mercury and mercury compounds in, and the emissions and releases to the environment of mercury from gold mining and processing.

The proposed project will support the Government towards meeting its future obligations under the Minamata Convention, by strengthening the capacity of the National Commission for the Sound Management of Chemicals (CNG) and other key institutions. It will do so by providing training to improve the understanding of the Convention and Honduras' possible commitments and its implications. In addition, the CNG and key institutions will be involved in the development, review and validation of the **National Mercury Release Inventory (Output 1.1.1.)**, the **Hg population risk assessment (output 1.1.3)** and the monitoring of Mercury related activities undertaken as part of the project.

The ultimate objectives of this activity is to ensure that the CNG assumes a role as the national coordination mechanism on Mercury, and has the necessary capacity to do so.

Component 2. Strengthen the regulatory and policy framework to support a reduction in the use of Hg and allow for ESM of mercury containing products and their wastes.

This project component aims to strengthen the existing regulatory and policy framework to support a reduction in the use of Mercury in priority sectors and allow for the ESM of Mercury containing products and their wastes, by facilitating the adoption and introduction of a national plan, policies and regulations which aim to reduce the use of mercury in products and Artisanal and Small-scale Gold Mining (ASGM) as well as national regulations for ESM of Hg and Mercury containing wastes:

Outcome 2	Stengthened policy and regulatory framework to reduce reliance on Mercury, and Mercury added-products and improve the environmental sound management of Mercury **Outputs**: 2.1 National Plan for the Environmentally Sound Management of Mercury Developed 2.2 Regulatory instruments to reduce the use of Mercury and Mercury added products drafted. 2.3 Proposal for the harmonization of classification codes for Mercury containing products developed. 2.4 Standards and technical guidelines for the safe storage, packaging, transportation, data management, inspection and monitoring of Mercury containing wastes developed.
GEF funding:	US$ 106,900
Co-financing:	US$ 1,387,582

Output 2.1 Development of a National Plan for the Environmentally Sound Management (ESM) of Mercury

The project will develop and facilitate the validation of a National Plan for the ESM of Mercury in Honduras in line with the future requirements of the Minamata Convention. The Plan will be based on the outcomes of the National Mercury Release Inventory, identify national priorities and include (at a minimum) detailed actions plans for the phase-down/phase-out of Mercury use in two priority sectors (ASGM & HealthCare). The plan will be formulated in line with the strategic guidelines being prepared as part of the further development of the Honduras Mining Policy (World Bank support to strengthen capacity of the Honduras mining authority - INHGEOMIN). Additionally (if resources and time allow) the national Plan might also include actions for other priority sectors.

Output 2.2 Drafting of regulatory instruments to reduce the use of Mercury and Mercury added products.

Health Sector: The project (in consultation with the Regulatory Secretariat of the Directorate of Standardization as well as the Directorate for Monitoring Regulatory Framework – Ministry of Health), will develop a **regulation and monitoring standard on the use of Mercury in products**, based upon the

lessons learned and results from the pilot activities undertaken in both hospitals and the epidemiology study.

Mining Sector: The new mining law has been enacted in 2013. Following the adoption of the law, INHGEOMIN has identified the need to develop/enact a regulatory instrument to phase down/out the use of mercury in ASGM and support the monitoring of ASGM activities in order to comply with the future requirements of the Minamata Convention.

The World Bank and the Government of Chile will support the development and approval (by the national Government) of a National Mining Policy, strengthen INHGEOMIN's capacity to monitor mining activities and develop a BAT/BEP Manual for artisanal and small-scale mining activities. However, BAT and BEP for ASGM is also urgently needed, in particular with the aim to phase out Mercury. Therefore, the project will develop a manual for BAT and BEP for ASGM, with particular focus on the phase-down and phase-out of Mercury. This output will also be closely aligned with outputs under 3.1.2.

Customs: The project will also draft national (import) standards on maximum Mercury content in products, with a focus on Mercury containing medical devices. However, if time and resources allow, additional import standards might be developed for non-Medical Mercury added products.

Output 2.3 Proposal for the harmonization of classification codes for Mercury containing products developed.

During the preparation of the "*National Assessment of the Use of Mercury in Honduras (2011)*", it became clear that it was challenging for the customs and revenue authorities to indicate the amount and type of Mercury and Mercury containing products, which were imported on a yearly basis. In part this is due to the fact that classification codes for Mercury containing products are not alligned with WTO guidelines.

Therefore, the project envisages to increase the capacity of the customs and revenue authority (DEI), its departments and other relevant stekholders (among else: Directorate of Customs; Customs Technical Department (DTA); DTA Tariff Classification Section (FCS); BDS and Trade Policy COMIECO; School for Tax and Customs Training (EICAT); and the Customs Laboratory), to put in place the necessary institutional framework to build an enabling environment that would allow for bettering monitoring of trade in Mercury and Mercury-added products.

In specific, the project will support DEI in: i) Identifying mercury-containing products; ii) Defining the classification of mercury-added products; and iii) Creating national tariff codes (DEI).

After the tariff codes have been created, the project would support initiating the approval process by the Ministry of Economic Development, after which hopefully a resolution would be issued by the Commission of Ministries for Economic Integration (COMIECO), and the tariff codes would be published in the Gazette.

Output 2.4 Development of standards and guidelines for the safe storage, packaging, transportation, data management, inspection and monitoring (as per Basel Convention guidelines).

This activity will be closely aligned with the outputs under project component 3 which will introduce BAT/BEP practices for the management, storage and use of Mercury and Mercury containing devices at the level of healthcare facilities as well in the project's priority ASGM community. This output will also be closely aligned with outputs under 4.1.4 (*Establishment and operation of a centre for temporary storage of mercury waste*) and 4.1.5 (*Pilot demonstration of ESM and interim storage of other Hg-containing wastes initiated with a private sector entity*).

In Honduras, there currently exists a lack of storage and disposal options for Mercury containing wastes. As a result, the majority of mercury containing products is discarded along with regular municipal waste and ends up in landfills or disposal sites not fit to store Mercury wastes. In addition, there are no standards or technical guidelines available for the safe storage, packaging and transportation for Mercury containing wastes. Therefore, Mercury waste generators have no guidelines to go by on how to manage their wastes in terms of storage, packaging and disposal, which is another reason for which such wastes are handled and disposed of improperly.

In addition there are no standards or guidelines for data management, inspection and monitoring of Mercury containing wastes. The latter makes it challenging for monitoring entities to keep track of such wastes, their quantities, generation rates as well as place of disposal.

In order to create national capacity to improve the management of Mercury containing wastes, the project will support the development of standards and guidelines for the safe storage, packaging, transportation (in line with Basel Convention guidelines), as well as prepare guidelines for data management, inspection and monitoring of Mercury containing wastes.

Component 3. Reduce mercury releases from priority sectors (artisanal & small scale gold mining and healthcare) to protect human health and the environment

This project component will reduce mercury releases from priority sectors (ASGM and healthcare) to project human health and the environment, through the adoption of BAT/BEP practices, introduction of sustainable mining practices and the phase-out of Mercury containing devices in the healthcare sector.

Outcome 3.1	Reduced Hg releases from priority mining communities as a result of the adoption of BAT/BEP practices and the phase-out of unsound mining practices.
	Outputs:
	3.1.1 In-depth Hg baseline assessment in 1 priority ASGM community completed (incl. socio-economic analysis).
	3.1.2 BAT/BEP introduced to 1 ASGM community to reduce Hg releases and adopt socially and env. sound mining practices.
	3.1.3 Capacity of 1 mining community built to improve the gold supply chain
	3.1.4 Replication process of pilot experience in three (3) additional geographical priority areas launched.

Outcome 3.2	Reduced Hg releases from priority Healthcare Facilities through the adoption of BAT/BEP practices and the phase-out of Mercury containing devices. **Output**: 3.2.1 In-depth Hg baseline assessment completed for 2 model Healthcare Facilities (HCFs). 3.2.2 Facilities' HCWM programmes updated to include Hg phase-out and management. 3.2.3 Facility staff trained on BAT/BEP practices for Hg management. 3.2.4 Comparative study on Hg-free devices concluded and procurement processes adapted based on staff preferences. 3.2.5 Replication process of pilot experiences launched in 2 additional HCFs.
GEF funding:	US$ 701,350
Co-financing:	US$ 1,647,272

Output 3.1.1 In-depth Hg baseline assessment in 1 priority ASGM community completed (incl. socio-economic analysis).

In consultation with the Government of Honduras and the Ministry of Mining, the project has decided to work with one of the country's priority ASGM communities in Honduras, which is located in the Municipality of El Corpus, Choluteca. The Municipality of Corpus has around 25,000 inhabitants, their main source of income being agriculture and mining. Of the inhabitants a little more than 1,300 are directly employed in mining, while approximately 4,000 inhabitants are indirectly employed.

Before the project activities will be implemented is will important to establish a sound baseline, to help national stakeholders obtain an in-depth understanding of the on-going practices in this community and to help further shape and direct the project. Secondly, developing a sound baseline will also allow for better reporting on project results and impacts down the line.

In order to conduct a baseline assessment, the project will:

A. **Build a team of locals that understand ASGM practices, Mercury use and gold production and who can integrate with the community and conduct the baseline survey**. This might ential:
   - Analyzing and summarizing previously conducted survey results (e.g. Government, private sector or NGO led) to help plan the upcoming survey, and analyze ASGM survey tactics and results from other countries.
   - Develop a training and a field guide to train surveyors and conduct training

B. **Plan and execute baseline survey**. This might ential:
   - Establishing survey expected outcomes (survey coverage and confidence analysis).
   - Creating a baseline execution plan.
   - Surveying miners and milling operations for Mercury use (incl. three repetitions of full mass balance in 10% of mining operations, 3 months apart and single mass balance in 40% of plants, for a total of 50% plants surveyed).
   - Assessing confidence interval of survey results

- Estimating overal cost of living
- Disaggregating operating expenses into fuel, equipment repair, manual labour etc.
- Elucidating Mercury supply chain.

Output 3.1.2 BAT/BEP introduced to 1 ASGM community to reduce Hg releases and adopt socially and environmentally sound mining practices.

The project ultimately aims to support the mining community of El Corpus to start processing ore without Mercury or with significantly less Mercury, built the capacity of miners to process ore applying BAT and BEP and finally support gold refiners/gold shops in introduction personal protections measures. The project will do so through the following activities:

A. **Build or rent mercury free processing facilities in or near the ASGM community**. This might ential:
   - Assess availability of in-country processing facilities, equipment manufacturers and distributors (assess level of technical support offered)
   - Assist communities in negotiating service agreements with equipment providers
   - Evaluate the costs of building clean processing facilities from scratch, including investment recovery time[24]
   - Assess potential sites for communal processing facilities

B. **Develop a training program for miners**. This might ential:
   - Develop partnerships with other ASGM initiatives which are developing training materials (at national, regional or global level).
   - Write curriculum, reference materials, lesson plans (use existing training materials[30] as a basis and tailor those – if necessary – to local circumstances).
   - Hire/train trainers, conduct 10 workshops in El Corpus to train 200 miners (20% of El Corpus mining population).
   - Produce a training video depicting local miners being trained in clean techniques.
   - Conduct exit surveys to assess the efficacy of training programmes.

C. Support Gold Shops in introducing personal protection measures. This might ential:
   a. Installation of gold shop filters and introduction of personal protective equipment.
   b. Train gold shops on filter and PPE use and on Mercury hazards.

Output 3.1.3 Capacity of 1 mining community built to improve the gold supply chain

As mentioned in the section on "*Project Strategy related to ASGM (section 2.1)*" much of the profits from gold extraction currently end up with the middle-man (gold buyers, plant operators and other middle-man) who often receive much of the profit from gold).

In order to redirect profits, and ensure that these support miner development instead, miners/producers should be directly or more closely linked to refiners, or the gold supply chain should

[30] The project anticipates to develop a partnership with the Biodiversity Research Institute U.S. Department of State project *"Development and implementation of artisanal and small-scale gold miner training resources for reducing mercury use and release in South America"*, which is in the process of developing training curricula and training videos.

shortened in other ways. An additional advantage of shortening the gold supply chain could result in a reduction of opportunities for tax embezzlement and tax seeking behaviour.

This project output in particular envisages to shorten/repair the gold supply chain, by organizing mining communities, formalizing negotiations and strengthening the position of the cooperative in negotiations with buyers. Ideally ending with a mining cooperative that is part of a consistent and reliable purchasing agreement and supply chain.

The project envisages achieving this through:

A. **One miner training and business support center to provide technical, legal, financial, and ethical points of premium clean gold production established.** This might ential:
    - Establishing a negotiation center to provide legal and ethical points of sale for sustainably sourced gold in the country/community or establishing a partnership with an existing negotiation center[31].
    - Develop training programme and guidance documentation for all relevant business issues pertaining to the operation and running of the Negotiation Center (e.g. accounting, transparency, premium certification and government regulations)
    - Conduct training for Negotiation Center staff and miners and negotiators on gold commercialization and premium supply chains.
    - Assist communities in negotiating service agreements with equipment providers
    - Facilitate access to financing for local miners to (existing) lending and savings structures[32].

B. **Introducing economic incentives (e.g. efficiencies and premiums) by linking clean/fair trade gold directly to global supply chains of sustainably sourced gold.** This might ential:
    - Establish customs agreements with national government and governments where large refiners are located.
    - Establish transparent supply chains.
    - Introducing economic incentives (e.g. premiums) for sustainably sourced gold.
    - Negotiate purchasing/exchange deals with large refiners.
    - Creating awareness on sustainably sourced gold from Honduras[33] by creating a set of 4 demonstration jewelry pieces using all local clean and fair gold and opal.

Output 3.1.4 Replication process of pilot experience in three (3) additional geographical priority areas launched

The purpose of this project output is to keep the ball rolling and momentum going, after activities have significantly progressed in the mining community of El Corpus.

[31] This could include facilitating access to refineries (regional/global ones) as well as other buyers.

[32] This could potentially be achieved by entering into an agreement with a local bank, as legal miners (those part of a cooperative) should be able to access loans through a regular bank.

[33] This would entail the production of 1 set of jewelry, 100% made in Honduras, as well as accompanying publicity campaign.

SERNA/ INHGEOMIN indicated that Honduras counts 10 ASGM significant ASGM sites throughout the country to which the project could potentially be expanded. Priority ASGM sites for replication of project results which have been indicated are Paraiso, Guayape, and Margoliso.

After the project has progressed significantly, the Mercury release inventory has been conducted, the Hg baseline survey completed, and the Mid-Term Review (MTR) or Mid-Term Evaluation (MTE) of the project conducted, it would be recommended to start planning the selection of the three ASGM replication sites as well as identify the project's activities for these three sites.

