

Mercury Free Gold Mining Project – New Horizons

End of Project
Evaluation Report
February 13, 2019



Artisanal Gold Miners at Buheeri Site in Namayingo District (Photo Credit: UNACOH Project Photographs)

End of Project Evaluation Report

By

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Table of Contents

List of Abbreviations	3
Executive Summary	4
Acknowledgements	6
1 Introduction	7
1.1 The Mercury-Free Gold Mining Project – New Horizons	7
1.2 Program intervention areas	7
1.3 Purpose of the evaluation assignment	7
1.4 Scope and processes of this evaluation assignment	8
2 Approach and Methodology	9
3 EVALUATION FINDINGS	11
3.1 Overview	11
4 Objective One: Capacity building on Mercury-free gold mining among selected ASGMs and the partner organizations, and document the use of mercury in ASGM in Uganda	14
5 Objective Two: International advocacy for Mercury-free gold processing, and to enrol ASGMs and partners in international networks	24
6 Objective Three: Creating local, national and regional alliances	26
6.4 Unintended results of the project	31
6.5 Sustainability: ways to ensure ownership and lasting gains made by the project	32
6.6 Project implementation challenges	34
7 Conclusion, Lessons Learnt and Recommendations	36
8 Annexes – Data collection tools and Reference documents	40
8.1 Annex 1: Data Collection Instruments	40
8.2 Annex 2: List of reference documents reviewed	40

List of Tables

Table 1: Categories of respondents who participated in MFGM project evaluation exercise	9
Table 2: Description of project activities/ result areas	11
Table 3: Ugandan participants at the International Conference and Workshop on Occupational Health and Safety.....	24

List of Figures

Figure 1: End of project evaluation steps and processes.....	8
Figure 2: Miners trained on mercury in ASGM by gender and district:	17

List of Abbreviations

AIDS	Acquired Immune-Deficiency Syndrome
ASGM	Artisanal Small Scale Gold Mining
ASM	Artisanal Small Scale Mining
CAO	Chief Administrative Officer
CDO	Community Development Officer
CSO	Civil Society Organisation
DASAM	Danish Society of Occupational and Environmental Medicine
DEO	District Environmental Officer
DHE	District Health Educator
DHO	District Health Officer
ECO	Ecological Christian Organization
FGD	Focus Group Discussion
GCM	Gravity Concentration Method
GoU	Government of Uganda
ICT	Information Communication Technology
KII	Key Informant Interview
LC	Local Council
M&E	Monitoring and Evaluation
MGLSD	Ministry of Gender, Labour and Social Development
MoU	Memorandum of Understanding
NAPE	National Association of Professional Environmentalists
NRO	Natural Resources Officer
NGO	Non-Governmental Organization
OSH	Occupational Safety and Health
ToR	Terms of Reference
UBOS	Uganda Bureau of Statistics
UNACOH	Uganda National Association of Community and Occupational Health

Executive Summary

Artisanal Small Scale Gold Mining (ASGM) is an economic activity driven by poverty. More than half of the man made disposal of mercury comes from ASGM. The serious damage to the health of children and adults from the environmental pollution initially hits locally and then later globally. There are vast amounts of ASGM in Africa; and therefore, Diálogos introduced the mercury-free gold mining method in Africa starting with Uganda. Experience from the Philippines has shown that it is important to do advocacy in advance of implementing mercury-free ASGM.

In Uganda, two organisations i.e. Uganda National Association of Community and Occupational Health (UNACOH) and Uganda National Association of Professional Environmentalists (NAPE) together with the Ministry of Labour, Gender and Social Development (MGLSD) worked on the advocacy project together with Bantoxics! The Danish Government financed the project through a grant from CISU, and the project was implemented in close collaboration with Diálogos and the Danish Society of Occupational and Environmental Medicine (DASAM). Dialogos was directly responsible towards CISU regarding funds and implementation of the advocacy project.

The project’s main aim was to introduce the mercury-free gold mining in Uganda and to provide selected artisanal gold miners and the local partner organisations with knowledge on mercury pollution and use of the mercury-free gold mining methods, thus enabling them to spearhead advocacy for mercury-free ASGM nationally in Uganda, regionally in Africa and internationally.

Diálogos therefore sanctioned an evaluation at the end of the project implementation period. The overall purpose of the end of project evaluation was to assess the extent to which the project has realized its stipulated results (*positive or negative*).

The evaluation findings were categorized according to the project objectives and the findings summarized as follows:

Overall, the consultant and his team rated the Mercury-free gold mining project – New Horizons as **successful**. The project delivered on the targeted results under the three objectives based on the results realized for each project objective.

Objective one: To build capacity on Mercury-free gold mining among selected ASGMs and the partner organisations, and document the use of Mercury in ASGM in Uganda:

The findings under objective one show that the project was **successfully** in building capacity on Mercury-free gold mining among selected ASGMs and the partner organisations, and documented the use of Mercury in ASGM in Uganda. The key areas of capacity building for miners and the project partners were sensitization and awareness creation on mercury use in ASGM, institutional capacity building for project partners, capacity building for ASGMs, providing the ASGMs with alternative gold mining technology and methods, conducting project research, documentation of project interventions, and other areas of capacity building such as availing opportunities for sharing information, experiences and challenges related to mercury use in ASGM at different fora.

Objective two: To undertaking international advocacy for Mercury-free gold processing, and to enrol ASGMs and partners in international networks:

Evidence from the evaluation shows that objective two i.e. undertaking international advocacy for Mercury-free gold processing, and to enrol ASGMs and partners in international networks was largely **successful** although more remains to be done by the project partners. The key areas of success where advocacy for Mercury-free gold processing, and enrolling ASGMs and partners in international networks included; participation at both the Pre-Conference meeting and at the International Conference and Workshop on Occupational Health and Safety on formal and informal mining in Thyboron and Odense, Denmark between 17th to 26th August, 2017. Another area of successful advocacy was the creation of networks with international partners and involvement and recognition of the project at the International Commission on Occupational Health among other networks. The net effect of the advocacy efforts by the project team was the recognition of the Mercury-free gold mining project at different fora. Feedback from various stakeholders revealed that the interventions of the project on this objective have huge potential to bear fruits in the medium and long terms for the project partners and the country at large. The project has

‘opened the eyes’ of many stakeholders at local and international levels to an area of future collaboration in solving the problem of mercury use in ASGM.

Objective three: *To create alliances locally, nationally and regionally (- or nationally between stakeholders in Uganda, regionally in Africa between nationally based advocacy organisations and stakeholder groups and internationally by linking the Ugandan organisations and international network of ICOEPH):*

According to the evaluation findings, the Mercury-free gold mining project’s interventions to create alliances locally, nationally and regionally was **successful**. The project created local alliance with local governments in the project districts, line ministries such as MGLSD and other stakeholders including NGOs/ CSOs, academia and media houses. National level alliances were created with national actors through the formation of a National Steering Committee on Mercury in ASGMs in Uganda whereas the regional alliances were created through meetings with regional stakeholders. Regional meetings were organised in Kampala and Dar es Salaam, the 65th East, Central and Southern Africa Health Community and Health Ministers Meeting in Dar es Salaam as well as the Minamata Convention Meeting in Lusaka, Zambia.

Challenges encountered during project implementation:

However, as much as the project realized positive results on the three objectives; there were challenges encountered during implementation namely; the death of the first Project Coordinator, closure of the Mubende gold mines, delays in getting chemicals and other consumables for use in processing blood samples for the study, delayed disbursement of the initial project funds, problem of buying good ore with reasonable amounts of gold for demonstrating the gravity concentration method with borax, inadequate water for use in the mercury free processing method, influx of foreign unregistered miners into Ugandan gold mines as well as the introduction of new technology which is not supported by on-going technical support.

Lessons learnt:

Lessons learnt that were documented include the following namely; the destabilizing effect of politics and how it interferes with project implementation, the fact that meaningful change requires team work, knowledge that the era of Government and civil society organisations (CSOs) being apart is long gone, understanding that NGOs and CSOs are better placed to provide solutions to ASGM challenges and the importance of engaging and building trust with the ASGMs if a project like this one is to be successful.

Conclusion:

Overall, the evaluation team concludes that the Mercury-free gold mining – New Horizons project was successful. The project was able to create a positive impact for the artisanal small-scale gold miners (ASGMs) and other project stakeholders especially the partner organisations (*Dialogos and DASAM, UNACOH and NAPE*), as well as the communities surrounding the gold mining areas in Namayingo and Mubende Districts as well as other districts such as Buhweju, Busia, and Nakapiripirit among others where the project had interventions.