Project activities planned for these priority sites, might turn out to be very similar to those for El Corpus, although it is expected that activities will be altered and adapted based on lessons-learned and experiences from the project's implementation in El Corpus. It is expected that the MTE/MTR will make concrete recommendations for the focus and approach of the project's activities for these 3 additional communities.

For the purposes of planning, it is assumed that the following activities will be implemented:

A. Priority ASGM communities identified for replication purposes.
B. 2 clean mining workshops established in the priority communities.
C. 120 miners trained in BAT/BEP.
D. 30 miners participated in clean mining course in El Corpus, using its pilot facilities.

Finally, although a similar project approach will start being implemented in each of these three communities towards the second half of the project's implementation, it is not expected that full implementation will be achieved by the project's end, as mentioned before, this project activity is really intended to keep the ball rolling.

Output 3.2.1 In-depth Hg baseline assessment completed for 2 model Healthcare Facilities (HCFs).

The two project hospitals, University Teaching Hospital / National Autonomous University of Honduras (HEU / UNAH) and the Mario Catarino Rivas Hospital in San Pedro Sula, Cortés (HMCR) count 1004 and 541 beds respectively. Although no data is available on the quantity of Mercury containing products used by these facilities, they did indicate that they make use of Mercury containing thermometers, sphygmomanometers, lab reagents, vaccines and dental amalgam.

To establish a good baseline for the Mercury activities to be implemented in the two Health Care Facilities, the project will conduct an in-depth Mercury baseline assessment at each of the two facilities. The baseline assessment, will make use of the UNDP/GEF "*Guidance on conducting a baseline assessment of a model Healthcare Faclitiy*[34] *(section 9)*", guidance produced by the NGO Health Care

[34] http://www.gefmedwaste.org/downloads/Baseline%20Assessment%20Guidance%20April%202010%20UNDP%20GEF%20Project.pdf

Without Harm (HCWH) "*Guidance for Eliminating Mercury from Healthcare Establishments*[35]" as well as guidance issued by WHO "*Replacement of Mercury thermometers and sphygmomanometers in Healthcare.*[36]"

As part of the baseline assessments, the project will initially support the establishment of a HCWM Committees within each of the project hospitals. After training of this group, the project's experts and trained HCF staff members will conduct the assessment. Results of the assessment will be presented during an awareness raising workshop.

Output 3.2.2 Facilities' HCWM plans developed (including Hg phase-out and management).

The Department of Hospitals of the Directorate General of Integrated Networks of Health Services and the Secretariat for Integrated Networks and Health Services is responsible for developing and implementing waste management plans in health facilities, it is also responsible for training staff in the hospitals of the Ministry of Health.

In August 2014, SESAL (MoH) adopted the WHO/PAHO Handbook for developing waste management plans for healthcare facilities. However, to date HEU/UNAH and HMCR have not yet developed waste management plans.

In close coordination with SESAL (MoH), the Department of Hospitals of the Directorate General of Integrated Networks of Health Services and the Secretariat for Integrated Networks and Health Services, and the HCWM Committees of the two project facilities the project will support both HCFs in developing healthcare waste management plans.

These HCWM plans will include action plans and interventions for the phase-down and phase-out of Mercury added products, as well as include guidance for the management of Mercury within the facilities (including procurement, training, management, packaging/labeling, spill cleanup, temporary storage, transport, among else).

Prior to the preparation of the HCWM plans, facility staff will be trained on how to conduct a HCW assessment and awareness will be raised on the importance of HCWM. After the HCWM plans have been drafted, these will be presented to the two hospitals and SESAL (MoH) for validation.

Output 3.2.3 Facility staff trained on BAT/BEP practices for Hg management

Except as part of the pilot project implemented in San Felipe General Hospital (2008-2012) and some capacity of the staff of the Department of Hospitals of the Directorate General of Integrated Networks of Health Services and the Secretariat for Integrated Networks and Health Services, who at the time trained employees of the San Felipe General Hospital in the preparation of Mercury inventories, spill management and disposal of mercury waste, there is not much capacity within the country, or the 2 project hospitals on the management of Mercury containing devices and wastes.

[35] http://www.gefmedwaste.org/downloads/Mercury%20Elimination%20Guide%20for%20Hospitals%20.pdf

[36] http://www.gefmedwaste.org/downloads/Replacement%20of%20mercury%20thermometers%20and%20sphygmomanometers%20in%20health%20care.pdf

Therefore, the project will build the necessary capacity of healthcare facility staff to manage Mercury and Mercury containing wastes, at the two project facilities, through training, making use of training materials developed under the GEF/UNDP/WHO Global Medical Waste Project.[37]

In addition, at both project HCFs, improved mercury waste management practices will be implemented and safe storage sites set up (see output 4.1.3).

Finally, the project will develop a manual for mercury management in the project healthcare facilities, for use in both project healthcare facilities, but also for dissemination at national level.

Output 3.2.4. Comparative study on Hg-free devices concluded and procurement processes adapted based on staff preferences.

To create confidence in Mercury-free medical devices, prior to their introduction at the project healthcare facilities, the project will support a comparative study among HCF staff.

This study will include the identification and selection of Mercury-free medical devices, which will meet WHO prescribed technical specifications, are cost-effective and available at national level. Subsequently, these devices will be tested and used by a selected group in the HCFs, who after the testing period will report on their findings.

Based on the findings, each hospital will identify and select the Mercury-free devices they would prefer to work with. Firstly, the project would procure a small amount of these devices covering several departments (but not the entire hospital), and secondly will work with the hospitals' procurement departments to adapt their procurement practices and procedures for Mercury containing products to Mercury-free ones.

Output 3.2.5. Replication Process pilot at two facilities in the health sector.

Identification, selection and incorporation of two facilities to replicate, will be the first year of the project, so that the third year thereof are engaged in pilot replication. Activities will include workshops for socialization, training and monitoring.

The purpose of this project output is to keep the ball rolling and momentum going, after activities have significantly progressed in the two project healthcare facilities.

After the project has progressed significantly (Mercury release inventory conducted, the Hg and HCWM baseline assessments completed in both HCFs, HCWM plans implemented, staff preference studies completed, Mercury-free devices procured, and the Mid-Term Review (MTR) or Mid-Term Evaluation (MTE) of the project conducted), it would be recommended to start planning the selection of the two HCF for project replication.

[37] Training Video on "Cleanup and Temporary Storage of Mercury Waste for Health Care Facilities, available at: https://www.youtube.com/watch?v=Ry5SbkKv96o and The UNDP/GEF/WHO?HCWH HCWM Training Master Curriculum.

Project activities planned for two facilities, might turn out to be very similar to activities implemented in the first two project HCFS. However, it could be that activities will be altered and adapted based on lessons-learned and experiences from the project's implementation. It is expected that the MTE/MTR will make concrete recommendations for the focus and approach of the project's activities for these 2 additional HCFs.

Finally, although a similar project approach will start being implemented in 2 HCFs towards the second half of the project's implementation, it is not expected that full implementation will be achieved by the project's end, as mentioned before, this project activity is really intended to keep the ball rolling.

Component 4. Strengthen technical capacity and infrastructure for the interim storage of Mercury containing wastes

This project component aims to strengthen technical capacity and infrastructure for the interim storage of Mercury containing wastes, by establishing interim financially sustainable storage options for Hg-containing wastes and identifying potential long-term storage/disposal options.

Outcome 4.1	Interim financially sustainable storage options for Hg-containing wastes established and long-term storage/disposal options identified. **Outputs**: 4.1.1 Assessment of infrastructure, capacity and cost recovery approaches for Hg waste storage conducted. 4.1.2 Technical capacity of key actors for various Hg LCM stages developed and CRAs put in place. 4.1.3 Interim storage spaces established for healthcare Hg waste 4.1.4 Pilot demonstration of ESM and interim storage of other Hg-containing wastes initiated at national level.
GEF funding:	US$ 99,500
Co-financing:	US$ 2,385,000

Output 4.1.1 Assessment of infrastructure, capacity and cost recovery approaches for Hg waste storage conducted

In Honduras, there currently exists a lack of storage and disposal options for Mercury containing wastes. As a result, the majority of mercury containing products is discarded along with regular municipal waste and ends up in landfills or disposal sites not fit to store Mercury wastes.

Except for the San Felipe Hospital, which designed and constructed a temporary storage site for Mercury, at present, none of the project partners or project stakeholder institutions, have access to a temporary storage site for Mercury (containing) waste.

That said, UNAH has a Reagents Committee which handles expired reagents for the school and is constructing a temporary storage facility for this type of waste. If at all possible the project aims to link

the construction of an temporary storage facility for Mercury waste for UNAH to the reagent waste facility.

In order to identify potential options for interim, long-term storage of Mercury wastes and final disposal options the project will conduct a comprehensive assessment of storage and disposal options for Mercury containing wastes at national level (in line with national hazardous waste management related strategies/plans and priorities and Basel Convention Guidelines).

In addion, the assessment will also assess potential Cost-Recovery Approaches (CRAs) which would be able to cover the collection, transport and storage for Mercury containing wastes at national level. The assessment will also review the capacity of various actors and stakeholders in the collection, transport, and interim storage of hazardous wastes, and identify needs and gaps, and make recommendations to address these needs/gaps.

In summary, project output 4.1.4 will be achieved through the following subactivities:

A. Conduct a comprehensive assessment of storage and disposal options for Mercury containing wastes at national level.
B. Assess potential Cost-Recovery Approaches (CRAs) which would be able to cover the collection, transport and storage for Mercury containing wastes at national level.
C. Review the capacity of various actors and stakeholders in the collection, transport, and interim storage of hazardous wastes.
D. Make recommendations to address identifed capacity needs/gaps.

This project output will be implemented in close coordination with Output 2.1.4, which will support the development of standards and guidelines for the safe storage, packaging, transportation, data management, inspection and monitoring (as per Basel Convention guidelines).

Output 4.1.2 Technical capacity of key actors for various Hg LCM stages developed and CRAs put in place.

Based on the outcomes of the assessment and its recommendations (see output 4.1.1), this project activity aims to build the technical capacity of key stakeholders (private sector operators and national entities involved in the management of wastes) in the various stages of the Life-Cycle Management (LCM) of Mercury added products and their wastes (e.g. collection, transportation and interim storage) through training activities.

Secondly, this project activity will also put in place CRAs for the LCM of Mercury at national level. Based on the results of the assessment conducted (see output 4.1.1.) the project will draft a proposal for the institutionalization of a Cost Recovery Mechanism and facilitate its submission process for approval at national level.

Output 4.1.3 Interim storage spaces established for healthcare Hg waste.

The project will support each project healthcare facility in the establishment of an interim storage space/room for Mercury containing wastes.

Building upon the experiences and lessons-learned from the San Felipe Hospital, which designed and constructed a temporary storage space for Mercury, interim storage spaces/rooms will be designed for

both project facilities. Operational procedures for the management of these storage spaces will de drafted and implemented, and facility staff will be trained in the safe management of Hg storage spaces.

It should be noted, that these interim storage spaces/rooms only serve the purpose of temporarely storing this type of waste before it will be moved to a more centralized long-term location or disposed of, otherwise there exist the risks that such storage facilities turn into long-term storage options.

Output 4.1.4 Pilot demonstration of ESM and interim storage of Hg-containing wastes initiated at national level.

In addition to the interim storage spaces built at each of the project's healthcare facilities, it will be critical to ensure that at national level, a site would be identified that could potentially be used for the long-term storage of Mercury containing wastes, with the ultimate objective that these would be disposed of at some point (abroad, at regional level or at national level).

Building upon the outcomes of the assessment, undertaken as part of output 4.1.1, the project would support the selection of site, as well as support the design and construction of the storage facility so that it meet Basel Convention guidelines. Preferably the site would be suitable for wastes with a high Hg content but with a small volume.

Although HEU/UNAH is expected to be building a storage site, and potentially this site would be selected, an assessment has to be conducted to determine what type of improvements have to be made so that the storage facility meets BC and national guidelines (including Hg monitoring).

Finally, operational procedures for the management of this storage space will need to be drafted and implemented, and facility staff will be trained in the safe management of Hg storage spaces.

Component 5. Monitoring, learning, adaptive feedback, outreach, and evaluation

Outcome 5:	**Project's results sustained and replicated**
	Output 5.1: M&E and adaptive management applied to project in response to needs, mid-term evaluation findings with lessons learned extracted
	Output 5.2: Lessons learned and best practices are disseminated at national, regional and global level
GEF funding:	US$ 120,000
Co-financing:	US$ 125,000

This component is intended to provide necessary means for the monitoring and evaluation of project results in order to inform adaptive management of the programme. It will also enable consolidation of lessons learned throughout the course of project implementation.

The component aims at monitoring and evaluation of results achieved to improve the implementation of the project and disseminate lessons learnt at national, regional and international levels.

Mid-term and final evaluations will be completed and compiled into reports. Results and lessons learned will be extracted. Best practices will be shared nationally and regionally through a series of workshops and meetings. Reports and research results will be disseminated globally.

Further details are provided in Chapter VI (Monitoring Framework and Evaluation).

2.4.2 Project Indicators, Risks and Assumptions

For an overview of the project main project indicators, kindly refer to table 4. Project risks have been presented in Annex I, Table 15. For project assumption and project components specific indicators, kindly refer to Section III "Project Results Framework".

Table 10: Project Indicators

		Baseline ***(start of project)***	**Target end of project** ***(project direct)***	**Replication Target** ***(project indirect)***	**Comments/assumptions**
ASGM					
Mercury releases reduced/avoided as a result of BAT/BEP applied [kg/yr]		5,000	1,000	200	It is assumed that in El Corpus a Hg:Au ratio of 5:1 is common.
Healthcare					
Mercury releases reduced/avoided as a result of BAT/BEP applied	Hg containing medical devices [kg/yr]	4.3	4.3	4.3	Based on an annual average of 2.8 grams/bed. Replication will take place in 2 more HCFs.
	Dental amalgam [kg/yr]	10.5	10.5	10.5	Most likely highly overestimated. Based on average population use of dental amalgam per person, extrapolated by no. of beds. Replication will take place in 2 more HCFs.
Total Hg reductions (kg Hg/yr)			**1014.8**	**214.8**	

2.4.3 Project consistency with GEF strategic priorities and operations programs for the Chemicals and Waste focal area as identified in GEF-V

The project is fully consistent with the GEF-5 Chemicals focal area strategy, Objective 3: *Pilot sound chemicals management and mercury reduction* as well as the *GEF-V Strategy for Mercury programming* as the project will support activities consistent with the following issue areas:

- Reducing Mercury Use in Products.
- Reducing Mercury Use and Exposures in Artisanal and Small-scale Gold-Mining.
- Enhancing Capacity for Mercury Storage.
- Improved Data and Scientific Information at the National Level.
- Enhancing Capacity to Address Waste and Contaminated Sites.