Recommendations:

The recommendations put forward include the following namely; the networks and collaborative efforts created should be sustained, borax and other consumables should be brought nearer to gold miners, Mercury-free gold mining initiative should be studied and domesticated to local miners, ASGMs should strengthen the existing associations and support groups and where possible form more, there is a need to identify and deploy skilled technical mentors, the Mercury-free gold mining project should be scaled up to benefit more miners and districts, the project should set up its own standard pit with good old ore for proper demonstration of the GCM method with borax, Government should expedite/ fast-track the enactment of policy and legal regulations to improve gold mining, there is a need for more advocacy to be done on mercury use in ASGM in Uganda and the region, and that regular post-project follow-up support to miners should be provided.

Acknowledgements

The Consultant and his Team would like to thank all the stakeholders who were involved in this end of project evaluation assignment. Special thanks and mention go to the following stakeholders for their time, patience, advice, inputs and logistical support; Uganda National Association of Community and Occupational Health (UNACOH) Project Team, National Association of Professional Environmentalists (NAPE), Diálogos, DASAM, Ministry of Gender, Labour and Social Development (MGLSD), national partners, District Officials, artisanal small scale gold miners (ASGMs), gold buyers, local government and community leaders who participated in this end of project evaluation and provided useful information that has facilitated the compilation of this End of Project Evaluation Report. The contributions of all stakeholders to this evaluation assignment are gratefully acknowledged.

In a special way, the Consultant greatly appreciates the logistical and technical support provided by the Diálogos counterpart (*Dr Margrethe Smidth*) and the UNACOH counterparts (*Drs Victoria Mukasa and D.K. Sekimpi*), the in-country project partners such as NAPE and other project stakeholders throughout the duration of the assignment. Their logistical and technical support greatly facilitated the consultants in executing the assignment.

Richard Kaye Mugula
Consultant/ Team Leader
SL Consult (U) Ltd
February 13, 2019

1 Introduction

1.1 The Mercury-Free Gold Mining Project – New Horizons

Artisanal Small Scale Gold Mining (ASGM) is an economic activity driven by poverty. More than half of the man made disposal of mercury comes from ASGM. The serious damages to the health of children and grown-ups from the environmental pollution initially hits locally and then later globally. In a previous project, the Danish NGO Diálogos and the Philippine NGO BanToxics! showed and documented for the first time in the World that it is possible to change from use of mercury in gold mining to mercury-free gold mining methods. There are vast amounts of ASGM in Africa; and therefore, Diálogos wanted to introduce the mercury-free gold mining method in Africa starting with Uganda. Experience from the Philippines has shown that it is important to do advocacy in advance of implementing mercury-free ASGM.

In Uganda, two organisations i.e. Uganda National Association of Community and Occupational Health (UNACOH) and Uganda National Association of Professional Environmentalists (NAPE) together with the Ministry of Labour, Gender and Social Development worked on the advocacy project together with Bantoxics! It is the first time that Diálogos and the Danish Society of Occupational and Environmental Medicine (DASAM) have worked with more than one organisation at the time on a project. The Danish Government financed the project through a grant from CISU, and the project was implemented in close collaboration with the Diálogos, the latter being directly responsible towards CISU regarding funds and implementation of the advocacy project. The project will pave way for financing of future implementation projects for stopping Mercury pollution from small-scale gold mining in Africa.

The project’s main aim was to introduce the mercury-free gold mining method in Uganda and to provide selected miners and the three partner organisations with knowledge on mercury pollution and use of the mercury-free gold mining methods, thus enabling them to spearhead advocacy for mercury-free ASGM nationally in Uganda, regionally in Africa and internationally.

1.2 Program intervention areas

Below are the objectives of the Mercury-Free Gold Mining-New Horizons Project that the end of project evaluation focused on:

- To build capacity on Mercury-free gold mining among selected ASGMs and the partner organisations, and document the use of Mercury in ASGM in Uganda.
- To do international advocacy for Mercury-free gold processing, and to enroll ASGMs and partners in international networks.
- To create alliances locally, nationally and regionally. (- or nationally between stakeholders in Uganda, regionally in Africa between nationally based advocacy organisations and stakeholder groups and internationally by linking the Ugandan organisations and international network of ICOEPH).

1.3 Purpose of the evaluation assignment

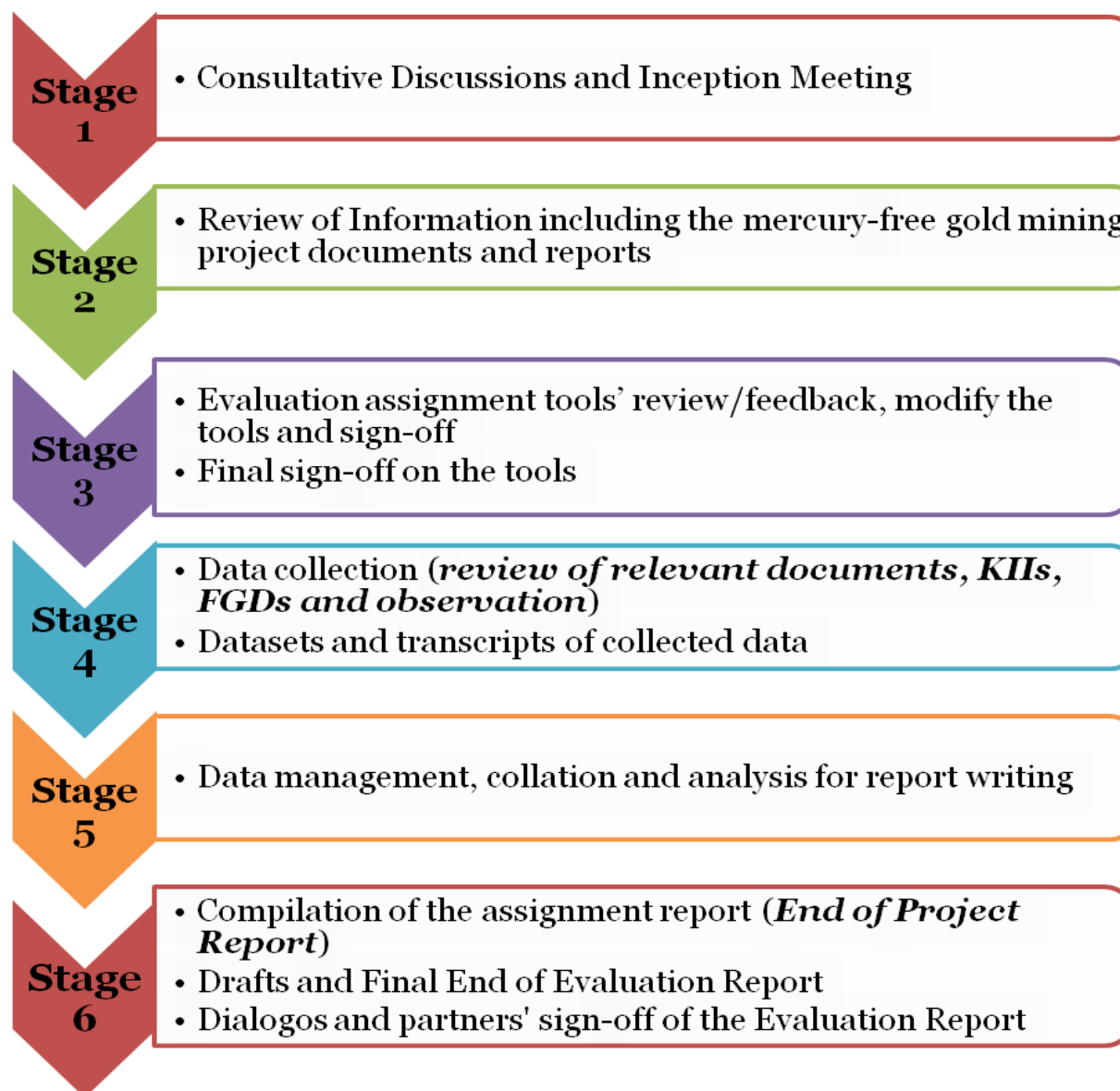
The overall purpose of this end of project evaluation assignment was to assess the extent to which the project has realized its results (*positive or negative*).

1.4 Scope and processes of this evaluation assignment

Diálogos engaged Richard Kaye Mugula (*Consultant*) and his colleagues from SL Consult (U) Ltd to undertake the assignment “**End of Mercury Free Gold Mining – New Horizons Gold Mining Project**”; working closely with identified project stakeholders. The consultant and his team worked closely with the UNACOH and consulted with a range of identified project stakeholders in the project districts i.e. Namayingo and Mubende Districts.

The scope of work and processes involved in conducting this assignment included the following key steps and processes highlighted in *Figure 1* below:

Figure 1: End of project evaluation steps and processes



2 Approach and Methodology

2.1 Approach

The Mercury-free gold mining-New Horizons project end of project evaluation assignment was conducted during the period between October and mid November 2018. The consultant employed a participatory and consultative approach and methodology for data collection. Primary data was collected from the artisanal small scale gold miners and other key stakeholders such as project staff, project partners, District Officials (*DHEs, DHIs, CDOs and Natural Resources/ Environmental Officers*), the artisanal small scale gold miners, gold buyers, local trainers whereas secondary data and information were collected from the relevant project documents.

In table 1 below is a summary of the various categories of respondents who were involved in the mercury-free gold mining – New Horizons end of project evaluation exercise:

Table 1: Categories of respondents who participated in MFGM project evaluation exercise

Category of respondents	National level		Mubende District		Namayingo District		Buhweju District	
	KIIs	FGDs	KIIs	FGDs	KIIs	FGDs	KIIs	FGDs
Miners			4		8	4	1	
National level stakeholders	3							
District leaders (e.g. LC V Chairman, RDC, DISO etc....)			3		2			
District officials (e.g. DHO, DHE, DHI, CDO etc....)			3		4		2	
Sub-county leaders (e.g. LC III Chairman)			1		1			
Leaders of miners’ groups			2		2	1		
Local trainers			1			1		
Gold buyers			2		2	1		
Community/ LC leaders					5			
Total	3		16		24	7	3	

2.2 Data collection methods employed

The data collection methods employed included a desk review of relevant Mercury-free gold mining project -New Horizons documents, in-depth interviews with key project stakeholders (*key informants*), focus group discussions (FGDs) with different categories of participants, observation within the mines and communities where the miners work and live; as well as telephone and skype interviews with some project staff and miners from Mubende and Buhweju Districts who could not be physically reached by the Consultant and his team. Further details on how the data collection methods were employed are as follows:

- **Documents Review:** A document map, linking key Mercury-free gold mining-New Horizons project documents to the project intervention areas, project results and outcomes, project impact, sustainability and lessons learnt was drafted and information obtained from documents was mapped against the areas of review and key data extracted to inform analysis and report writing;
- **In-depth Interviews with Key Informants:** Selected key informants were interviewed using the in-depth interviews with key Mercury-free gold mining-New Horizons project stakeholders from the project districts (*Namayingo, Mubende and selected miners from Buhweju*). The stakeholders included project staff, District Officials (*DHEs, DHIs, CDOs and Natural Resources/ Environmental*

Officers), the artisanal small scale gold miners, gold buyers, local trainers, as well as the local government and community leaders in the areas with gold mines;

- **Focus Group Discussions (FGDs):** A series of focus group discussions were carried out in the project districts to gather information to complement the desk review and in-depth interviews with key Mercury-free gold mining-New Horizons project stakeholders who included the artisanal small scale gold miners, gold buyers and selected local trainers who were involved in separate FGDs; and,
- **Observation:** Through observation, data and information were collected from the areas with gold mines in Namayingo District with regard to the methods the artisanal small-scale gold miners were using to extract gold, the status of the mines, the tools/ equipments and materials that the miners were using as well as the infrastructure within the mines that the team visited.

2.3 Limitations

Although all efforts were made to engage and talk to as many identified relevant Mercury-free gold mining-New Horizons project stakeholders as possible during the course of the evaluation assignment, a number practical and of logistical factors prevented this from being entirely achieved. Some of the limitations of this evaluation assignment include the following:

- **Difficulty in locating miners and refusal by some to provide information:** Due to challenges encountered in Mubende District where the gold mines were closed by the Government over land ownership and evictions of locals, there were difficulties in locating miners for interviews. Other miners were easily located but they were suspicious and some outrightly refused to be interviewed. It took a lot of back and forth engagement for the consultant and his team to convince the miners to allow to be interviewed. Some of the miners would initially promise to provide information but then turn around and delay to allow to be interviewed citing various reasons but mostly fear due to the sensitivity of the gold mining business. This was mostly in Mubende but also somehow in Namayingo District Other miners would refuse to meet our team, pick calls or even in extreme cases simply move away or switch off their phones. This called for a lot of physical call-backs and movement by our team and telephone calls and in the process there was loss unnecessary of valuable time, delays and resources. However, some of the miners would eventually allow to be interviewed after a back and forth engagement;
- **Delay in starting field data collection:** There was a delay to the start of the field data collection exercise because of the project extension. Initially the Mercury-free gold mining-New Horizons project end of project evaluation was slated to be conducted in June but due to the extension granted to the project, the assignment was shifted to the month of October 2018. This change in the end of the project affected the earlier planned start dates for data collection as the consultant had already mobilized the various stakeholders before the changes were made. This put the consultant and his team in bad light in the eyes of the stakeholders mobilized earlier. As such there was a lot of back and forth engagement and delays before such stakeholders would allow to be interviewed the second time in October 2018.

In order to mitigate the above limitations, the consultant and his team worked hard to ensure that the data collection process proceeded as planned including visiting all the identified stakeholders and conducting interviews with them including visiting Kassanda District (*formerly part of Mubende District*). The consultant also triangulated the data collection process using various data collection methods to ensure no biases were introduced and that all targeted stakeholders were reached during data collection.

3 EVALUATION FINDINGS

3.1 Overview




This section contains the findings of the Mercury-free gold mining – New Horizon Project end of project evaluation with regard to the achievement of project results. It also includes a summary of the assessment of project objectives’ achievements and the results realized under each project objectives.

The project’s overall goal was **to introduce the Mercury-free method in Uganda and to provide selected miners and the local partner organisations with knowledge of Mercury pollution and of the Mercury-free gold mining method, thus enabling them to spearhead advocacy for Mercury-free ASGM nationally in Uganda, regionally in Africa and internationally.**

The Mercury-free gold mining – New Horizons Project’s focus was on achieving the following objectives:


- To build capacity on Mercury-free gold mining among selected ASGMs and the partner organisations, and document the use of Mercury in ASGM in Uganda;
- To undertaking international advocacy for Mercury-free gold processing, and to enrol ASGMs and partners in international networks; and,
- To create alliances locally, nationally and regionally (- or nationally between stakeholders in Uganda, regionally in Africa between nationally based advocacy organisations and stakeholder groups and internationally by linking the Ugandan organisations and international network of ICOEPH)







The project results realized are presented under each objective. The project results were derived from a review of project data/ information and reports, from data collection and interviews conducted during the evaluation exercise with different project stakeholders. The Consultant employed a pictorial representation to present the results realized against each project objective as follows:






-  Represents the objective was achieved and exceeded (High)
-  Represents the objective was significantly achieved to a great extent (Medium)
-  Represents the achievement of the objective was below expectations/ target (Low)

The project realized results under each project objective. Overall, the project achieved its objectives and realized results as highlighted in table 2 below. The Consultant and his team analyzed project performance on each objective and gave ratings as follows:

Table 2: Description of project activities/ result areas

Ref. No	Description of project activity/ result area	Target	Results realized	Rating
Objective 1: To build capacity on Mercury-free gold mining among selected ASGMs and the partner organisations, and document the use of Mercury in ASGM in Uganda				
1.1	Empowerment of partners and stakeholders in Uganda	Project implementation visit from Diálogos and Bantox, Miner-to-miner training on mercury-free processing by Bantox,	Project implementation visit done, 53 miners were	

Ref. No	Description of project activity/ result area	Target	Results realized	Rating
		Capacity building workshop for partners	trained, 11 partner staff attended the capacity building workshop	
1.2	Generation of knowledge about the use of mercury in ASGM in Uganda	Exploratory study on occupational hazards in ASGM Baseline study of mercury use in ASMG	Exploratory study done Baseline study done Data collection tools developed	
1.3	Create enabling environment in Uganda on mercury and ASGM	National and select workshops on mercury and ASGM, Opportunistic inputs to Ugandan Minamata Initial Assessment and National Action Plan	Sensitization meetings conducted, Workshops held, Reports and briefing papers produced, Action plans developed	
1.4	Preparation of presentations for MINOSH conference, and videos for advocacy	9 ASGMs, 3 UNACOH and 3 NAPE staff planned to attend MINOSH conference	6 miners and 3 project partners attended, Presentations and video film produced and disseminated	
Objective 2: To undertaking international advocacy for Mercury-free gold processing, and to enroll ASGMs and partners in international networks				
2.1	Key persons in partner organisations given capacity advocate for implementation of mercury-free gold processing projects	Pre-conference workshop (5 days)	More than 10 staff in partner organisations were empowered to do advocacy and other areas	
2.2	International stakeholders learn about mercury pollution from ASGM and mercury-free gold processing	MINOSH conference in Odense in August 2017, International stakeholders acquire knowledge on how the environment and humans are affected by mercury pollution from ASGM International stakeholders learn that mercury-free processing techniques	Oral presentations by miners and partners, Videos film presented, Presentations by Diálogos, Keynote talk and presentations by Bantox	
2.3	The project partners become part of an international network against mercury pollution	Meetings between project partners and the following organizations: <ul style="list-style-type: none"> ▪ ISSA (ILO) ▪ CISU ▪ MD Phillippe Grandjean from Denmark 	More than 10 meetings were facilitated at least between the project partners and key	