The project will contribute to the achievement of GEF's main indicators under GEF-V as follows:

Table 11: Consistency with GEF-V strategic priorities and operations programs

Relevant GEF-5 Strategy Indicator	**Project's contribution**
Objective 3: Pilot sound chemicals management and Mercury reduction ***Outcome 3.1: Country capacity built to effectively manage Mercury in priority sectors***	
Indicator 3.1 **Countries implement pilot Mercury management and reduction activities**	The project will focus on reducing the use of Mercury in two (2) priority sectors (Artisanal and Small-scale Gold Mining and the Healthcare Sector) by implementing several pilot mercury management and reduction activities. At national level the project will support the creation of an enabling environment by developing the regulatory and policy framework pertaining to the Environmentally Sound Management (ESM) of Mercury, Mercury containing products and their wastes. The project will create the necessary technical capacity for (risk) assessment, inventory and monitoring of Hg releases, use of Mercury-free devices in healthcare, use of socially and environmentally sound mining artisanal practices, creation and operation of interim storage in line with Basel Convention guidelines for mercury containing (discarded) devices, life-cycle management of Hg (incl. spill clean up, collection, transport, etc.), awareness raising, among else. Through implementation of these components, the project expects to reduce mercury releases by ~ 1,000 kg/yr. These releases would otherwise be added to the "global pool" of Mercury, putting environmental and human health at risk everywhere. Importantly, setting-up sound and sustainable mercury management and phase-out/down schemes for priority sectors will enable a steady and gradual reduction in the use of Hg, ultimately achieving complete phase-out.

2.4.4 Incremental reasoning and expected global, national and local benefits

The Government of Honduras, and its many partners, have undertaken a number of important efforts to map the country's situation with respect to Mercury releases and to start introducing measures to improve the management of chemicals in general and that of Mercury in particular, both in the ASGM as well as in the Healthcare sector.

In Section 1.3, table 6, national baseline projects which have been/are being supported by many different stakeholders, and which are associated with creating the enabling environment for reducing Mercury use and its releases and/or improving the sound management of chemicals and wastes, have been summarized. The table also summarizes baseline projects and their activities, which provide co-financing to the project, and which have been certified by co-financing commitment letters. Finally, the table also summarizes the incremental activities financed by the GEF bringing Hg reduction and global benefits.

Project interventions as outlined in section 2.4 are necessary to introduce BAT/BEP in the ASGM sector to phase-down and phase-out the use of Hg; introduce BEP/BAT for Hg-free alternatives on a large scale in the healthcare sector, and improve the sound management and interim storage of Mercury and Mercury containing wastes at national level. Without funding from the Global Environment Facility (GEF), these conditions are very unlikely to change in the near future.

ASGM commonly uses large amounts of Hg to process the ore, often in very unsafe conditions. As the demand for gold continues to grow due to high gold prices, it is expected that without the proposed project, the use of Mercury will continue to increase as it is the dominant and preferred method among miners (easy to use, inexpensive and freely available). Without the project introducing miners to more sustainable and safe mining practices and connecting miners to sustainably sourced gold markets and buyers, allowing them to keep more of the profits themselves, it is unlikely that these practices will change.

Similarly, the initial capital investment and "start-up" costs for migrating from Mercury containing devices to Mercury-free devices cannot be covered by national budget allocations and contribution of healthcare facilities alone. As seen in the past, solely working with pilot facilities will not result in extensive replication at national level. It is therefore critical to (in additional to working with "Champion" HCF which demonstrate improved practices) create the policy and regulatory framework at national level that will support HCFs in migrating to Mercury-free devices.

The proposed project is regarded as a natural continuation of previous initiatives and fully builds on past and on-going baseline projects. As such, activities proposed as part of this project supported with GEF funding can be considered entirely incremental.

The expected global, regional and local benefits of the project are many and varied. In the absence of the project and GEF funding however, the following environmental benefits will be missed:

- A reduction of 1,000 kg/yr of Mercury from the priority ASGM community (El Corpus). Which over the 4-year duration of the project (assuming ASGM really start taking of in project year two), might result in a release reduction of 3,000 kg of Mercury.
- Replication of BEP/BAT in the three (3) additional ASGM communities might result in an additional 200 kg/yr.
- A reduction of 4.3 kg/yr by introducing Mercury-free devices into the two (2) project healthcare facilities. Over the duration of the project (3 years), this could result in 12.9 kg just for these two HCFs.
- Replication of efforts in the healthcare sector (through the introduction of import restrictions and the phase-out/phase-down of Mercury added products), could result in an additional 17 kg/yr phase-out, while replication in two additional HCFs would likely result in a phase-out of 4 kg/yr.

Combined the global environmental benefits of the project, in terms of Mercury releases, could range from ~ 1,000 kg of Mercury to approximately ~ 3,200 (including replication and sustainable reduced releases).

Without this project, Honduras will be unable to comply with future requirement of the Minamata Convention to reduce/minimize releases of Mercury and will be unable to adopt a phased approached towards the phase-out of the use of Mercury in ASGM, the phase-out of Mercury-containing devices in the health sector and improve dental amalgam waste management practices to reduce releases of Mercury.

Without the GEF project, risk groups and local, regional and global communities currently being exposed to Mercury releases released from these two sectors, as well as the global environment, will continue to remain at risk.

2.4.5 Socio-economic benefits including Gender dimensions

ASGM: The ASGM sector in Honduras is the most significant source of Mercury releases in the country, impacting local, regional and global human and environmental health. ASGM communities are not only directly exposed to Mercury from amalgamation processes but also indirectly through the air breathed and from the polluted water and the food that they eat every day. Although to date no biomonitoring has been undertaken in the ASGM community in Honduras, bio-monitoring results from several ASGM countries worldwide show alarming concentrations of Mercury in hair, urine, mother's milk, and blood of children, women and men.

To create more awareness on the risks of Mercury on ASGM communities, the project will conduct a population risk assessment, and will undertake a full Mercury baseline assessment in the El Corpus ASGM mining community as well as partial assessment in the other three (3) priority ASGM communities. Results from these assessments, will be also representative of other ASGM communities in the country and present decision makers with heath and environmental priorities to consider when shaping policies and introducing regulatory measures.

However, human health issues from Mercury exposure are not the only health issues faced by artisanal miners. Artisanal miners often employ rudimentary techniques for mineral extraction and often operate under hazardous, labour intensive, highly disorganized and illegal conditions. The two mining accidents which occured in Honduras this year (see project baseline) are clear proof.

To reduce human health issues from Mercury as well as from other potentially hazardous working conditions and techniques as well as environmental impacts of ASGM activities, the project will introduce BAT/BEP in mining communities to allow them to adopt socially and environmentally sound mining practices. These efforts will go hand-in-hand with the formalization of the sector, which will help to further reduce hazardous working conditions.

Gender considerations: In many Artisanal Small Gold Mining (ASGM) areas, women are mostly employed in the processing aspect of artisanal mining, including amalgamation with Mercury, often with their children or babies nearby. In certain ASGM communities, it might be harder to find work for women than for men, resulting in some women reprocessing tailing, using even larger amounts of Mercury to extract the very small amounts of gold present in the tailings.

The population risks assessment will be able to highlight gender consideration of the ASGM communities. Subsequently, the project will be able to employ gender sensitive approaches to reduce exposure risks to men, women, children and their families, to promote cleaner technologies and approaches and support the development of stronger, healthier artisanal mining communities.

Economic considerations: As mentioned in the section on "*Project Strategy related to ASGM (section 2.1)*" much of the profits from gold extraction currently end up with the middle-man (gold buyers, plant operators and other middle-man) who often receive much of the profit from gold.

In order to redirect profits, and ensure that these support miner development instead, the project will work towards linking miners more closely/directly to refiners and/or buyers, essentially shortening the

gold supply chain.

An additional advantage of shortening the gold supply chain could result in a reduction of opportunities for tax embezzlement and tax seeking behaviour.

Healthcare: Although not as significant as the ASGM sector, the health sector in Honduras is an important source of Mercury releases, impacting local and global human and environmental health.

By introducing Mercury-free devices in the healthcare sector and reducing Mercury releases, the project will directly benefit the health of healthcare workers (such as doctors, nurses and hospital cleaning staff), patients as well as waste handlers, collectors and recyclers who face hazardous working conditions when in contact with Mercury containing wastes which are inadequately disposed of. Communities living close to waste disposal sites (municipal waste dumps and landfills) or incinerators will also benefit.

Gender considerations: Women represent a large portion of workers employed in healthcare services (according to the U.S. Bureau of Labor Statistics, 73% of medical and health service managers are women[38]). Although similar statistics are not available for Honduras, it can be assumed that the majority of healthcare workers are female. Therefore, the "nature" of the target beneficiaries instinctively lends itself to target women as key stakeholders. Additionally, the project will encourage, in the model HCFs, the emergence of 'champions' of better HCWM practices. Experience from the GEF/UNDP/WHO Global Medical Waste project demonstrates that this values-based effort can reinforce women empowerment within the HCF staff and administration.

The project's capacity building and training programmes will be developed and tailored to different recipients within the healthcare sector, such as i) Trainers; ii) Medical staff, such as doctors, nurses and paramedical staff, iii) Hospital maintenance and sanitary staff iv) Administrators, etc. Training will also be tailored and provided to support services linked to healthcare facilities, such as laundries, waste handling and transportation services, treatment facilities as well as workers in waste disposal facilities.

Economic considerations: The project aims to replace Mercury-containing devices and Mercury added products with cost-effective Mercury-free alternatives. By doing so the project will reduce the burden of Mercury exposure on human health and the environment both at national and international level, in turn reducing costs related to abatement activities, healthcare costs and other socio-economic costs resulting from Mercury exposure and pollution.

However at national level, the costs for the management of Mercury containing waste will increase. Therefore, the project will conduct an assessment of potential Cost-Recovery Approaches (CRAs), and later on introduce one or more CRA to cover the collection, transportation, storage and ultimate disposal/treatment of Mercury ocntaining wastes.

2.4.6 Cost-effectiveness

Project activities have been designed in such a way that cost-effectiveness should be achieved during project implementation. The implementation will follow standard UNDP rules and regulations and will assure that procurement processes will be open, transparent and competitive. All larger contracts will

[38] Forbes (June, 2012) available at: http://www.forbes.com/sites/davechase/2012/07/26/women-in-healthcare-report-4-of-ceos-73-of-managers/

be published internationally. UNDP procurement procedures for all project activities, including selection of services and equipment, will be based on the best quality/cost ratio.

Healthcare Sector: As part of the ongoing UNDP/GEF/WHO Global Medical Waste project, cost data related to the phase-out of Mercury containing devices, and the management of Mercury containing waste from the health sector have been documented. The funding levels of each of the healthcare sector activities proposed as part of the Honduras project have been based on the costs incurred by the Global Medical Waste project.

ASGM Sector: Costing information related to the phase-down and phase-out of the use of Mercury in the ASGM sector, has been based on the costs and expenditures incurred during the UNDP/GEF UNIDO-implemented project "Removal of Barriers to the Introduction of Cleaner Artisanal Gold Mining and Extraction Technologies", as well as ASGM activities currently being implemented in the Latin-American region (e.g. those supported by BRI/DoS, BIO Redd+, among else).

The funding level of the proposed project is therefore deemed comparable and proportional to the level of activities planned while considering local conditions, and as such is deemed the most cost-effective.

2.4.7 Coordination with other initiatives

There are a number of regional and global initiatives (past, on-going and future) that are relevant for the proposed project, and are expected to provide important insights, lessons-learned and experiences that will improve the implementation of this project (see table x below). Therefore the project will ensure close coordniation with these initiatives and the organizations/entities which are implementing them.

For an overview of the projects that constitute the baseline for this project, please refer to section 1.3.

Table 12: Overview of relevant HCWM related programmes and projects (past, on-going and planned).

Entity / Organization	Description
UNDP/WHO/GEF	Demonstrating and Promoting Best Techniques and Practices for Reducing Health-Care Waste to Avoid Environmental Releases of Dioxins and Mercury in Argentina, India, Latvia, Lebanon, Philippines, Senegal, Tanzania and Viet Nam". GEF Grant: 10,326,455 US$
UNDP	Uruguay: Environmental Sound Life-Cycle Management of Mercury Containing Products and their Wastes. GEF Grant: 700,000 US$
UNDP	Removal of Barriers to the Introduction of Cleaner Artisanal Gold Mining and Extraction Technologies. GEF Grant: 6,806,800 US$
UNEP	Global Mercury Partnership
UNEP/BCCC LAC/Norway	Mercury storage project for the Latin American and Caribbean Region
UNEP/BCCC LAC	Uruguay and Argentina: Bi-national project on storage and final disposal of Mercury
UNEP	Regional: Development of mercury action plans in Latin America and the Caribbean

USEPA/Norway/ BCCC LAC	Argentina, Costa Rica and Uruguay: Minimization and environmentally sound management of mercury containing waste within the context of the implementation of the Basel Convention
WHO-HCWH	Global Initiative to Substitute Mercury-Based Medical Devices in Health Care
USAID, USEPA, CCAD	Environmental Cooperation to strengthen the review of EIA in the Metallic and non-Metallic Mining Sector
CCAD	Trans-boundary Biosphere Reserve Project – Heart of the Central American Biological Corridor - Assessment of Environmental Impacts of artisanal mining in Honduras and Nicaragua
USAID/Chemonics/ Colombia BIO-REDD+	Project supports biodiversity, climate change mitigation (REDD), and climate change adaptation activities in the Choco and Caribbean regions. The BIO REDD+ project is also working in the Bajo Cauca Region (Northern Colombia) supporting the legalization and formalization of small gold miners, the technology transfer to improve gold extraction and reduce the environmental impacts and the use of Mercury, and developing new approaches to land reclamation after the mine is closed.

2.4.8 Sustainability

An enabling environment to ensure sustainability of project results and potential for scaling up/replication of project results to be achieved through several measures:

- Strengthening of the institutional capacity for the ESM of Mercury and Mercury containing wastes (e.g. development of human capacity for risk and Mercury assessments, development of laboratory capacity for monitoring/analysis, strengthening of the national coordination mechanisms for the implementation of the Minamata Convention, etc.).
- Drafting and facilitating the approval/adoption process for a national plan on the ESM of Mercury.
- Drafting and facilitating the approval/adoption process of regulatory instruments to impose restrictions on the import of Mercury-containing medical devices.
- Drafting/Development of standards and technical guidelines on the safe storage, packaging, transportation, management, inspection and monitoring of Mercury containing wastes.
- Building the capacity of mining communities to improve/shorten the gold supply chain, resulting in better profit margins for sustainability sourced gold (e.g. establishing a legal negotiation centre, connecting mining communities directly to regional refiners and global buyers).
- Introducing mining communities to BAT/BEP to build the necessary capacity to produce Green(er) gold and access markets with better profit margins.
- Identifying and establishing interim and long-term storage capacity for Mercury containing wastes.
- Assessing/introducing Cost-Recovery Approaches (CRAs) to cover the costs for collection, transport, storage and ultimately treatment/disposal.
- Publication and dissemination of lessons-learned.