Ref. No	Description of project activity/ result area	Target	Results realized	Rating
		<ul style="list-style-type: none"> ■ Boese O’Reiley from Germany ■ Pál Veihe from the Faroe Islands ■ Stakeholders from Greenland 	international stakeholders on mercury pollution	
2.4	Project engagement in the Minamata Convention and related international meetings on mercury and ASGM	Participation in the Minamata Convention negotiations on ASGM, Participation at the UNEP Global Mercury Partnership on ASGM	Reports and briefing papers produced, Presentations at side-events made, UNACOH is now represented on the National Committee on the Minamata Convention	
<p>Objective 3: To create alliances locally, nationally and regionally (or nationally between stakeholders in Uganda, regionally in Africa between nationally based advocacy organisations and stakeholder groups and internationally by linking the Ugandan organisations and international network of ICOEPH)</p>				
3.1	Establishment of a national alliance for stopping mercury pollution from ASGM	Identification of national stakeholders on occupational safety and health, Holding a national conference on mercury pollution and mercury-free ASGM, Dialogue with Government bodies or local government units about reducing mercury pollution from ASGM	National alliance established in Uganda, Meeting with government and stakeholders Reports and briefing papers produced	
3.2	Founding of a regional alliance in Africa for mercury-free ASGM	Identifying partners in neighbouring countries, Meeting with partners from neighbouring countries	Regional alliance is founded at East Africa level	
3.3	Reinforcement of linkages with other international initiatives	UNEP Mercury Global Partnership on ASGM, ISSA (ILO), MinOSH	MoUs/ membership in international networks formalized	
3.4	Project sustainability	Fundraising for project interventions, Engage local and international gold traders and consumer organisations, Project evaluation, Follow-up visits from Diálogos	Follow up projects in Uganda, Project evaluation done Local gold buyers were engaged	

The findings and results presented under each project objective were derived from a review of Mercury-free gold mining Project – New Horizons data/ information and reports, and from consultations and interviews different project stakeholders. The Consultant and his team validated the project results from various sources using rigorous methodologies and are satisfied with the validity of the project results reported under each project objective:

4 Objective One: Capacity building on Mercury-free gold mining among selected ASGMs and the partner organizations, and document the use of mercury in ASGM in Uganda

The findings under objective one provide details regarding capacity building on Mercury-free gold mining among selected ASGMs and the partner organisations, and the documentation of use of mercury in artisanal small-scale gold mining (ASGM) in Uganda.

4.1 Sensitisation and awareness creation on mercury in ASGM

The Mercury-free gold mining project team and partners gained valuable skills and experience in conducting activities to sensitize different stakeholders and the general public on the use of mercury in artisanal small-scale gold mining in Uganda. The sensitization and awareness creation were done in form of meetings with various stakeholders, production of a video film, writing articles in newspapers as well as appearing on different radio and TV shows to talk about the dangers of mercury use in gold mining and the alternative options to mercury. All these avenues built the capacity of the project team in various ways:

Project sensitization and awareness creation meetings

During the implementation of the Mercury-free gold mining project, sensitization and awareness creation meetings were held with various stakeholders. The project team and partners led by the Project Coordinator from UNACOH organised meetings with Government ministries (*i.e. Department of Occupational Safety and Health (OSH) at the Ministry of Gender Labour and Social Development, Ministry of Energy and Mineral Development and the Department of Water, Environment and Natural Resources (Entebbe) at the Ministry of Water, Environment and Natural Resources*).

“The sensitization and awareness creation meetings helped us to introduced and explain the project to stakeholders and identify areas of mutual interest” **KII with Team Member**

Other stakeholders the project team met and sensitized included the Uganda Police; Minerals Unit, National Environmental Management Authority (NEMA), Makerere University (MUK), School of Public Health; Department of Environmental Management, the African Centre for Energy and Mineral Policy (ACEMP) and Ecological Christian Organisation (ECO) among others. The project team also sensitized local government/ local council (LC) leaders such as Chairpersons of districts, Chairpersons of sub-countries (LC III), Resident District Commissioners (RDCs), leaders of miners’ groups, NGOs, gold buyers and researchers among others.

The project team and partners effectively utilised the sensitization and awareness creation meetings not only to introduce the project to those stakeholders but also to explore areas of potential collaboration and support during the implementation of the project. According to feedback from the project team these meetings were found to be very useful in the sense that they helped to create awareness on the project, its interventions and the problem of mercury use in gold mining in the country.

Video Film ‘Mercury the Assassin’

According to the evaluation findings and feedback from the miners and local leaders, another way the capacity of the project partners was built was through the production and dissemination of the Video Film “**Mercury the Assassin**” which was used to sensitize and create awareness on the dangers of mercury use in gold mining to the miners and the general population in the project districts and country in general. The video film highlights the situations that miners work in with no protective gears but working in very hazardous environments.

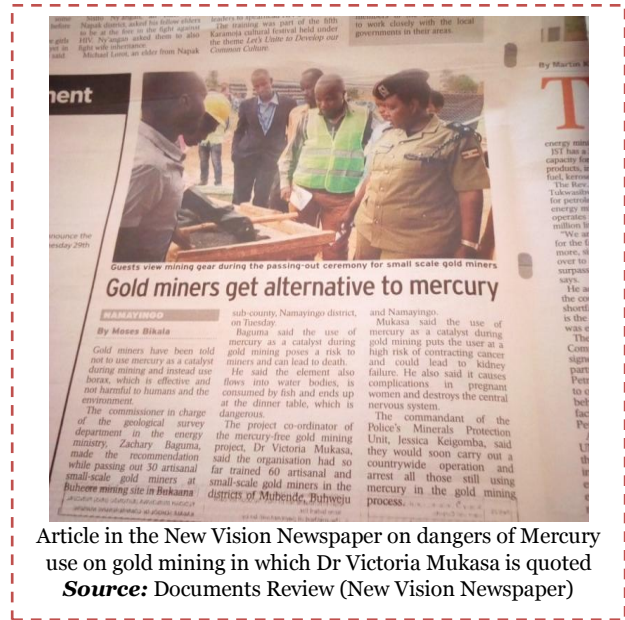
“From my view, ‘Mercury the Assassin’ is very educative video which helped me to appreciate the dangers of mercury in gold mining. However, even at the conference I could see that international participants learnt from it” **KII with Miner who attended the conference in Denmark**

The video film was produced and put on CDs that were distributed to various stakeholders including the project partners, miners and Government agencies. The video film ‘Mercury the assassin’ was shown at the 3-day Pre-Conference Workshop in Thyboron in Northern Denmark and at the International Conference and Workshop on Occupational Health and Safety on formal and informal mining at Odense, Denmark between 17th to 26th August, 2017 where project partners from Uganda attended.

The video was also shown at the Parallel side meeting during at The 65th East, Central and Southern Africa Health Community (ECSA-HC) Health Ministers Conference was held in Dar es Salaam, Tanzania on 20th March, 2018; as well as at several meetings with different stakeholders on mercury in ASGM in Uganda. The project team and partners gained very valuable skills in the production and dissemination of educative video films.

Newspaper articles written on Mercury in ASGM

A review of the Mercury-free gold mining project related documents and interviews with the project team



Article in the New Vision Newspaper on dangers of Mercury use on gold mining in which Dr Victoria Mukasa is quoted
Source: Documents Review (New Vision Newspaper)

revealed that a number of interviews on mercury use in ASGM and newspaper articles on the same subject were written and published in various newspapers in Uganda. One such article was published in the month of *June 2018* and it appeared in the New Vision Newspaper in Uganda as highlight in the picture on the **left**.

“A number of articles were written and published in newspapers. Also, several project team members were interviewed and those interviews were put in newspapers such New Vision highlighting mercury in ASGM and its dangers” **KII with Project Partner**

Also, the Project Coordinator was interviewed several times by different journalists and articles written in the newspapers. One such articles

written by the Project Coordinator and published in the New Vision Newspaper on the 12th October, 2017 was an article entitled “**Mercury use in gold extraction a time bomb to over 20,000 lives**”¹.

¹ New Vision Article on “Mercury use in gold extraction a time bomb to over 20,000 lives”; 12th October, 2017 (https://www.newvision.co.ug/new_vision/news/1463533/mercury-gold-extraction-bomb-lives); accessed in October-November, 2018

Television and Radio Shows on Mercury in ASGM

Television and radio talk-shows were used to disseminate information on mercury in ASGM in Uganda. However, these television and radio talk-shows were also utilized as one of the ways of building the capacity of project team and partners.

Feedback from the project team, miners and local leaders in the project districts revealed that the television and radio talk-shows were an effective way the Mercury-free gold mining project used to reach a wider audience of stakeholders beyond the miners involved in poor gold mining practices using mercury.

“I saw one of the talk-shows on Bukedde TV and the panellists clearly explained the dangers of poor mining practices including using mercury in gold mining. It was a good program and I’m sure many people watched it and got the message” **KII, Miner who attended the International Conference in Denmark from Mubende District**

Interviews with district leaders in Mubende and Namayingo revealed that the information and facts provided during the television and radio talk-shows were appreciated by the miners, the local populations and the technical teams at the districts. It was reported that these were regularly referred to during discussions on mercury use in ASGM as well as the options to mercury use in gold mining such use of the gravity concentration method with borax which the project promoted in both Namayingo and Mubende districts.

4.2 Capacity building for the project partners

A capacity building workshop for the project partners (UNACOH, NAPE and Diálogos/ DASAM) was organized by the project coordination team at UNACOH. The workshop was held at the Grand Global Hotel, Makerere Kikoni, Kampala on 25th May, 2017. It was facilitated by the three Philippino Miner Trainers (*i.e. Arlene B. Galvez, Alma Andoy and Rivalde Perez aka Nono*). This workshop was attended by 11 participants (5M, 6F) from UNACOH, NAPE, Diálogos and DASAM representatives as indicated in the table below:

The capacity building workshop focused on the following topics:

- Damage to the environment and human health caused by mercury pollution;
- How involvement of the civil society can help ASGMs change to mercury free mining; and,
- How to make a scientifically valid baseline study.

Feedback from one of the project partners indicates the capacity building workshop was beneficial to the participants. It was reported that this workshop helped the local project partners to understand and fully appreciated the dangers of mercury use and the important of interventions designed to counter mercury use in ASGM.

“The capacity building workshop was timely for us to gain understanding of mercury use in ASGM and the project interventions” **KII with key Project Partner**

4.3 Artisanal small-scale gold miners’ capacity building

According to the findings, the Mercury-free gold mining project built capacity and mentored miners on mercury use in ASGM which resulted in improved mining practices, increased knowledge on the risks and dangers associated with use of mercury in gold mining and improved practical skills gained in use of the safer gold mining technology using the gravity concentration method with borax. As a result, the miners gained valuable new knowledge and mining skills from the topics highlighted in Box 1 below.

With regard to capacity building for artisanal small-scale gold miners, the trainings were two-fold i.e. miner to miner training and later on the refresher gravity concentration method training. The training sites for the miners were Lugongwe, Kitumbi Sub-County in Mubende and Buheeri in Bukaana Sub-county, Namayingo Districts.

A total of 53 miners were trained by the project team and partners during the course of the Mercury-free gold mining project.

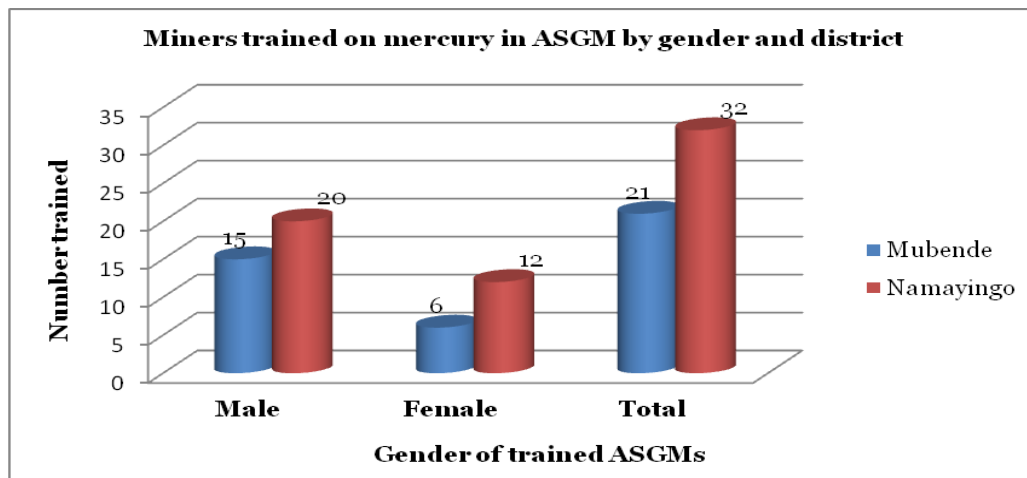
The miner to miner trainings lasted three (3) days each were conducted by three trainers from Bantoxics Trainers from the Philippines (i.e. Arlene B. Galvez, Alma Andoy and Rivalde Perez aka Nono). Of these, 32 miners were from Namayingo District and 21 miners were from Mubende District. Figure 2 below shows a breakdown of the average attendance by the miners trained in the two districts:

Box 1: Topics covered during the training of artisanal gold miners:

- Objectives of the project and training;
- The dangers of mercury to human health and the environment;
- Understanding Gravity Concentration Method in relation to mercury free mining;
- Tips on sorting, grinding, sluicing, panning, smelting, good house-keeping, occupational safety and health (OSH);
- Actual demonstration of gold extraction using the gravity concentration and borax method;
- Hands-on training of selected miners; and,
- Special leadership training sessions for women and youth miners

Source: UNACOH Miners’ Training Reports

Figure 2: Miners trained on mercury in ASGM by gender and district:



Source: Mercury-free gold mining project – New Horizons End of Project Evaluation data (October - November, 2018)

Overall, with regard to gender of the ASGMs trained; 35 (66%) were male and 18 (44%) were female as indicted in figure 2 above. The consultants assessed information on the miners trained through review of the project training reports and interviews with the project team and implementing partners such as NAPE and MGLSD who participated and supported the capacity building component of the project among others.

“We benefitted a lot from the knowledge and skills of our trainers. We now the risks involved in using mercury in gold mining and at the same time we know how to use the alternative technology in gold mining” FGD with miners at Buheeri Site, Namayingo District

Overall, the consultant and his team are satisfied that the project satisfactorily built the capacity of the ASGMs trained in the project districts. The trained ASGMs are also in turn reaching other miners in project districts with knowledge and skills acquired on mercury in ASGM and the alternative approaches to use of mercury in gold mining. According to feedback from the project team and partners as well as the miners, this is one of the ways to ensure that the project capacity building component becomes sustainable.



The BanToxics! trainers conducting a training (left) and the Project Coordinator (right) facilitating a Refresher Training on GCM to miners at Buheeri Demonstration Site, Buhaana Sub County in Namayingo District

As highlighted in the pictures above and according to feedback from the project team, the capacity building equipped the miners with valuable skills on how to use the gravity concentration method with borax in processing gold which produces more pure gold and extracts gold much more than when mercury is used.



A certificate awarded to one of the ASGMs after attending the Refresher Training Workshop

Feedback from the project team shows that the trained miners appreciated the use of borax because it is not harmful to human life and the environment i.e. reduction of harmful dust exposure. The findings further show that the use of the gravity concentration method with borax leads to higher yields from a sample i.e. 30% to 70% yields per sample compared to when mercury is used in gold processing.

“The use of the gravity concentration method with borax gives bigger yields and it’s a big boost from the same effort. Only challenge is it requires one to use a lot of water.” **KII with leader of the miners’ group at Buheeri Site, Namayingo District**

A review of project reports and feedback from the miners from Buhweju, Namayingo and Mubende Districts show that the appreciated the training provided by the project team of UNACOH, NAPE and Dialogos as it empowered them with better knowledge and mining skills as well as creating improvements in the mining environment within the mines and the communities in general where the mines are located.

4.4 Demonstration of alternative gold mining and processing options

According to feedback from the project implementers and the miners from Buhweju, Namayingo and Mubende District, the Mercury-free gold mining project supported the ASGMs to adopt and utilize the gravity concentration method with borax as an alternative mining method to use of mercury in gold mining and processing in the project gold mining districts.