2.4.9 Replicability

During the project's duration, the proposed project will initiate the replication of BEP/BAT approaches, project activities and results in three (3) ASGM communities and two (2) additional HCFs. The project will do so to ensure that momentum is not lost and activites at national level do not slow down/halt because the project comes to an end. Financial support for these activities will partly orginate from GEF resources and partly from national resources. National contributions for these replication activities will be sourced during the second half of the project's implementation.

The strengthening of the national policy and regulatory framework, as foreseen under component 2 of the project (with the objective to reduce reliance on Mercury), will put regultory instruments in place which will create the enabling environment to replicate project results across the country.

As part of project component 5, lessons-learned and best practices will be captured and documented for dissemination at national, regional and global level. Materials will be posted on the project's website to facilitate dissemination.

In addition, through the project's partnerships with the Artisanal Gold Council, Biodiversity Research Institute (BRI), BIO-RED+ as well as other regional and global partners (e.g. BCCC-LAC), training materials, such as training videos and programmes developed as part of the project will contribute towards the project "*"Development and implementation of artisanal and small-scale gold miner training resources for reducing mercury use and release in South America"*. The BRI project is developing a series of training modules on appropriate and more efficient mining technologies for small-scale miners. Ultimately, the project anticipates developing a quality-training package that will be made publically available via an ASGM training portal. Each module will address a specific step in the mining process where the incorporation of appropriate technologies can be introduced to improve efficiency, increase gold recovery, and reduce reliance on mercury.

2.4.10 Country Ownership, country eligibility and country drivenness

The Government of Honduras has been a strong advocate for a globally, legally-binding instrument on Mercury and the Secretary of Natural Resources and Environment (SERNA), through its Center for the Study and Control of Pollutants (CESCCO), representing all National Chemicals Convention Focal Points, has been serving as a member of the Intergovernmental Negotiating Committee (INC) meetings.

The Government of Honduras signed the Minamata Convention on Mercury on 24 September 2014, at the occasion of a high-level special event entitled "*The Minamata Convention on Mercury: Towards its early entry into force and effective implementation"* organized during the opening of the sixty-ninth session of the United Nations General Assembly[39].

Even though the Government of Honduras disposes of limited financial resources, the amount of effort towards improving the management of Mercury and Mercury wastes over the past few years clearly demonstrates their commitment towards improving the current situation. The co-financing commitments provided by the country's Government is another clear indication of their commitment towards the objectives of the proposed project.

[39] http://unep.org/newscentre/Default.aspx?DocumentID=2796&ArticleID=11001&l=en#sthash.ittYPeBF.dpuf

III. PROJECT RESULTS FRAMEWORK

	Output	Indicator	Baseline	Targets End of Project	Source of verification	Risks[40]
Project Objective[41]		• 1,000 kg of Mercury releases reduced/year from ASGM.	• 5,000 kg/yr of Mercury is released from ASGM activities in El Corpus.	• 1,000 kg of Mercury release reduction/year achieved through introduction of BEP/BAT in ASGM.	• Copy of purchasing records of negotiation centers.	
		• 14.8 kg of Mercury reduction achieved/year from Healthcare (4.3 kg/yr from medical devices and 10.5 kg from dental amalgam)	• 16.9 kg/yr of Mercury is released from the health sector (medical devices). • 412 kg/yr of Mercury is used for dental amalgam yearly.	• 14.8 kg of Mercury release reduction/year achieved through introduction of BEP/BAT in health care.	• Copy of purchasing records from project healthcare facilities.	
COMPONENT 1: STRENGTHEN INSTITUTIONAL CAPACITIES TO ACHIEVE THE ESM OF MERCURY (GEF: 154,250 US$; CO-FINANCING: 500,000 US$)						
Outcome 1.1: Improved capacity at institutional level to assess and monitor Hg releases, Hg levels in populations, and generate data and scientific information in order to take action on priority issues.	**Output 1.1.1** National Mercury Release Inventory developed	National Mercury Release Inventory Report finalized	• A National Assessment of the Use of Mercury in Honduras was conducted in 2011, however the assessment did not provide a detailed national Mercury release inventory.	• National Mercury Release Inventory (level 1) completed	• Inventory Report	
	Output 1.1.2 Analytical capacity of health & Env. Institutions to monitor Hg releases developed.	National Laboratory able to undertake Mercury analysis. Laboratory staff trained.	• There is no national capacity to analyze Mercury in environmental or biological samples. • The National Surveillance Laboratory (SESAL)	• CESCCO's laboratory able to determine Mercury in environmental matrices such as soil and water as well as biological samples (blood and urine).	• Protocols for the collection and analysis of mercury in biological samples and environmental media. • Reports on analysis results of mercury in biological samples and	

[40] For the Mitigation Measures for these risks, kindly refer to Annex I: Risk Analysis and Risk Mitigation Measures.

[41] *Objective (Atlas output) monitored quarterly ERBM and annually in APR/PIR*

			does not dispose of a laboratory that can analyze metals.		environmental media.	
	Output 1.1.3 Hg population risk assessment(s) conducted.	• Hg population risk assessment(s) completed	• The country has no experience in conducting Mercury risk population studies	• Hg population risk assessment(s) completed in the mining community of El Corpus, Choluteca. • Stakeholders informed about population groups of high risk to Mercury.	• Copy of Risks assessment/epidemiological study. • Scientific article published in an international journal.	
Outcome 1.2: Capacity of the National Commission for SMC (CNG) strengthened to meet future commitments under the Global Hg treaty.	**Output 1.2.1** Capacity of the National Commission for SMC strengthened to meet future commitments under the Global Hg treaty.	• CNG aware of the Convention's requirements as they relate to the focus of the project (Mercury added products and ASGM). • CNG assumes role as national coordination mechanism on Mercury.	• As part of a SAICM project, a National Commission on the Environmentally Sound Management of Chemicals (CNG) was created in 2013. • Honduras does not dispose of a coordination mechanism on Mercury management.	• CNG members trained on the Minamata Convention's requirements. • CNG members reviewed and validated the results of the Mercury Release Inventory and the Hg population risk assessment.	• Certificates of training completion and attendance sheets of training sessions.	**Risk**: Lack of coordination of the relevant institutions and ministries **Level: Low**
COMPONENT 2: STRENGTHEN THE REGULATORY AND POLICY FRAMEWORK TO SUPPORT A REDUCTION IN THE USE OF HG AND ALLOW FOR ESM OF MERCURY CONTAINING PRODUCTS AND THEIR WASTES. (GEF: 106,900 US$; CO-FINANCING: 1,387,582 US$)						
Outcome 2: Stengthened policy and regulatory framework to reduce reliance on Mercury, and Mercury added-products and improve the environmental sound	**Output 2.1** National Plan for the Environmentally Sound Management of Mercury Developed.	• National Plan for the Environmentally Sound Management (ESM) of Mercury developed.	• A policy for the Sound Management of Chemicals exists. • A National Plan on Mercury was developed in the past (2011) and requires updating. • SESAL does not dispose of policies, strategies and plans for addressing mercury removal.	• National Plan for the Environmentally Sound Management (ESM) of Mercury developed.	• Copy of National Plan.	

management of Mercury	**Output 2.2** Regulatory instruments to reduce the use of Mercury and Mercury added products drafted.	• Number of regulatory instruments drafted.	• No standard, risks assessment or monitoring protocol available for Mercury in products or food. • A new Mining Law was enacted in 2013 with provisions on ASGM. However BAT and BEP manuals/guidelines, specifically on ASGM, were not developed.	• Draft regulation and monitoring standard on the use of Mercury in products developed • BAT and BEP manual for use in the ASGM sector. • Draft national (import) standards on maximum Mercury content in products prepared.	• Draft regulation and monitoring standard on the use of Mercury in products • ASGM-BAT/BEP Manual • Draft national (import) standards on maximum Mercury content in products	**Risk**: New regulatory instruments cannot be drafted and adopted within the project's timeframe due to the length of the law making process **Level: Medium**
	Output 2.3 Proposal for the harmonization of classification codes for Mercury containing products developed.	• National tariff codes for Mercury containing products alligned with WTO guidelines.	• Classification codes for Mercury containing products are not alligned with WTO guidelines which makes it challening for DEI to monitor trade in Mercury and Mercury added products.	• Mercury-containing products identified. • Classification of mercury-added products defined. • National tariff codes proposed.	• Draft document containing classification and proposal for tariff codes of Mercury added products. • Copy of the request of approval of the national tariff codes submitted to the Ministry of Economic Development.	
	Output 2.4 Standards and technical guidelines for the safe storage, packaging, transportation, data management, inspection and monitoring of Mercury containing wastes developed.	• Draft standards and technical guidelines for the safe storage, packaging, transportation, data management, inspection and monitoring of Mercury containing wastes available.	• Management of mercury-contaminated waste was included in the Regulations for the Management of Hazardous Waste Generated in Health Facilities (No. 07 Agreement, February 28, 2008). The regulation is currently under revision by the Ministry of Health. • No standards or technical guidelines are available for the management of	• Draft standards and technical guidelines for the safe storage, packaging, transportation, data management, inspection and monitoring of Mercury containing wastes prepared.	• Copy of draft standards and technical guidelines.	**Risk**: New regulatory instruments cannot be drafted and adopted within the project's timeframe due to the length of the law making process. **Level: Medium**

			Mercury in the ASGM sector.			
COMPONENT 3: REDUCE MERCURY RELEASES FROM PRIORITY SECTORS (ARTISANAL & SMALL SCALE GOLD MINING AND HEALTHCARE) TO PROTECT HUMAN HEALTH AND THE ENVIRONMENT (GEF: 701,350 US$; CO-FINANCING: 1,647,272 US$)						
Outcome 3.1 Reduced Hg releases from priority mining communities as a result of the adoption of BAT/BEP practices and the phase-out of unsound mining practices.	**Output 3.1.1** In-depth Hg baseline assessment in 1 priority ASGM community completed (incl. socio-economic analysis).	• Representative surveys and participants lists created. • Survey team hired and trained. • Percentage of miners surveyed. • Percentage of milling operations analyzed for mercury use. • Survey completed covering 50% of the primary target mining community and 15% of secondary replication project communities. • Baseline report available.	• No Mercury baseline is available for the mining community of El Corpus, Choluteca.	• Team of locals that understand ASGM practices, Mercury use and gold production build. • Baseline survey planned and executed. • Baseline survey report drafted and published.	• Copy of draft survey and participants list. • Copy of survey report. • Certificates of training completion and attendance sheets of training sessions.	**Risk**: Difficulties related to the gathering of information on ASGM and the management of Mercury. **Level**: Low **Risk**: Slower than expected implementation of BEP/BAT in the project's ASGM communities. **Level: Medium** **Risk**: Economic incentives perceived too low by artisanal gold miners to adopt BEP/BAT resulting in continued unsound practices and use of Mercury. **Level**: Medium **Risk:** Technology procurement beset by delays, inadequate equipment, wrong specifications, lack of
	Output 3.1.2 BAT/BEP introduced to 1 ASGM community to reduce Hg releases and adopt socially and env. sound mining practices.	• % of Corpus ore processed with less mercury or mercury free techniques. • Training curriculum available • 5 trainers trained in mercury free techniques • 200 of miners trained in BEP/BAT at primary site.	• All gold ore in El Corpus is processed with Mercury.	• Mercury free processing facilities built or rent • Colllaboration on training programme established with one organization/institution. • Training program on BAT/BEP for miners developed and miners trained.	• Copy of training materials and plans. • Certificates of training completion and attendance sheets of training sessions. • Photos of installed filters. • Copy of (training) video.	

		• Training video available. • % of gold shops in the priority community have adopted mercury filters and PPE and have been trained on their use.		• Video shot of local miners being trained in clean techniques. • Personal protection measures introduced at gold shops. • Filters installed and PPE introduced in gold shops • Gold shops trained on use of filters and PPE.		transparency, or non-compliance with UN bidding requirements and procedures. **Level: Low** **Risk**: Mistrust of miners towards Government agencies and entities (as well as their affiliates – such as UNDP) trying to support the formalization of the ASGM sector and the workers conditions of the miners **Level**: High **Risk**: Current middlemen may resist change to shortening the gold supply chain, some of which may be linked to organized crime. Tax seeking behavior throughout the gold supply chain, jeopardizing peace and security in the ASGM communities. **Level**: High **Risk**: Less demand for premium fair trade or green gold than supply of the same.
	Output 3.1.3 Capacity of 1 mining community built to improve the gold supply chain	• Negotiation center operational or partnership with an existing negotiation center operational. • Training curriculum available. • # negotiation center staff and miners trained. • # of service agreements with equipment providers negotiated. • Lending/saving fund established/facilitated • # of customs agreements btw national government and governments where large refiners are located developed. • # of purchasing/ exchange deals with large refiners. • % of miners of cooperatives make use of premiums.	• Miners sell their ore or gold to middle men. As a result most of the profits end up with the middle men.	• Negotiation center established or partnership with an existing negotiation center established. • Training programmes and guidance documentation for all relevant negotation center business issues developed. • Negotiation center staff and miners trained. • Access to financing for local miners to (existing) lending and savings structures established. • Customs agreements btw. national government and governments where large refiners are located negotaited. • Purchasing/ exchange deals with large refiners negotiated. • Premiums for sustainably sourced	• Copy of training materials and plans. • Certificates of training completion and attendance sheets of training sessions. • Photos of negotiation center. • Copies of log books on sale of sustainable gold. • Posters/photos of Hondurian jewerly campaign.	