A miner at the gold sieving area at Buheeri Demonstration Site, Buhaana Sub County in Namayingo District

“Since this project came we have seen a positive change. The miners have become more knowledgeable; they are using better methods and are taking better care of their lives in the mines than before. This is due to the trainings and support they have got”
FGD with a group of Gold Buyers at Buheeri Site, Namayingo District

Evidence from the trained miners and a review of project training and quarterly progress reports showed that the project team severally equipped the miners with practical information on the risks and dangers

associated with the use of mercury in gold mining, information about occupational safety and better ways the miners could protect themselves while in the mines, *information and practical alternatives to the use of mercury in mining* as well as information on the importance of organizing themselves into associations and groups for better coordination and harmonisation of their activities.

According to the findings and feedback from the miners, the incremental effect of all the capacity building efforts and introduction of the gravity concentration method with borax; is the improvement in knowledge and skills of the miners, embracing of the gravity concentration method with borax and the miners becoming better organized in their mining activities.

“This project is the first of its kind in Uganda to give miners an option” **KII, key Project Partner**

Evidence from the evaluation findings show that the gravity concentration method with borax has been embraced by the miners. Findings show that the miners have gained a good understanding of how this method works, they have appreciated it as an alternative to the use of mercury in gold mining and processing and also this method does not present occupational health-related risks that mercury has exposed to the miners in the project districts.

However, the challenges with the gravity concentration method with borax; is that it requires use of a lot of water yet water is a big challenge in most of the mining areas/ districts in Uganda. The project team through UNACOH even donated a water-tank to the miners at the Buheeri Demonstration Site in Buhaana Sub-country in Namayingo District as a way of lessening the water shortages. The Lugongwe Demonstration site at Kitumbi Sub-county in Mubende District was closed by Government and the equipment and materials which had been set up at that site was dismantled and removed.

“One of the biggest challenges we have faced over the years is water. When this project came they taught us better ways to process gold but it needs a lot of water. Fortunately, they donated to us a water tank but it’s still not enough and other miners also lack adequate water” **FGD with miners at Buheeri Demonstration Site, Namayingo District**

Feedback from various miners during the FGDs and KIIs shows that water shortage is a big challenge for them and that miners in the different mines don’t have adequate water to fully utilise the gravity

concentration method with borax and they called on the project, the district and local leadership to continue supporting them as far as the water challenge is concerned.

4.5 Project Research

Feedback from the project team and implementing partners revealed that conducting research was one of the areas the Mercury-free gold mining project built capacity of the implementing team, partners and other stakeholders. The project conducted a two key research studies i.e. an exploratory study on socio-economic, health and environment management status among ASGMs in Namayingo and Mubende Districts, and a baseline (scientific) study that covered miners from the project districts. The findings of the baseline study which was the first of its nature in Uganda became very instrumental in designing the project interventions and also became very good reference points for partners and other stakeholders work on mercury in ASGM in Uganda and the region.

Exploratory Study

An exploratory study was conducted in June 2017 by the project team in Namayingo and Mubende Districts to provide preliminary data for the baseline study. Information on artisanal small-scale gold miners in Uganda is scarce. The project team conducted the exploratory study in the two districts to

“This exploratory study generated facts and gave the project team more insights on the problems associated with use of mercury in ASGM” **KII with Project Team Member**

generate more information on ASGM by exploring the socio-economic, health and environment management status among artisanal small-scale gold miners in Namayingo and Mubende Districts.

The exploratory study revealed that ASGMs who use mercury in their mining activities are faced with so many occupational health hazards² which include injuries, mercury related effects on the body, fatigue and stress, headaches, chest pains, heart problems and elevated blood pressure and eye problems. The most mentioned occupational health related problem was accidents and injuries caused during various levels in the gold mining process especially during excavation and crushing of the gold ore.

A review of the exploratory study report and feedback from interviews with the artisanal small-scale gold miners, as well as local leaders in Mubende and Namayingo revealed that miners were affected by the above highlighted occupational health-related problems because they were working in extremely dangerous environments with no protective gear from the dust and fumes that emanate from excavation and crushing of the rocks and gold ore.

Baseline (scientific) Study

The project team conducted a baseline Survey on Social, Economic and Health Impacts of Mercury in the ASGM Sector (*mercury exposure*) on miners in the gold mining areas in Uganda. Through this baseline study, blood samples were collected from 160 miners who had used mercury before in their gold mining activities. The study was conducted in partnership with District Health Officers (DHOs) from the districts of Namayingo, Bugiri, Mubende, Busia, Nakapiripirit and Ibanda.

“This scientific baseline study was the very first of its kind in Uganda. The study helped us to understand the levels of exposure to mercury in different districts and it gave us an evidence base for our project interventions” **KII with Project Leadership**

² Exploratory Study Report on the Socio-economic, Health and Environment Management status among Artisanal Small-Scale Gold Miners in Uganda; Namayingo and Mubende Districts (2017); accessed in October - November, 2018



The Minister of State for Mining (Hon. Peter Lokeris) issuing a Certificate of Attendance to a Participant at the Baseline Study Report Presentation Conference; 30th August, 2018, at Fairway Hotel, Kampala

Source/ Photo credit: UNACOH

According to the feedback from the project team and partners, the baseline study found that there were high levels of mercury concentration in the blood and urine samples of the miners from the mining districts involved. The study findings revealed that Mubende and Busia Districts had miners with the highest levels of mercury concentration in the blood and urine samples.

Also, the same scientific study was conducted on food stuffs, plants, soil, fish and water bodies in the project districts. Samples were drawn and tests conducted to determine the presence of mercury in food

stuffs (tubers i.e. cassava, potatoes and yams, sugarcane, fish), soil and water bodies in the affected districts. Again, the results showed that mercury was present in food stuffs, plants, soil, fish and water bodies in those areas.

The baseline study was disseminated to project stakeholders at a National Conference which was held on 30th August, 2018 at Fairway Hotel in Kampala. The study dissemination conference attracted over 75 participants from Government, CSOs, local governments from the gold mining districts, ASGMs who were trained in alternative gold mining methodology, the Mining Police Protect Unit (MPPU), representatives from NEMA, Ministry of Energy and Mineral Development (MEMD) among other stakeholders. The central government was represented by the Minister of State for Mining (Hon. Peter Lokeris).

“The study findings have guided us in our interventions such as advocacy and the new projects. The findings helped us to understand the dangers of mercury use in mining” **KII with Project Partner**

Additional baseline study dissemination meetings were held at district level in districts where the study was conducted i.e. Busia, Kasanda (formerly Mubende), Amudat and Ibanda). A total of 104 participants {Amudat (34), Ibanda (25), Busia (23) and Kasanda (22)} attended the district dissemination meetings in four districts.

The feedback from the project team shows the findings of the scientific study were used to inform the interventions and activities of the Mercury-free gold mining project – New Horizons in the project districts. The study provided an evidence-base not only to the project team but also to Government, researchers and other interested stakeholders.

4.6 Documentation of project interventions

A review of the Mercury-free gold mining Project – New Horizons and feedback from the project team and leadership showed that the project made tremendous efforts as far as documentation of the project interventions, activities, progress and results are concerned. The project

“We have been able to produce a number of project activity and progress reports. We also made a Documentary of Mercury that was translated into six (6) languages in order to reach more people” **KII with Project Team/ Leadership**

team produced various reports i.e. quarterly and annual project progress reports, research reports, miners’ training reports, stakeholders’ meeting reports, and conference reports among others.

The Mercury-free gold mining project team also produced a documentary known as **‘Mercury Poisoning’** and this documentary was translated into four (4) local languages i.e. **Luganda, Lusoga, Runyankore and Swahili** as indicated in Box 2 below. The purpose of translating the documentary was to ensure that the message reached a wider audience than it would have been if it was only in English.

Box 2: Mercury Free Gold Mining – New Horizons Project Documentaries:

- Mercury Poisoning Luganda - <https://youtu.be/Oq79RrhjFRA>
- Mercury Poisoning Runyankore - <https://youtu.be/fApjIbog8PU>
- Mercury Poisoning Lusoga - https://youtu.be/ft_cGPnwxno
- Mercury Poisoning Swahili - <https://youtu.be/QYl2wx6-eHk>
- Mercury-Free Project – Fairway - https://youtu.be/T_qAd8rISI4
- Mercury-Free Project Namayingo - <https://youtu.be/MMnnGwaHpLI>

Source: UNACOH Activity Report

Feedback from the local leaders in Mubende, Namayingo and Buhweju District shows that the translating the *‘Mercury Poisoning’* Documentary was a very useful project intervention in that more local people who were not literate and conversant with the English language were able to listen and watch the documentary and

understand it in their own local language.

As a result the message was more understood and a wider audience was reached than if it had been left only in one language (English). The translation helped the ASGMs and locals comprehend the message, pick valuable lessons and also to pass on this message to their fellow miners and community members which in turn reduced the use of mercury in gold mining in the project districts.