		• 1 set of 100% Hondurian jewellery figures in publicity campaign.		gold introduced. • Awareness created on sustainably sourced gold from Honduras.		**Level**: Medium
	Output 3.1.4 Replication process of pilot experience in three (3) additional geographical priority areas launched.	• Priority ASGM communities identified for replication purposes. • 2 clean mining workshops established in the priority communities. • 120 miners trained. • 30 miners participated in clean mining course in El Corpus, using its pilot facilities.	• All gold ore in El Corpus in ASGM priority sites is processed with Mercury.	• Priority ASGM sites for replication of project identified. • Mining workshops established in the priority communities. • Miners trained on BAT/BEP.	• Certificates of training completion and attendance sheets of training sessions. • Photos of clean mining workshops.	
Outcome 3.2 Reduced Hg releases from priority Healthcare Facilities through the adoption of BAT/BEP practices and the phase-out of Mercury containing devices.	**Output 3.2.1** In-depth Hg baseline assessment completed for 2 model Healthcare Facilities (HCFs).	• 2 HCWM committees established. • # of staff trained on conducting a Mercury assessment • 2 Mercury baseline assessments completed.	• HMCR conducted a simplified baseline in 2013. • HMCR disposes of a Biosafety Disaster/Emergency Committee • HEU disposes of an Epidemiological Surveillance Committee. • UNAH has a Reagents Committee which handles expired reagents for the school and is constructing a temporary storage facility for this type of waste.	• HCWM committees operations in each HCF. • Healthcare facility staff trained on conducting Hg baseline assessments. • 2 Hg baseline assessments completed.	• Copy of list of HCWM members and meeting minutes. • Copy of training materials. • Certificates of training completion and attendance sheets of training sessions. • Copies of Hg baseline reports and Hg plans.	**Risk**: Difficulties related to the gathering of information on Healthcare and the management of Mercury. **Risk**: Low
	Output 3.2.2	• # of staff trained on	• In August 2014, SESAL	• Healthcare facility	• Copy of training	

	Facilities' HCWM programmes updated to include Hg phase-out and management.	conducting a HCWM assessment • a HCWM plan developed for each project HCF.	adopted the WHO/PAHO Handbook for developing waste management plans for healthcare facilities. • HEU/UNAH and HMCR have not yet developed waste management plans. • SESAL does not dispose of policies, strategies and plans for addressing mercury removal.	staff trained on conducting HCWM baseline assessments. • 2 HCWM baseline assessments completed.	materials. • Certificates of training completion and attendance sheets of training sessions. • Copies of HCWM baseline reports and HCWM plans.	
	Output 3.2.3 Facility staff trained on BAT/BEP practices for Hg management.	• # of staff trained on Mercury management. • One Hg management manual.	• There is some experience among the staff of the Department for Hospital Management and Health Regulations; Secretariat for Integrated Networks and Health Services in conducting inventories, spill management and disposal of mercury waste, as a result of the San Felipe General Hospital pilot project (2008-2012). • HCF personnel is not aware of the risks of Hg and has not been trained in proper Hg management practices. • Manuals for BAT and BEP for the	• HCF staff trained on management of Mercury and mercury containing wastes. • Interim storage facilities set up at project HCF level. • Manual for Hg management in HCF setting developed.	• Copy of training materials. • Certificates of training completion and attendance sheets of training sessions. • Copy of Hg management manual.	

			management of mercury waste in health facilities is not available.			
	Output 3.2.4 Comparative study on Hg-free devices concluded and procurement processes adapted based on staff preferences.	• 2 comparative study reports on Hg-free devices. • # of Mercury-free devices procured for the project HCFs. • # of Hospital Mercury-free at the end of project implementation.	• In both project hospitals, medical supplies and medical added products such as thermometers, sphygmomanometers , lab reagents, vaccines and dental amalgams are being used.	• Comparative study on Hg-free devices concluded and report finalized. • Preferred Mercury-free devices selected for each project HCF. • Mercury-free devices procured for HCFs. • Procurement processes of 2 project HCFs adjusted.	• Copy of comparative study report. • Photos of staff using Mercury-free devices.	**Risk**: Little confidence of healthcare facilities in mercury-free devices, resulting in continued use of mercury containing devices. **Level**: Low
	Output 3.2.5 Replication process of pilot experiences launched in 2 additional HCFs.	• 2 Mercury baseline assessments completed. • 2 Hg management and phase-out plans drafted. • # of staff trained on Mercury management and use of Mercury-free alternatives. • Procurement processes of 2 replication HCFs adjusted.	• It is assumed that in the replication HCFs medical supplies and medical added products such as thermometers, sphygmomanometers , lab reagents, vaccines and dental amalgams are being used.	• Mercury baseline assessments completed for each replication HCF. • Staff trained on Mercury management and use of Mercury-free alternatives. • Procurement processes of replication HCFs adjusted.	• Certificates of training completion and attendance sheets of training sessions. • Copies of Hg baseline reports and Hg plans. • Copy of procurement plans.	
COMPONENT 4: STRENGTHEN TECHNICAL CAPACITY AND INFRASTRUCTURE FOR THE INTERIM STORAGE OF MERCURY CONTAINING WASTES (GEF: 99,500 US$; CO-FINANCING: 2,385,000 US$)						
Outcome 4: Interim financially sustainable storage options for Hg-containing wastes established and long-term	**Output 4.1** Assessment of infrastructure, capacity and cost recovery approaches for Hg waste storage	• Assessment report.	• No project partners/stakeholders have access to a temporary storage site for Mercury (containing) waste. • UNAH's Reagent	• An assessment conducted and report prepared, summarizing: - Storage and disposal options for Mercury containing wastes. - Potential Cost-	• Copy of assessment report.	

storage/disposal options identified.	conducted.		Committee handles expired reagents and is in the process of constructing a temporary storage facility for reagents. • San Felipe Hospital, designed and constructed a temporary storage site for Mercury as part of a pilot project (2008 – 2012).	Recovery Approaches (CRAs). - Capacity of various actors and stakeholders in the collection, transport, and interim storage of hazardous wastes. - Recommendations to address identifed capacity needs/gaps		
	Output 4.2 Technical capacity of key actors for various Hg LCM stages developed and CRAs put in place.	• # of people trained on the LCM of Hg • # of CRA put in place.	• No existing capacity for the LCM of Mercury. • No Cost Recovery Mechanisms are in place for Mercury management.	• Private sector operators and national entities involved in the management of wastes trained in the various stages of the Life-Cycle Management (LCM) of Mercury added products and their wastes. • CRAs for the LCM of Mercury put in place at national level.	• Copy of training materials. • Certificates of training completion and attendance sheets of training sessions. • Copy of the proposal for the institutionalization of a Cost Recovery Mechanism.	
	Output 4.3 Interim storage spaces established for healthcare Hg waste.	• # of interim storage spaces/rooms established. • # of people trained on the management of Hg storage spaces • Operational procedures for management of Hg storage spaces available.	• Project partners/stakeholders do not have access to interim storage spaces/rooms for Mercury (containing) waste at facility level.	• Interim storage speces/rooms set up at project HCF level. • Operational procedures for the management of Hg storage spaces drafted and implemented. • Facility staff trained in the safe management of Hg storage spaces.	• Photos of interim storage facilities. • Copy of waste logs. • Copy of training materials. • Certificates of training completion and attendance sheets of training sessions. • Copy of operational procedures.	
	Output 4.4 Pilot demonstration of ESM and interim storage of other Hg-containing wastes	• Centralized storage facility operational. • # of people trained on the management of the centralized Hg	• No centralized faiclity for the collection and storage of Mercury containing wastes exists at national level.	• Storage facility for of mercury containing waste designed and operational. • Operational procedures	• Photos of storage facility. • Copy of waste logs. • Copy of training materials.	

	initiated at national level.	storage facility. • Operational procedures for management of the centralized Hg storage facility.		for the management of the Hg storage facility drafted and implemented. • Facility staff trained in the safe management of the Hg storage facility.	• Certificates of training completion and attendance sheets of training sessions. • Copy of operational procedures.	
COMPONENT 5: MONITORING, ADAPTIVE FEEDBACK, OUTREACH AND EVALUATION (GEF: 120,000 US$; CO-FINANCING: 125,000 US$)						
Outcome 5 Project results sustained and replicated	**Output 5.1** M&E and adaptive management applied to project in response to needs, mid-term evaluation findings with lessons learned extracted.	• Number of high quality monitoring and evaluation documents prepared during project implementation.	Not applicable	• 4 Quarterly Operational Reports submitted to UNDP each year • 1 annual APR/PIR submitted to UNDP each year. • 1 Mid-term project review. M&E results and insights are applied to provide feedback to the project coordination process, and have informed/redirected the design and implementation of the second phase of the project. • 1 Final evaluation. • MTE and FE must include a lessons learned section and a strategy for dissemination of project results.	• 4 QORs available for each project year. • APR/PIR available for each project year. • Mid-Term Evaluation Report available. • Mid-Term Evaluation Report available. • Reports submitted to UNDP	**Risk**: It is assumed that the regional and national project technical coordinators will prepare all the reports that are required by the GEF and UNDP. **Level: Low**
	Output 5.2 Lessons learned and best practices are disseminated at national, regional and global level.	• 1 comprehensive lessons-learned report. • 1 project website/Facebook page/Twitter	• In Honduras there are currently no best practices for Mercury management easily accessible.	• Project website/Facebook and twitter account designed/set-up and regularly updated. • Lessons learned and	• Website/Facebook and Twitter account • Copy of lessons-learned report/publication • Lessons-learned from	

		account containing all published project reports, training materials and videos for easy dissemination and sharing.		best practices are accumulated in reports/documents/videos. • Lessons-learned and experiences are presented at national, regional and international events.	the project easily accessible and searchable on-line. • Project related documentation, photos and videos posted on the project's website/Facebook page and Twitter account.	

IV. TOTAL BUDGET AND WORKPLAN

GEF Outcome/Atlas Activity	Responsible Party/ Implementing Agent	Fund ID	Donor Name	Atlas Budgetary Account Code	ATLAS Budget Description	Amount Year 1 (USD)	Amount Year 2 (USD)	Amount Year 3 (USD)	Amount Year 4 (USD)	Total (USD)	See Budget Note:
Component 1: Strengthen Institutional Capacities to Achieve the Environmentally Sound Management (ESM) of Mercury	**SERNA**	**62000**	**GEF**	71200	International Consultants	37,000	0	5,000	0	42,000	1
				71300	Local Consultants	12,000	0	0	0	12,000	2
				71600	Travel	20,650	0	5,500	0	26,150	3
				72100	Contractual Services	2,000	1,000	1,000	0	4,000	4
				72200	Equipment	52,000	0	0	0	52,000	5
				72500	Office Supplies	600	0	200	0	800	6
				74200	Printed media	2,000	3,000	0	0	5,000	7
				74500	Miscellaneous	2,300	0	0	0	2,300	8
				75700	Workshop/training	6,000	3,000	1,000	0	10,000	9
					Sub-total GEF	**134,550**	**7,000**	**12,700**	**0**	**154,250**	
					Total Component 1	**134,550**	**7,000**	**12,700**	**0**	**154,250**	
Component 2: Strengthen the Regulatory and Policy Framework to Support a Reduction in the Use of Hg and allow for ESM of Mercury containing products and their wastes.	**SERNA**	**62000**	**GEF**	71200	International Consultants	0	0	24,000	12,000	36,000	10
				71300	Local Consultants	5,000	8,000	24,000	8,000	45,000	11
				71600	Travel	1,000	1,000	5,000	0	7,000	12
				74200	Printed media	0	0	2,000	0	2,000	13
				74500	Miscellaneous	1,000	0	1,000	3,000	5,000	14
				75700	Workshop/training	2,700	3,200	2,000	4,000	11,900	15
					Sub-total GEF	**9,700**	**12,200**	**58,000**	**27,000**	**106,900**	

					Total Component 2	**9,700**	**12,200**	**58,000**	**27,000**	**106,900**	
Component 3: Reduce Mercury Releases from Priority Sectors (ASGM & Healthcare) to Protect Human Health and the Environment	**SERNA**	**62000**	**GEF**	71200	International Consultants	12,000	20,000	46,150	20,000	98,150	16
				71300	Local Consultants	40,000	30,000	52,000	20,000	142,000	17
				71600	Travel	9,000	11,500	2,500	15,000	38,000	18
				72100	Contractual Services	0	10,500	30,000	0	40,500	19
				72200	Equipment	0	145,000	60,000	50,000	255,000	20
				72500	Office supplies	700	200	600	0	1,500	21
				74200	Printed media	2,500	4,000	2,000	0	8,500	22
				74500	Miscellaneous	5,000	1,500	1,700	0	8,200	23
				75700	Workshop/training	4,000	59,500	16,000	30,000	109,500	24
					Sub-total GEF	**73,200**	**282,200**	**210,950**	**135,000**	**701,350**	
					Total Component 3A	**73,200**	**282,200**	**210,950**	**135,000**	**701,350**	
Component 4: Strengthen Technical Capacity and Infrastructure for the Interim Storage of Mercury Containing Wastes	**SERNA**	**62000**	**GEF**	71200	International Consultants	0	9,000	9,000	0	18,000	25
				71300	Local Consultants	0	19,000	19,000	0	38,000	26
				71600	Travel	0	5,000	5,000	0	10,000	27
				72200	Equipment	0	0	30,000	0	30,000	28
				72500	Office supplies		100	0	0	100	29
				74200	Printed media	0	1,500	500	0	2,000	30
				74500	Miscellaneous	0	400	1,000	0	1,400	31
					Sub-total GEF	**0**	**35,000**	**64,500**	**0**	**99,500**	
					Total Component 4A	**0**	**35,000**	**64,500**	**0**	**99,500**	
Component 5: Monitoring, Learning, Adaptive Feedback and	**SERNA**	**62000**	**GEF**	71200	International Consultants	0	30,000	0	30,000	60,000	32
				71300	Local Consultants	0	10,000	0	10,000	20,000	33

Evaluation				71600	Travel	0	5,000	0	5,000	10,000	34
				72100	Contractual Services	5,000	5,000	5,000	11,000	26,000	35
				74500	Miscellaneous	0	2,000	0	2,000	4,000	36
					Sub-total GEF	**5,000**	**52,000**	**5,000**	**58,000**	**120,000**	
					Total Component 5	**5,000**	**52,000**	**5,000**	**58,000**	**120,000**	
Project Management Costs	**SERNA**	**62000**	**GEF**	71300	Local Consultants	10,000	10,000	10,000	10,000	40,000	37
				72200	Equipment	40,000	0	0	0	40,000	38
				74500	Miscellaneous	2,000	2,000	$2,000	2,000	8,000	39
				74599	Direct Project Costs	4,400	10,600	$12,000	3,000	30,000	40
					Sub-total GEF	**56,400**	**22,600**	**24,000**	**15,000**	**118,000**	
					Total Management costs	**56,400**	**22,600**	**24,000**	**15,000**	**118,000**	
					PROJECT TOTAL	**278,850**	**411,000**	**375,150**	**235,000**	**1,300,000**	

1.	International Consultants to support the development of the Mercury Release Inventory; Development and validation of environmental epidemiological study protocol; and CNG members trained on the Minamata Convention's requirements.
2.	National consultants to support the development of the Mercury Release Inventory and the implementation of environmental epidemiological study
3.	International travel expenses for the int. consultant (incl. DSA/TE) and local travel expenses for the national consultants and for national participants partaking in workshops/training (DSA).
4.	Participation in inter-calibration exercise
5.	Procurement of specialized lab equipment to allow for the analysis of Mercury in environmental media and biological samples; Acquisition of special materials for collection, transportation and storage of samples for the environmental epidemiological study.
6.	Office supplies and stationary for use during workshops/training.
7.	Layout and printing of the Mercury Release Inventory Report; Report of environmental epidemiological study; and the scientific publication on the results of the environmental epidemiological stud
8.	Fuel and sending duplicates for testing (environmental epidemiological study)
9.	Two workshops to review, validate, approve and raise awareness on the Hg Release Inventory; Training Workshop staff CESCCO (transfer analyst staff involved); validation workshop for the development of environmental epidemiological study protocol; Validation and awareness raising workshops on the environmental epidemiological study; 2 training workshops for CNG members
10.	International consultants to support the revision of current mining laws; Develop standards and technical guidelines for the safe storage, packaging, transportation, data management, inspection and monitoring of Mercury containing wastes.