“The translated documentaries helped us miners and the local people to understand the dangers of using mercury in gold mining. We appreciate the project team for doing this for us” FGD with Miners at Buheeri Site, Namayingo District



A Pull-up banner highlighting information about the MFGM Project at the UNACOH Offices in Kampala
Source/ Photo credit: Evaluation Team

Also, the Mercury-free gold mining Project – New Horizons produced a number of information, education and communication (I.E.C) materials such as brochures, pull-up banners and project briefs. The project team also took and produced still pictures of ASGMs and the mining sites in Mubende and Namayingo Districts. The IEC materials and still pictures were used and displayed during the International Conference and Workshop on Occupational Health and Safety on formal and informal mining in Thyboron and Odense in Denmark in August, 2017.

The IEC materials such as the pull-up banner in the picture on the left and still pictures were very instrumental in the international participants and stakeholders about the situation of the ASGMs in Uganda.

Feedback from the project team shows that the IEC materials such as the brochures and pull-up banners were used to disseminate general information, as well as the objectives and activities of the project to different stakeholders in the project districts, partners during the various meetings and to participants at the International Conference and Workshop in Thyboron and Odense in Denmark.

“The information materials such as the brochures and still pictures helped us to tell the project’s story especially during meetings and other project advocacy events” **KII with Project Team Member**

4.7 Formation of associations and groups for artisanal miners

One of the outcomes of the Mercury-free gold mining Project– New Horizons was the formation of associations and groups by the ASGMs in Namayingo and Buhweju Districts. The formation of the associations and groups was intended to organise the miners to mine and carry out their activities in a responsible and organised manner. Harmonisation and re-organisation of the mining

“The miners were supported and trained by the project team (UNACOH) to form groups for purposes of supporting themselves. I think the training and knowledge given to them has helped a lot as they are now different” **KII with Chairperson, Miners’ Group at Buheeri Site, Buhana in Namayingo District**

activities in the project districts was top of the agenda as far as this project intervention was concerned.

Feedback from the miners and local leaders has shown that in areas where associations and groups have been formed, there is harmony in the way the miners operate, lawlessness and other bad practices are on the decline and miners are looking at alternative methods to mercury use as well as ways to diversify their sources of income. The several capacity building meetings, trainings and engagements with the miners helped the miners to gain confidence to start forming groups, think of alternative ways to mercury use in gold mining and ways to survive on other sources of income.

4.8 Other areas in which the project built capacity of the miners and partners

Feedback from the ASGMs interviewed from Namayingo and Mubende Districts as well as the review of the project activity and progress reports, indicated that the MFGM Project has contributed to capacity building of the miners and the project partners in other ways as highlighted in Box 3 below:

Box 3: Other ways the Mercury-free gold mining project has contributed to capacity building of miners and project partners:

- The project supported the implementing partners (UNACOH, NAPE and MGLSD-OSH Department) to procure office furniture and equipments such as computers and to pay for utilities such as water, electricity, pay for faster internet , telephone costs (airtime) for the contact persons. And for UNACOH, recruitment of two new project staff i.e. Dr Victoria Mukasa (*Project Coordinator*) Ms Peace Nakayiza (*Project Assistant*), as well as enhancing the salaries of staff who were added additional responsibilities as result of this project;
- The project **‘opened the Government’s eyes’** to the problems associated with mercury use in ASGM and poor mining practices in general in Uganda. The project is a **‘stepping stone’** with regard to dealing with the informal mining sector in the country and how to deal with ASGMs;
- The project enabled the gold miners to interact with the partners (UNACOH, NAPE and Dialogos/ DASAM, MGLSD-OSH Department) and as such inform them about issues related to informal gold mining, the risks faced by miners and the miners also opened up on the dangers they encounter in the course of their work; and,
- Beyond the miners and partners, the project empowered communities in the mining areas where the demonstration sites were set up e.g. communities got valuable information on the dangers of using mercury in gold mining.

Source: KIIs with Project Partners and FGDs with trained miners

Objective Two: International advocacy for Mercury-free gold processing, and to enrol ASGMs and partners in international networks

The section below highlights on the findings with regard to international advocacy for Mercury-free gold processing, and enrolling ASGMs and partners in international networks:

5.1 The International Conference in Denmark

A review of the Mercury-free gold project reports and feedback from the project implementation team indicates that an International Conference and Workshop on Occupational Health and Safety on formal and informal mining was organized in Odense, Denmark between the 17th to 26th August, 2017 and it was attended by the project stakeholders from Uganda. The conference provided opportunities for advocacy for the project.

The International Conference was attended by participants from close to 25 countries and Africa was represented by participants from 3 countries i.e. Uganda, South Africa and Democratic Republic of Congo (DRC). At this conference, over 40 papers including keynote addresses were made and several papers were presented about occupational health and safety in mining among which some of the papers were directly concerning ASGMs.



A section of the Uganda Delegation at the International Conference in Denmark (17th to 26th August, 2017)

For Uganda, a total of 6 miners attended the conference out of the 9 miners originally planned to travel to Denmark. Also, 3 project partners representing UNACOH, NAPE and the OSH Department of Ministry of Gender, Labour and Social Development (MGLSD) attended the conference in Denmark.

Table 3 below shows details of Ugandan participants at the International Conference in Denmark.

Table 3: Ugandan participants at the International Conference and Workshop on Occupational Health and Safety

Miners	District	Partners	Organisation
Mugisha Andrew	Mubende	Mukasa Victoria	UNACOH
Jjombwe Mark Asaph	Mubende	Kamese Geoffrey	NAPE
Kauma Ivan Male	Mubende	Nkonge Douglas	OSH Dept., MGLSD
Beinomugisha Deus Dedit	Buhweju		
Aguttu Josephine	Busia		
Dhizaala Kaloli	Nakapiripirit		

Source: Mercury-free gold mining – New Horizon Project data (October, 2018) and Project Reports

Feedback from the project partners shows that the International Conference in Odense, Denmark provided a very important opportunity for the Ugandan partners to advocate for the project and also learn from their counterparts from other countries with regard to mercury-free gold mining and occupational

health and safety in formal and informal mining environments. The partners noted that they learnt from their colleagues how to ensure health and safety in formal and informal situations, how to build capacity and equip ASGMs with the relevant knowledge and information as far as mercury-free gold mining is concerned.

“The Denmark conference was a great opportunity for advocacy that gave us exposure and empowered us as partners. We benchmarked ourselves to colleagues from other countries and we got insights to improve what we do” **KII with key project partner**

Pre-Conference Workshop in Thyboron, Denmark

Feedback from the partners who travelled to Denmark shows that before the Ugandan delegation attended the International conference on Formal and Informal Mining; they participated in a 3-day Pre-Conference Workshop in Thyboron in Northern Denmark from the 18th to 21st August, 2017. At this Pre-Conference workshop, the participants were prepared for the conference and the following presentations³ were made by the Ugandan delegation:



Some of the participants at the Pre-Conference Workshop in Thyboron, Denmark
Source/ Photo credit: NAPE

- Mercury toxicology; Learnings from the Phillipines;
- Civil Society interventions and communication training for the miners;
- Dissemination of findings from the exploratory study on the socioeconomic, health and environmental management issues faced by artisanal small scale miners in Uganda was made; and,
- The Video Film **‘Mercury, the Assassin’**, a poster presentation and pictures from the field in Uganda were also showcased.

Overall, feedback from the Ugandan delegation shows that the conference benefited the participants as far as sharing experiences, learning new technology and exposure to new and better ways of formal and informal gold mining techniques are concerned. The Ugandan miners who attended the conference and workshop in Denmark also learnt a lot about the dangers of poor mining methods including the use of mercury in gold mining.

“The International Conference in Denmark was a great learning and networking opportunity. We made many contacts with various stakeholders at the international level” **KII with Project Team Member**

5.2 Networking with International partners

One of the interventions of the Mercury-free gold mining project was to engage in international advocacy for mercury free gold processing, and to enroll ASGMs and partners in international networks. The evaluation findings show that the Project Team that participated at the **International Scientific Conference and Workshop on Occupational Health and Safety in Formal and Informal Mining** made efforts to identify and initiate networks and partnerships for partners and ASGMs with stakeholders at the international level.

³ Report on the International Conference and Workshop on Occupational Health and Safety on formal and informal mining in Odense, Denmark (17th to 26th August, 2017); (August, 2017); accessed in November, 2018

The attendance at the International Conference and efforts made to initiate networks and partnerships for project partners and ASGMs in Uganda with stakeholders at the international level was aimed at meeting the second project objective. The International Conference was organized by MinOSH and sponsored by several bodies such as DASAM, ICOH, Workplace Health Without Borders (WHWB), University of Southern Denmark (SDU), Clinic of Occupational Medicine, Odense University Hospital, International Security Agency (ISSA) and National Research Centre for the Working Environment and Dialogos (which sponsored the Ugandan delegation).