11.	National consultants for the development of the National Plan for the Environmentally Sound Management of Mercury; Development of regulation and monitoring standard on the use of Mercury in products; Revision of current mining laws; Draft national (import) standards on maximum Mercury content in products, with a focus on Mercury containing medical devices; Proposal for the harmonization of classification codes for Mercury containing products developed; and develop standards and technical guidelines for the safe storage, packaging, transportation, data management, inspection and monitoring of Mercury containing wastes.
12.	International travel expenses for the int. consultant (incl. DSA/TE) and local travel expenses for the national consultants and for national participants partaking in workshops/training (DSA).
13.	Layout and printing of the National Plan for the Environmentally Sound Management of Mercury
14.	Printing in the Official Gazette of newly drafted/revised regulatory instruments.
15.	Workshops to review, validate, approve and raise awareness on the National Plan for the Environmentally Sound Management of Mercury; Workshops to review, validate, approve and raise awareness on regulatory instruments to reduce the use of Mercury and Mercury added products; 3 Workshops to review, validate, approve and raise awareness on harmonization of classification codes for Mercury containing products; 2 Workshops to review, validate, approve and raise awareness on the guidelines/standards for the safe storage, packaging, transportation, data management, inspection and monitoring of Mercury containing wastes.
16.	International consultants to support In-depth Hg baseline assessment in 1 priority ASGM community; Introduce BAT/BEP into 1 ASGM community; Build capacity of 1 mining community to improve the gold supply chain; Support replication process of pilot experience in three (3) additional geographical priority areas; Train HCF staff on BAT/BEP practices for Hg management and use of Hg-free devices;
17.	National consultants to support In-depth Hg baseline assessment in 1 priority ASGM community; Introduce BAT/BEP into 1 ASGM community; Build capacity of 1 mining community to improve the gold supply chain; Support replication process of pilot experience in three (3) additional geographical priority areas; Conduct in-depth Hg baseline assessment for 2 HCFs; Update facilities' HCWM programmes to include Hg phase-out and management; Conduct comparative study on Hg-free devices. Train HCF staff on BAT/BEP practices for Hg management and use of Hg-free devices;
18.	International travel expenses for the int. consultant (incl. DSA/TE) and local travel expenses for the national consultants and for national participants partaking in workshops/training (DSA).
19.	Economic incentives for ASG miners to produce sustainably sourced gold; Production of video on good ASG mining practices.
20.	Equipment and supplies for the construction of Mercury-free Rastas; Jewellery design and production.
21.	Office supplies and stationary for use during workshops/training.
22.	Design and printing of reports and manuals.
23.	Fuel as well as other unforeseen expenses.
24.	Training events for ASG miners and healthcare staff.
25.	International consultants to support assessment of infrastructure, capacity and cost recovery approaches for Hg waste storage; and assessment of technical capacity of key actors for various Hg LCM stages;
26.	National consultants to support assessment of infrastructure, capacity and cost recovery approaches for Hg waste storage; assessment of technical capacity of key actors for various Hg LCM stages; Selection and design of the center.
27.	International travel expenses for the int. consultant (incl. DSA/TE) and local travel expenses for the national consultants and for national participants partaking in workshops/training (DSA).
28.	Supplies and construction materials for the upgrading of the centralized interim storage facility.
29.	Office supplies and stationary for use during workshops/training.
30.	Design and printing of operational manuals.
31.	Blue prints.
32.	International consultants to support the Mid-Term Evaluation, final evaluation and capturing of project results and lessons-learned.
33.	National consultants to support the Mid-Term Evaluation, final evaluation and capturing of project results and lessons-learned.
34.	International travel expenses for the int. consultant (incl. DSA/TE) and local travel expenses for the national consultants.

35.	Yearly audits.
36.	Unforeseen expenses.
37.	National consultant to support the implementation of the project.
38.	Vehicle and office equipment, to ensure that the project management unit can obtain easy access to the mining sites and regularly monitor project activities.
39.	Unforeseen expenses.
40.	Direct Project Support Costs calculated based on number of contracts, hires, payments.

V. MANAGEMENT ARRANGEMENTS

The implementation modality for this project will be National Implementation Modality (NIM).

The Implementing Partner (IP) of the Project will be the Ministry of Environment and Natural resources (SERNA), which will be responsible for the implementation of the project.

The Implementing Partner shall designate a Project Coordinator who will be in charge of managing all activities in order to meet project objectives, outcomes and outputs according to the established schedule as put forward in the project document. The project coordinator reports directly to the Project Director, which is the Ministry of Environment and Natural resources (SERNA), through its Center for the Study and Control of Pollutants (CESCCO). The responsibilities of the Project Coordinator regarding requests for procurement of goods and services, cash advances, direct payments, etc. are specified in the NEX/DIM Project Management Guide.

UNDP shall provide project cycle management services as defined by the GEF Council. The Government of Honduras shall request to UNDP to provide direct project services, specific to project inputs, according to its policies and convenience. These services – and the costs of such services- are specified in the Letter of Agreement in Annex II. In accordance with GEF Council requirements, the costs of these services will be part of the executing entity's Project Management Cost allocation identified in the project budget. UNDP and the Government of Honduras acknowledge and agree that these services are not mandatory and will only be provided in full accordance with UNDP policies on recovery of the direct costs.

A National Project Board (PB) will be convened by SERNA, and will serve as the Project's coordination and decision-making body. The tentative members of the PB are listed in table 3.

Table 13. Project Board Members

Institution	Project Board Role
1. Ministry of SERNAM	Executive
2. Resident Representative of UNDP	Senior Supplier
3. A member of National Commission on the Environmentally Sound Management of Chemicals	Senior Beneficiaries
4. Secretary of Health	Senior Beneficiaries

The PB meetings will be chaired by the National Focal Point for the Minamata Convention. It will meet according to necessity, but not less than once in 3 months, to review project progress, approve project work plans and approve major project deliverables. The project board is responsible for ensuring that the project remains on course to deliver products of the required quality to meet the outcomes defined in the project document.

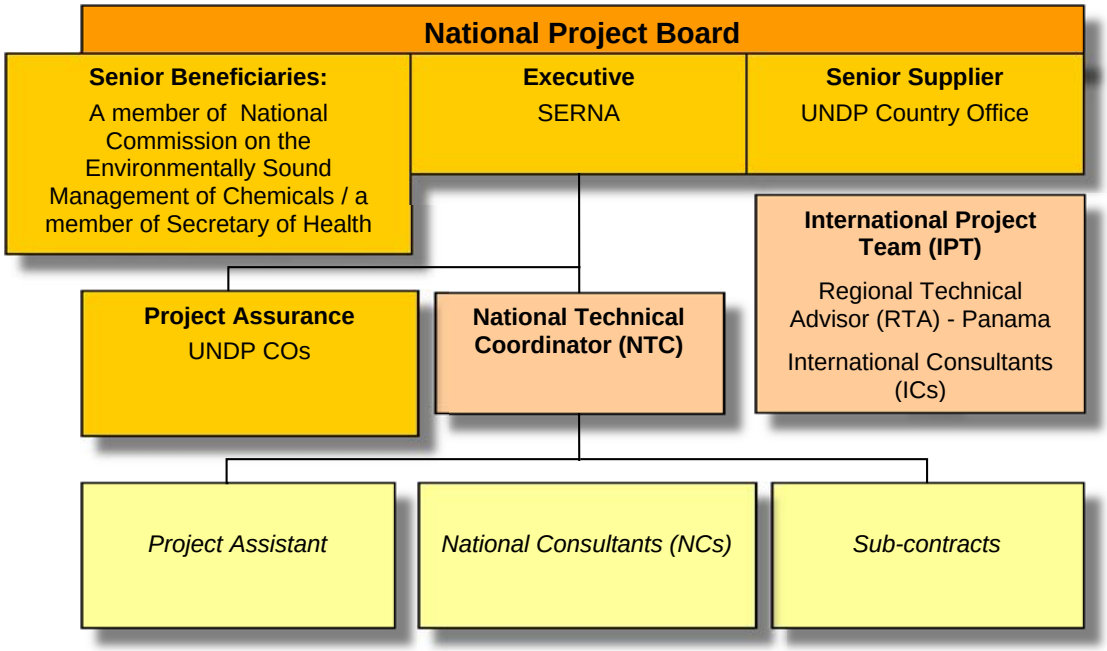
Until the National Project Board has met for the first time, and has agreed on its role and responsibilities, the following are the proposed TOR for the Project Board:

Table 14. Tentative TORs for the Project Board until revised after the first PB meeting

Terms of Reference:

1.	Provide policy and strategic oversight and support to the implementation of the Project, in particular ensuring that the project and its outputs and outcome are aligned with the future requirements of the Minamata Convention, that reports are of sufficiently high standard and quality and that they are reviewed and endorsed by project stakeholders and submitted to the Minamata Convention Secretariat will full Government endorsement.
2.	Advise and ensure stakeholder involvement on matters of related to the Life-Cycle Management (LCM) of Mercury.
3.	Review and approve Project's annual work plans, as well as other Project planning and implementation instruments.
4.	Provide inputs to the Project's APR/PIR.
5.	Support Project evaluations, if applicable.
6.	Deliberate on the TOR and membership for other committees and working groups that are expected to contribute to the implementation of Project activities and the achievement of its outcomes.
7.	Any other relevant task as applicable.

Besides the roles and responsibilities of different stakeholders outlined in this PRODOC, the following project diagram represents the expected key relationships governing the Project.



The **Executive** is comprised of the Ministry of Environment and Natural resources (SERNA) and UNDP and its decisions will be made by consensus. The Executive is ultimately responsible for the project, supported by the Senior Beneficiary and Senior Supplier. The Executive's role is to ensure that the project remains focused on its objectives and delivers outputs that contribute to higher-level outcomes. The Executive will ensure that the project gives value for money, ensuring a cost-conscious approach, and balancing the demands of Beneficiary and Supplier. The Executive is also responsible for overall

quality assurance of the project as described below. If the situation warrants it, the Executive may delegate some responsibility for the project assurance functions.

Senior Beneficiary: This refers to an individual or group of individuals representing the interests of those who will ultimately benefit from the project. The Senior Beneficiary's primary function within the Board is to ensure the realization of project results from the perspective of project beneficiaries. The member of National Commission on the Environmentally Sound Management of Chemicals and a member of Secretary of Health will constitute the Senior Beneficiaries. The Senior Beneficiary is responsible for validating the needs and for monitoring that the proposed solution meets those needs within the provisions of the project. The Senior Beneficiary role monitors progress against targets and quality criteria. While this role may require more than one person to cover all the beneficiary interests, it will not be split between too many people for the sake of effectiveness.

Senior Supplier: The Senior Supplier's primary function within the Board is to provide guidance regarding the technical feasibility of the project. This includes technical guidance on designing, developing, facilitating, procuring for and implementing the project. The UNDP Country Office will constitute the Senior Supplier for this project. The Senior Supplier role will have the authority to commit or acquire supplier resources as required.

Project Assurance: The Project Assurance role is the responsibility of the Project Board. UNDP will augment this role to ensure that its fiduciary, environmental and social safeguards and standards are maintained. Further, the Project Assurance role supports the Project Board by carrying out objective and independent project oversight and monitoring functions. This role ensures appropriate project management milestones are managed and completed.

UNDP's Country Office in Honduras will be responsible for ensuring transparency, appropriate conduct and financial responsibility. This office will oversee annual financial audits, as well as the execution of independent Project Midterm and Terminal Evaluations. All financial transactions and agreements, including contracts with staff and consultants, will follow the rules and regulations of United Nations. The UNDP Regional Coordinating Unit will provide regular programmatic and administrative oversight as well.

The **Project Board** is responsible for making management decisions for a Project in particular when guidance is required by the Project Manager. The Project Board plays a critical role in Project monitoring and evaluations by quality assuring these processes and products, and using evaluations for performance improvement, accountability and learning. It ensures that required resources are committed and arbitrates on any conflicts within the Project or negotiates a solution to any problems with external bodies. In addition, it approves the appointment and responsibilities of the Project Manager and any delegation of its Project Assurance responsibilities. The Project Board is equally responsible for approving Annual Work Plans. Based on the approved Annual Work Plans, the Project Board can also consider and approve the quarterly plans (if applicable) and also approve any essential deviations from the original plans.

In order to ensure UNDP's ultimate accountability for the Project results, Project Board decisions will be made in accordance to standards that shall ensure management for development results, best value for money, fairness, integrity, transparency and effective international competition. In case consensus cannot be reached within the Board, the final decision shall rest with the UNDP.

Project Manager: The Project Manager (PM) has the authority to run the Project on a day-to-day basis on behalf of the Implementing Partner within the constraints laid down by the Board. The Project Manager's prime responsibility is to ensure that the Project produces the results specified in the Project document, to the required standard of quality and within the specified constraints of time and cost. The Project Manager is also responsible for convening the Project Inception Meeting, and for convening meetings of the National Project Board, which will be chaired by Minister of SERNAM.

Project Support: The Project Support role provides Project administration, management and technical support to the Project Manager as required by the needs of the individual Project or Project Manager.

Audit: The Project will undergo audit by a certified auditor according to UNDP rules and regulations.

The Government will provide the Resident Representative with certified periodic financial statements, and with an annual audit of the financial statements relating to the status of UNDP (including GEF) funds according to the established procedures set out in the Programming and Finance manuals.

The audit will be conducted in accordance with UNDP financial regulations and rules and applicable audit policies on UNDP projects.

VI. MONITORING FRAMEWORK AND EVALUATION

The project will be monitored through the following M&E activities. The M&E budget is provided in the table at the end of this section.

Project start:

A Project Inception Workshop will be held within the first 2 months of project start with participation of those with assigned roles in the project organization structure, the UNDP Country Office and where appropriate/feasible regional technical policy and programme advisors as well as other stakeholders. The Inception Workshop is crucial to building ownership for the project results.

The Inception Workshop should address a number of key issues including:

a) Assist all partners to fully understand and take ownership of the project. Detail the roles, support services and complementary responsibilities of the UNDP CO and RCU staff *vis à vis* the project team. Discuss the roles, functions, and responsibilities within the project's decision-making structures, including reporting and communication lines, and conflict resolution mechanisms. The Terms of Reference for project staff will be discussed again as needed.
b) Based on the project results framework and the relevant GEF Tracking Tool (if at the time of the Inception Workshop GEF tracking tools/indicators are available for Mercury), finalize the first Annual Work Plan. Review and agree on the indicators, targets and their means of verification, and recheck assumptions and risks.
c) Provide a detailed overview of reporting, monitoring and evaluation (M&E) requirements. The Monitoring and Evaluation work plan and budget should be agreed upon and scheduled.

d) Discuss financial reporting procedures and obligations, and arrangements for annual audit.
e) Present and formalize the Project Steering Committee and Technical Advisory Committee.
f) Plan and schedule Project Steering Committee meetings. Roles and responsibilities of all project organization structures should be clarified and meetings planned. The first Steering Committee meeting should be held within the first 12 months following the inception workshop.

Note: the project Steering Committee will review and approve the first year's Annual Work Plan.

An Inception Workshop report is a key reference document and must be prepared and shared with participants to formalize various agreements and plans decided during the meeting.

Quarterly:

- Progress made shall be monitored in the UNDP Enhanced Results Based Management Platform.
- Based on the initial risk analysis submitted, the risk log shall be regularly updated in ATLAS. Risks become critical when the impact and probability are high. Note that for UNDP GEF projects, all financial risks associated with financial instruments such as revolving funds, microfinance schemes, or capitalization of Energy Service Companies are automatically classified as critical on the basis of their innovative nature (high impact and uncertainty due to no previous experience justifies classification as critical).
- Based on the information recorded in Atlas, a Project Progress Reports (PPR) can be generated in the Executive Snapshot.
- Other ATLAS logs can be used to monitor issues, lessons learned etc. The use of these functions is a key indicator in the UNDP Executive Balanced Scorecard.

Annually:

- *Annual Project Review/Project Implementation Reports (APR/PIR*): This key report is prepared to monitor progress made since project start and in particular for the previous reporting period (30 June to 1 July). The APR/PIR combines both UNDP and GEF reporting requirements.

  The APR/PIR includes, but is not limited to, reporting on the following:
  - Progress made toward project objectives and project outcomes - each with indicators, baseline data and end-of-project targets (cumulative).
  - Project outputs delivered per project outcome (annual).
  - Lesson learned/good practices.
  - AWP and other expenditure reports.
  - Risk and adaptive management.
  - ATLAS QPR.
  - Portfolio level indicators (i.e. if GEF focal area tracking tools are available for Mercury at the time of the preparation of the APR/PIR these will also be completed on an annual basis).

Annual Project Steering Committee meetings will be organized to review project progress. During these meetings the following year's Annual Work Plan should be presented for approval to the Steering Committee.

Periodic Monitoring through site visits:

The UNDP CO and the UNDP RCU will conduct visits to project sites based on the agreed schedule in the project's Inception Report/Annual Work Plan to assess first hand project progress. Other members of the Project Board may also join these visits. A Field Visit Report/Back-to-Office-Report (BTOR) will be prepared by the CO and UNDP RCU and will be circulated no less than one month after the visit to the project team and Project Board members.

Mid-term of project cycle:

Considering this is an MSP and a mid-term evaluation is not compulsory, the project's design team would propose for the project to undergo an independent **Project Review** by an International Technical Advisor at the mid-point of project implementation (Jan 2015; exact date will depend upon project start date). The Mid-Term **Project Review** will determine progress being made toward the achievement of outcomes and will identify course correction if needed. It will focus on the effectiveness, efficiency and timeliness of project implementation; will highlight issues requiring decisions and actions; and will present initial lessons learned about project design, implementation and management. Findings of this review will be incorporated as recommendations for enhanced implementation during the second half of the project's term. The organization, terms of reference and timing of the **Project Review** will be decided by the Project's Steering Committee. The Terms of Reference for this Mid-term Project Review will be prepared by the UNDP CO based on guidance from the Regional Coordinating Unit and UNDP-GEF.

The relevant GEF Focal Area Tracking Tools, if those are available for Mercury at the time of the time of the Project Review, will also be completed.

End of Project:

An independent Final Evaluation will take place three months prior to the final Project Board meeting and will be undertaken in accordance with UNDP and GEF guidance. The final evaluation will focus on the delivery of the project's results as initially planned (and as corrected after the mid-term Project Review, if any such correction took place). The final evaluation will look at impact and sustainability of results, including the contribution to capacity development and the achievement of global environmental benefits/goals. The Terms of Reference for this evaluation will be prepared by the UNDP CO based on guidance from the Regional Coordinating Unit and UNDP-GEF.

The Terminal Evaluation should also provide recommendations for follow-up activities and requires a management response, which should be uploaded to PIMS and to the UNDP Evaluation Office Evaluation Resource Center (ERC).

The relevant GEF Focal Area Tracking Tools, if those are available for Mercury at the time of the time of the Project Review, will also be completed completed during the final evaluation.

During the last three months, the project team will prepare the Project Terminal Report. This comprehensive report will summarize the results achieved (objectives, outcomes, outputs), lessons learned, problems met and areas where results may not have been achieved. It will also lay out recommendations for any further steps that may need to be taken to ensure sustainability and replicability of the project's results.

Learning and knowledge sharing:

Results from the project will be disseminated within and beyond the project intervention zone through existing information sharing networks and forums.

The project will identify and participate, as relevant and appropriate, in scientific, policy-based and/or any other networks, which may be of benefit to project implementation though lessons learned. The project will identify, analyze, and share lessons learned that might be beneficial in the design and implementation of similar future projects.

M&E work plan and budget

Type of M&E activity	Responsible Parties	Budget US$ *Excluding project team staff time*	Time frame
Inception Workshop and Report.	Project Manager UNDP CO, UNDP GEF.	Indicative cost: 14,000 US$	Within first two months of project start up.
Measurement of Means of Verification of project results.	UNDP GEF RTA/Project Manager will oversee the hiring of specific studies and institutions, and delegate responsibilities to relevant team members.	To be finalized in Inception Phase and Workshop.	Start, mid and end of project (during evaluation cycle) and annually when required.
Measurement of Means of Verification for Project Progress on *output and implementation*	Oversight by Project Manager Project team	To be determined as part of the Annual Work Plan's preparation.	Annually prior to ARR/PIR and to the definition of annual work plans.
ARR/PIR	Project manager and team UNDP CO UNDP RTA UNDP EEG	None	Annually
Periodic status/ progress reports	Project manager and team UNDP CO	None	Quarterly
Int. Expert for Technical Review of Project	Project manager and team UNDP CO UNDP RCU External Consultants (i.e. evaluation team)	Indicative cost: 40,000 US$	At the mid-point of project implementation.
Final Evaluation	Project manager and team, UNDP CO UNDP RCU External Consultants (i.e. evaluation team)	Indicative cost: 40,000 US$	At least three months before the end of project implementation.
Project Terminal Report	Project manager and team UNDP CO local consultant	0	At least three months before the end of the project.
Audit	UNDP CO Project manager and team	26,000 US$	Every year
Visits to field sites	UNDP CO UNDP RCU (as appropriate) Government representatives	For GEF supported projects, paid from IA fees and operational budget.	Yearly
TOTAL indicative COST Excluding project team staff time and UNDP staff and travel expenses		120,000 US$	

VIII. LEGAL CONTEXT

This project document shall be the instrument referred to as such in Article 1 of the SBAA between the Government of Honduras and UNDP, signed on 2015.

Consistent with the Article III of the Standard Basic Assistance Agreement, the responsibility for the safety and security of the executing agency and its personnel and property, and of UNDP's property in the executing agency's custody, rests with the executing agency.

The executing agency shall:

a) Put in place an appropriate security plan and maintain the security plan, taking into account the security situation in the country where the project is being carried;
b) Assume all risks and liabilities related to the executing agency's security, and the full implementation of the security plan.

UNDP reserves the right to verify whether such a plan is in place, and to suggest modifications to the plan when necessary. Failure to maintain and implement an appropriate security plan as required hereunder shall be deemed a breach of this agreement.

The executing agency agrees to undertake all reasonable efforts to ensure that none of the UNDP funds received pursuant to the Project Document are used to provide support to individuals or entities associated with terrorism and that the recipients of any amounts provided by UNDP hereunder do not appear on the list maintained by the Security Council Committee established pursuant to resolution 1267 (1999). The list can be accessed via http://www.un.org/Docs/sc/committees/1267/1267ListEng.htm. This provision must be included in all sub-contracts or sub-agreements entered into under this Project Document.

IX. AUDIT CLAUSE

The Audit will be conducted in accordance with UNDP Financial Regulations and Rules and applicable audit policies on UNDP projects.

The Project will undergo audit by a certified auditor according to UNDP rules and regulations. The Government will provide the Resident Representative with certified periodic financial statements, and with an annual audit of the financial statements relating to the status of UNDP (including GEF) funds according to the established procedures set out in the Programming and Finance manuals.

The audit will be conducted in accordance with UNDP financial regulations and rules and applicable audit policies on UNDP projects.

X. REFERENCES

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ANNEX I: RISK ANALYSIS AND RISK MITIGATION MEASURES

Table 15: Overview of the Risks and Mitigation Measures

Description	Date Identified	Type	Impact & Probability	Countermeasures / Management responses	Owner	Submitted, updated by	Last Update	Status (compared with previous update)
Lack of coordination of the relevant institutions and ministries	Nov 2014	Institutional	L/L	Coordination among various stakeholders will be ensured by involving them in the project steering committee and/or in specific project activities. In addition, the project will work closely with the National Commission for SMC (CNG) and strengthen their capacity with respect to the Minamata Convention's requirements. One of the project outcomes is expected to be that the CNG will assume the role as national coordination mechanism on Mercury and through its representation with liaise will all relevant stakeholders.	PM GOV	UNDP	Nov 2014	N/A at this stage
New regulatory instruments cannot be drafted and adopted within the project's timeframe due to the length of the law making process	Nov 2014	Institutional	M/L	The selection of the proper law-making process (i.e., decrees, guidance, standards, etc. embedded in existing regulations) will ensure that the development, review and approval submission of an improved regulatory framework on Mercury Management compliant with the Basel and Minamata Convention is achieved within the project timeframe.	PM GOV	UNDP	Nov 2014	N/A at this stage
Slower than expected implementation of BEP/BAT in the project's ASGM communities.	Nov 2014	Management	M/M	The project will build a team of local trainers that understand ASGM practices, Mercury use and gold production, who can integrate with the community (or are already part of the community) and can ensure the training of miners and support the implementation of BEP/BAT. Secondly, the project will also closely collaborate with other ASGM mining initiatives in the region, and apply lessons-learned and experiences from other countries	PM	UNDP	Nov 2014	N/A

Description	Date Identified	Type	Impact & Probability	Countermeasures / Management responses	Owner	Submitted, updated by	Last Update	Status (compared with previous update)
				that have proven to be successful. Finally, the MTE/MTR will identify problems and recommend improvements half way through the project, while continuous monitoring of the project team will aim to address any delays in implementation based on needs as they arise.				
Little confidence of healthcare facilities in mercury-free devices, resulting in continued use of mercury containing devices.	Nov 2014	Management	L/L	The project will share technical specifications, standards, test results, and experiences from the UNDP/WHO/GEF global HCWM project. To create additional confidence, the project will also undertake a staff preference study (staff will test and select mercury free alternatives based on accuracy, ease of use and costs), which will give ownership of the selection process to the end users rather than the project or hospital management. In addition, training on the use of mercury-free products will be provided to create confidence in the use of the new devices.	PM	UNDP	Nov 2014	N/A
Economic incentives perceived too low by artisanal gold miners to adopt BEP/BAT resulting in continued unsound practices and use of Mercury.	Nov 2014	Management	M/M	First and foremost, the project will aim to shorten the gold supply chain, so that more of the profits will end up with the miners than with the middlemen. The project will do this through 2 avenues: i) By establishing a negotiation center to provide legal points of sale for sustainably sourced gold; ii) By linking clean/fair trade gold directly to global supply chains for sustainably sourced gold (e.g. through establishing customs agreements with national government and governments where large refiners are located; establishing transparent supply chains; introducing economic incentives (e.g. premiums) for sustainably sourced gold; Negotiate	PM	UNDP	Nov 2014	N/A

Description	Date Identified	Type	Impact & Probability	Countermeasures / Management responses	Owner	Submitted, updated by	Last Update	Status (compared with previous update)
				purchasing/exchange deals with large refiners).				
Mistrust of miners towards Government agencies and entities (as well as their affiliates – such as UNDP) trying to support the formalization of the ASGM sector and the workers conditions of the miners, as ASG miners are often afraid that their property might be taken away and given to foreign transnational corporations.	Nov 2014	Management	M/M	It will be important to build trust among the miners and the mining community, otherwise it will be challenging to implement any project activities. The project envisages therefore working closely with the leadership of the municipality, the cooperative and also through local NGOs that have worked with ASGM communities in the past. The project will focus on building a trust relationship with the mining community before it will start implementation of project activities. The project will also select miners and moderators from the mining communities, and train them as trainers, to build trust.	PM	UNDP	Nov 2014	N/A
Current middlemen may resist change to shortening the gold supply chain, some of which may be linked to organized crime. Tax seeking behavior throughout the gold supply chain, jeopardizing peace and security in the ASGM communities.	Nov 2014	Management	M/M	Improving the gold supply chain (or short circuiting it) with the objective to improve income for small-scale miners and legalize their status, would result in lowering the income for the middle man, who might be likely to resist this change. However, the project anticipates that with the creation of a cooperative with a legal status, miners stand stronger together and will receive more support from the Government considering they are paying taxes, resulting in less harassment.	PM	UNDP	Nov 2014	N/A
Less demand for premium fair trade or green gold than supply of the same.	Nov 2014	Management	M/M	It is hard to build a market for premium green gold products. In addition to relying on green gold markets certified by Fairtrade and Fairmined, the project will also try to work with other entities to establish an ethical gold fund that could provide a certain premium for gold but ensure larger supply volumes.	PM	UNDP	Nov 2014	N/A

ANNEX II. AGREEMENTS AND LETTERS OF SUPPORT

Letter of Agreement for Direct Project Services

Letter of Agreement

STANDARD LETTER OF AGREEMENT BETWEEN UNDP AND THE GOVERNMENT OF BELIZE FOR THE PROVISION OF SUPPORT SERVICES

1. Reference is made to consultations between officials of the Government of *Honduras* (hereinafter referred to as "the Government") and officials of UNDP with respect to the provision of support services by the UNDP country office for nationally managed programmes and projects. UNDP and the Government hereby agree that the UNDP country office may provide such support services at the request of the Government through its institution designated in the relevant programme support document or project document, as described below.

2. The UNDP country office may provide support services for assistance with reporting requirements and direct payment. In providing such support services, the UNDP country office shall ensure that the capacity of the Government-designated institution is strengthened to enable it to carry out such activities directly. The costs incurred by the UNDP country office in providing such support services shall be recovered from the administrative budget of the office.

3. The UNDP country office may provide, at the request of the designated institution, the following support services for the activities of the programme/project:

(a) Identification and/or recruitment of project and programme personnel;

(b) Identification and facilitation of training activities;

(c) Procurement of goods and services;

4. The procurement of goods and services and the recruitment of project and programme personnel by the UNDP country office shall be in accordance with the UNDP regulations, rules, policies and procedures. Support services described in paragraph 3 above shall be detailed in an annex to the programme support document or project document, in the form provided in the Attachment hereto. If the requirements for support services by the country office change during the life of a programme or project, the annex to the programme support document or project document is revised with the mutual agreement of the UNDP resident representative and the designated institution.

5. The relevant provisions of the Special Standard Agreement between the Government of Honduras and the United Nations Development Programme in Honduras, (the "SSA"), including the provisions on liability and privileges and immunities, shall apply to the provision of such support services. The Government shall retain overall responsibility for the nationally managed programme or project through its designated institution. The responsibility of the UNDP country office for the provision of the support services described herein shall be limited to the provision of such support services detailed in the annex to the programme support document or project document.

6. Any claim or dispute arising under or in connection with the provision of support services by the UNDP country office in accordance with this letter shall be handled pursuant to the relevant provisions of the SSA and the project document.

7. The manner and method of cost-recovery by the UNDP country office in providing the support services described in paragraph 3 above shall be specified in the annex to the programme support document or project document.

8. The UNDP country office shall submit progress reports on the support services provided and shall report on the costs reimbursed in providing such services, as may be required.

9. Any modification of the present arrangements shall be effected by mutual written agreement of the parties hereto.

10. If you are in agreement with the provisions set forth above, please sign and return to this office three signed copies of this letter. Upon your signature, this letter shall constitute an agreement between your Government and UNDP on the terms and conditions for the provision of support services by the UNDP country office for nationally managed programmes and projects.

Yours sincerely,

_____

Signed on behalf of UNDP

Resident Representative

_____

For the Government

[*Date*]

Attachment

DESCRIPTION OF UNDP COUNTRY OFFICE SUPPORT SERVICES

1. Reference is made to consultations between the Secretary of Natural Resources and Environment, through its Centre for the Study and Control of Pollutants (CESCCO) and its department of chemicals management (DGPQ); the institution designated by the Government of Honduras and representatives of UNDP with respect to the provision of support services by the UNDP country office for the nationally managed project Environmental Sound Management of Mercury and Mercury Containing Products and their wastes in Artisanal Small-scale Gold Mining and Healthcare..

2. In accordance with the provisions of the letter of agreement signed on *Date of signature (LOA)* and the project document, the UNDP country office shall provide support services for the Project as described below.

3. Support services to be provided:

Support services* (insert description)	**Schedule for the provision of the support services**	**Cost to UNDP of providing such support services (where appropriate)**	**Amount and method of reimbursement of UNDP (where appropriate)**
1. Payments, disbursements and other financial transactions	During project implementation	Universal Price List	Support Services
2. Recruitment of staff, project personnel, and consultants	During project implementation	Universal Price List	Support Services
3. Procurement of services and equipment, and disposal/sale of equipment	During project implementation	Universal Price List	Support Services
4. Organization of training activities, conferences, and workshops, including fellowships	During project implementation	Universal Price List	Support Services
5. Travel authorizations, visa requests, ticketing, and travel arrangements	During project implementation	Universal Price List	Support Services
6. Shipment, custom clearance, vehicle registration, and accreditation	During project implementation	Universal Price List	Support Services

* UNDP direct project support services will be defined yearly, and for those executed during the period, direct project costs will be charged at the end of each year based on the UNDP Universal Pricelist (UPL) or the actual corresponding service cost

4. Description of functions and responsibilities of the parties involved:

The project will be conducted through the National Implementation modality of UNDP (NIM). The Secretary of Natural Resources and Environment (SERNA), through its Centre for the Study and Control of Pollutants (CESCCO) and its department of chemicals management (DGPQ)., will act as the National Implementing Partner[42], through the Department of Environment, and with the support of UNDP as a GEF Implementing Agency. The Department of Environment will be responsible for directing and managing the project and monitoring compliance with project work plans as a basis for project execution. Within the Department of Environment a Project Management Unit (PMU) will be created, which will be responsible for the daily implementation of activities, including direct supervision in coordination with UNDP, for all activities that are carried out by the project.

To ensure an effective assimilation of the Project in permanent institutional structures, the PMU will convene a Steering Committee. This committee will be part of the project supervision and is a continuance of the experience of the Preparatory Phase, which adopted this method with good results.

UNDP will provide technical and operational support necessary for the implementation of activities and the results of this project, with constant support from the PMU. The UNDP office will ensure that all consultant contracts, purchase orders and contracts for company services are in compliance with UNDP standards and procedures. In those cases in which the UNDP Resident Representative has to sign the contracts mentioned above, UNDP will participate in the processes for selection and recruitment. UNDP will also provide advances payments to the project to make direct payments and maintain accounting and financial control of the project.

The project authorities will carry out the procurement and contracts for all purchases less than USD$ 2,500. These minor operations shall comply with rules and procedures contained in the National Implementation Manual. According to the above, ownership of equipment, supplies and other property financed with project funds will be conferred to UNDP. Transfer of ownership rights shall be determined in accordance with the policies and procedures of UNDP. All goods will be considered UNDP property for the following five years since purchased.

UNDP will assist in the administration of funds provided by GEF and UNDP itself. UNDP will be able to assist in the management of any other additional fund for co-financing this project. These arrangements will be included in the relevant Memorandum of Understanding. Contributions will be subject to internal and external audits established in UNDP.

[42] National Execution partner under new harmonized definition.

ANNEX III: OVERVIEW OF CO-FINANCING

Table 16: Status of co-financing at the time of project submission for CEO endorsement (co-financing letters have been submitted separately to the GEF)

Name of Entity	Type of Entity	In-kind (US$)	Cash (US$)	Total (US$)
1. United Nations Development Organization (UNDP)	UN agency	50,000		50,000
2. INHGEOMIN	Nat. government	2,647,272	387,582	3,034,854
3. Honduras Environmental Services (HES)	Private Sector Company	75,000	10,000	85,000
4. CESSCO / SERNA	Nat. Government	750,000		750,000
5. RECYCLE	Private Sector	500,000	1,800,000	2,300,000
	TOTAL	**4,022,272**	**2,197,582**	**6,219,854**

ANNEX IV: RESPONSES TO GEFSEC REVIEW AT PIF/PPG STAGE

Question		Secretariat Comment at PIF (PFD)/Work Program Inclusion 1	GEF Agency Response at PPG phase
13.	Comment on the project's innovative aspects, sustainability, and potential for scaling up. • Assess whether the project is innovative and if so, how, and if not, why not. • Assess the project's strategy for sustainability, and the likelihood of achieving this based on GEF and Agency experience. • Assess the potential for scaling up the project's intervention.	The project seeks to clean up the gold supply chain in Honduras, which would allow in better pricing of the gold thereby creating a platform for others to replicate in the country. The project will also promote replication from using national resources to do additional work. There is not mention of enforcement of policies etc. developed in the project. This seems to be a lacking component to ensure the project is sustainable. Please address this. Sept 20 - The response partially satisfies the concern raised in the first review. **An assessment of possible incentives should be looked at to encourage miners to enter into a regulated mining sector.** **Comment cleared but the above comment needs to be addressed during the CEO endorsement**.	First and foremost, the project, through **component 2, will strengthen the regulatory and policy framework to support a reduction in the use of Hg and allow for ESM of mercury containing products and their wastes**. This project component will coordinate activities with three (3) baseline projects, all of which focus on the implementation and enforcement of policies and regulations, these are: **World Bank/INHGEOMIN:** "*Strengthening of INHGEOMIN for the implementation of the Act and its Regulations*"; **International Cooperation Agency of Chile/INHGEOMIN:** "*Strengthening of Institutional Capacity for the Development of the Mining Sector in Honduras*". **INHGEOMIN: "***Monitoring of mining activities nationwide*". To avoid duplication of efforts, the GEF UNDP project will mostly provide support on the improvement of policies and regulations, while the World Bank, Chile and INHGEOMIN efforts will concentrate on the enforcement and capacity building part. **Furthermore, related to encouraging miners to enter into the regulated mining sector**. It should be noted that since the PIF was submitted, a number of disastrous events have changed the attitude of the Government towards ASGM and has resulted in the establishment of legal mining cooperatives. In July 2014, a mine collapse at El Corpus resulted in 8 people killed and 3 rescued[43]. On 15 October 2014 another accident occurred at Macuelizo, Santa Bárbara, as a result of which one miner passed away[44]. These type of accidents, although sad, have focused national attention on such ASGM sites and are spurring the Government to further regulate ASGM and support miners in forming cooperatives and obtaining a legal status. In the case of El Corpus, after the July incident, the government has promised the miners legal title to the land on the condition that they would organize into cooperatives. Since then, most of the miners (>700) have quickly formed a cooperative in order to

[43] http://www.bbc.com/news/world-latin-america-28241698
[44] http://www.laprensa.hn/inicio/758423-410/entierran-a-minero-que-muri%C3%B3-soterrado-en-macuelizo

			take advantage of the offer. The miners that have not joined the cooperative, have done so because of mistrust/misinformation. As such, since the PIF phase, the majority of the miners has already been formalized and entered the "*regulated mining sector*". To ensure that these miners continue to operate in the regulated mining sector and to encourage the ASG miners that have not yet joined the cooperative, to do so, **the project will build the capacity of the mining community to improve the gold supply chain (output 3.1.1)** Project output 3.1.1 in particular envisages to shorten/repair the gold supply chain, by organizing mining communities, formalizing negotiations and strengthening the position of the cooperative in negotiations with buyers. Ideally ending with a mining cooperative that is part of a consistent and reliable purchasing agreement and supply chain. An additional advantage of shortening the gold supply chain could result in a reduction of opportunities for tax embezzlement and tax seeking behavior. The project will aim to achieve this through implementation of the below activities: **1. One miner training and business support center to provide technical, legal, financial, and ethical points of premium clean gold production established.** This might ential: • Establishing a negotiation center to provide legal and ethical points of sale for sustainably sourced gold in the country/community or establishing a partnership with an existing negotiation center[45]. • Develop training programme and guidance documentation for all relevant business issues pertaining to the operation and running of the Negotiation Center (e.g. accounting, transparency, premium certification and government regulations). • Conduct training for Negotiation Center staff and miners and negotiators on gold commercialization and premium supply chains. • Assist communities in negotiating service agreements

[45] This could include facilitating access to refineries (regional/global ones) as well as other buyers.

			with equipment providers. • Facilitate access to financing for local miners to (existing) lending and savings structures[46]. **2. Introducing economic incentives (e.g. efficiencies and premiums) by linking clean/fair trade gold directly to global supply chains of sustainably sourced gold.** This might ential: • Establish customs agreements with national government and governments where large refiners are located. • Establish transparent supply chains. • Introduce economic incentives (e.g. premiums) for sustainably sourced gold. • Negotiate purchasing/exchange deals with large refiners. • Create awareness on sustainably sourced gold from Honduras[47] by creating a set of 4 demonstration jewelry pieces using all local clean and fair gold and opal.
19.	Is the GEF funding and co-financing as indicated in Table B appropriate and adequate to achieve the expected outcomes and outputs?	Please justify the request of 120,000 for awareness raising activities. Sept 20 - While it is true training and awareness are important in educating the miners and communities about the impacts of mercury a better strategy would be to also demonstrate how their incomes can increase from using alternative practices and technologies. At this scale of mining the cost margins are immediately felt and changes that would increase overall production cost may be difficult to implement. **Please include during the CEO endorsement stage.**	In the PIF submitted to the GEF, an awareness-raising component (project component 5: Strengthen national and regional awareness on the ESM of Mercury in healthcare and ASGM as well as associated health hazards resulting from mismanagement), was taken up for 120,000 US$. However, during the PPG phase of the project and during its design, the project team realized that rather than implementing a stand-along awareness raising component, it would be more cost effective to: i) Make use of awareness raising materials and videos – produced by similar project implemented in the LAC region (e.g. BRI, BIO REDD+, etc.) and adapting those to local circumstances. ii) Focus project efforts on the training of miners in alternative practices, and shortening the gold supply chain so that profit margins end up with the

[46] This could potentially be achieved by entering into an agreement with a local bank, as legal miners (those part of a cooperative) should be able to access loans through a regular bank.

[47] This would entail the production of 1 set of jewelry, 100% made in Honduras, as well as accompanying publicity campaign.

			miners rather than with the middle-man. In this way – word of mouth will have a much larger impact than any awareness raising activity can achieve. Therefore, it was decided to remove component 5 and use the funding towards other project components (in particular component 3).
25.	Items to consider at CEO endorsement/ approval.	**Amount of Mercury to be reduced.** **An assessment of possible incentives should be looked at to encourage miners to enter into a regulated mining sector.**	**1. Amount of Mercury to be reduced:** It might be that this GEFSEC comment was not intended for this particular project. At PIF stage, it was estimated that (based on estimated release reductions and mercury releases as listed in the Honduras 2012 National Assessment of the Use of Mercury), the project would be able to achieve a reduction of about 40 kg Hg/yr. However, during the PPG phase of the project, the ASGM experts indicated that with the foreseen project activities, the project might be able to reduce Mercury emissions from the ASGM activities, by 1,000 kg/year alone. In addition, the project is also expected to phase out 5 kg of Mercury per year through implementation of project activities in the healthcare sector (supporting 2 HCFs). Based on the above expected project results: **Reduction of ~ 1,000 kg Hg/year**, it is unlikely that the GEFSEC wanted to reduce the project's reductions targets, to become lower than 40 kg Hg/yr. **2. An assessment of possible incentives should be looked at to encourage miners to enter into a regulated mining sector.** This item pertains to Question 13. Please refer to the answer provided above.