An international participant making a demonstration of gold processing at the Pre-Conference Workshop in Thyboron, Denmark
Source/ Photo credit: NAPE

The project partners (UNACOH and NAPE) who were part of the Ugandan delegation identified a number of stakeholders from the above organisations at the international level for future advocacy and networking for the Mercury-free gold mining project activities:

A review of Mercury Free Gold mining project progress reports and interviews with project partners and miners indicate that the second objective on engaging in international advocacy for mercury free gold processing, and to enroll ASGMs and partners in international networks; was still work in progress as much as a big percentage of the objective was largely achieved.

“As far as international advocacy for mercury-free gold processing is concerned, we made good progress but more needs to be done. We will continually make follow up with the contacts we made at the conference” **KII with Senior Project Team Member**

The project team was able to participate at the *International Scientific Conference and Workshop on Occupational Health and Safety in Formal and Informal Mining* in Denmark and also, to identify and initiate networks and partnerships for partners and ASGMs in Uganda with stakeholders at the international level.

The feedback from the partners shows that this is still work in progress and the partners either individually in their organisations or through a new project will make follow-up with the above identified stakeholders at the international level and any other key stakeholders to further promote international advocacy for mercury free gold processing, and to enroll ASGMs and partners in international networks.

International Commission on Occupational Health

One of the Project Leaders who also doubles as the Ag. Executive Director of UNACOH (Dr D.K. Sekimpi) is a life member of the International Commission on Occupational Health. He has used his membership and the UNACOH platform to advocate and create awareness about the Mercury-free gold mining project among the members and stakeholders of the International Commission on Occupational Health.

According to Dr Sekimpi, the Mercury-free gold mining project is now known among members of the International Commission on Occupational Health and this has further given the project more avenues to create networks with international partners.

6 Objective Three: Creating local, national and regional alliances

The findings under this objective offer a detailed picture on the creation of local, national and regional alliances (i.e. nationally between stakeholders in Uganda, regionally in Africa between nationally based advocacy organisations and stakeholder groups and internationally by linking the Ugandan organisations and international network of ICOEPH).

6.1 Creation of local alliances

Feedback from interviews with project partners and review of the project documents revealed that the project undertook a number of interventions that led to the creation of several local alliances with various stakeholders in the country including the following:

Alliances with Local Governments

Feedback from the project implementation team revealed that a number of memoranda of understanding (MoUs) were signed between the leadership of the Mercury-free gold mining project and the Local Governments with gold mining activities. Three (3) MoUs were signed with the districts of Buhweju, Namayingo and Nakapiriprit and alliances created with those project districts. A memorandum of understanding was not signed with Mubende District due to the land wrangles which were taking place even before the Mercury-free gold mining project started.

Secondly, the political and technical leadership in Mubende district were relatively new at the time and they had not yet understood the problems on the

“Our work in Mubende District was cut short when a Government directive came to close the mines. We had to fold and close our operations and leave” **KII with Project Leadership**

one hand but also the Mercury-free gold mining project on the other hand. The project team made efforts to engage the Mubende District leadership but this was the same time when the mines were closed by the Government of Uganda and all gold mining activities in the district suspended.

Also, the Mercury-free gold mining project team at UNACOH organized meetings and created alliances with District Health Educators (DHEs) from eight (8) districts with gold mining activities. The meetings with the DHEs were aimed at both creating awareness on the project and also seeking for their buy-in and support for the project in their respective districts.

Alliances with Line Government Ministries

During the course of implementation of the Mercury-free gold mining project team at UNACOH organised and held a number of meetings with line ministries. Meetings were held with the Ministry of Gender Labour and Social Development (MGLSD), Department of Occupational Safety and Health (OSH) and with the Ministry of Energy and Mineral Development (MEMD). For example, the project team held 2 meetings with the OSH Department at MGLSD in June 2017 and May 2018 respectively.

“My interactions with the project team and partners helped to understand this project. After this, I was able to get involved by supporting its activities such as workshops and trainings of ASGMs” **KII with Ministry Official**

At these meetings, the Mercury-free gold mining project team and partners were able to introduce the project to the relevant ministry officials, explore for potential areas for working together, seek views on areas of common interest and areas of support as far as interventions to fight mercury use in gold mining in Uganda are concerned. These meetings at the end of the day helped the project to create alliances with the line Government Ministries and they helped to enlist the involvement of various technical Ministry officials in project activities.

Alliances with other stakeholders (Government agencies and NGOs)

The Mercury-free gold mining project team made several visits to different project stakeholders during the course of implementation of the project. The team made several visits and created alliances with the following several stakeholders as indicted in Box 4 below.

Box 4: Alliances created with other stakeholders:

- African Centre for Energy and Mineral Policy (ACEMP)
- Department of Water, Environment and Natural Resources in Entebbe;
- Department of Occupational Safety and Health (OSH), MGLSD;
- National Environmental Management Authority (NEMA);
- Ecological Christian Organisations (ECO);
- Uganda Police, Minerals Protection Unit;
- Makerere University (MUK), School of Public Health; Department of Environmental Management;
- Directorate of Government Analytical Laboratory; and,
- National Chamber of Mining and Petroleum
- Media houses.

Source: KIIs with Project Team and Partners

A cross section of stakeholders at one of the meetings organized by the Project on ASGM in Kampala

Source/ Photo credit: UNACOH

The purpose of these visits and meetings with the different stakeholders was to create more local alliances with like-minded stakeholders. The visits and meetings were effectively employed by the project team to introduce the project to the stakeholders, seek for their input on areas of common interest, and identify areas of potential support.

At the end of the day, alliances were created with key stakeholders and these alliances have produced several benefits not only to the project but also to the fraternity of partners fighting for the reduction of use of mercury in gold mining in the country.

For example, through these alliances and partnerships; NAPE was able to organize meetings and invited the East Africa regional partners from Kenya, Uganda and Tanzania to share experiences and compare notes on interventions against mercury use in gold mining. The African Centre for Energy and Mineral Policy (ACEMP) supported the project team at UNACOH on identifying miners they had worked with and gave them guidance on organizing the ASGMs into associations and support groups for better coordination with the project team.

“Through our alliances with NAPE, we were able to create linkages with colleagues from Kenya and Tanzania. We are hopeful for more benefits from these alliances” **KII with Project Team Member**

Also, through the alliances created; NEMA was able to represent and made presentations at several international fora including the Minamata Convention on Mercury meeting in Lusaka, Zambia on behalf the Mercury-free gold mining project partners.

6.2 National alliances created

At the national level, the Mercury-free gold mining project created a strategic alliance through the **National Steering Committee on ASGM** which brought together the individual stakeholders that the project team and partners had cultivated earlier during the project implementation. The purpose of the National Steering Committee on ASGM was to create an entity that would bring together all stakeholders involved in the fight against the use of mercury in gold mining in Uganda to speak with one voice.

National Steering Committee on ASGM

The National Steering Committee on ASGM was spearheaded by project team composed of UNACOH, Dialogos/ DASAM, NAPE and the *stakeholders highlighted in the box above on alliances created* who supported the implementation of the MFGM project.

One of the highlights of the above effort was the National Steering Committee Meeting on ASGM⁴ which was held in Kampala Grand Global Hotel on 19th October, 2017. This meeting was attended by representatives of the above listed stakeholders. Below are the main areas on the agenda of the National Steering Committee meeting including the agreement on the roles and responsibilities of the committee:

- Update on the Mercury-Free Gold Mining Project – New Horizons;
- Updates from NAPE;
- A brief from the Ministry of Gender, Labour and Social Development (MoGLSD);
- Updates from Water Resources Management (MWE);
- Plenary Discussions and Reactions from participants;
- Updates from NEMA’s work on the Minamata Convention; and,
- Roles and responsibilities of the National Steering Committee

Roles of the National Steering Committee:

- Oversee the projects’ implementation;
- Guide stakeholders in the project implementation;
- Provide advisory and technical assistance where necessary; and,
- Build capacity of project teams



National Steering Committee Meeting on ASGM held at Grand Global Hotel, Kampala on 19th October, 2017

Source/ Photo credit: UNACOH National Steering Committee Meeting on ASGM Report

According to interviews with the project team and stakeholders, the alliances created at the national level were to a great extent beneficial to the project and partners in the sense that through the alliances created, UNACOH facilitated steering committee members i.e. NEMA, DGSM, MGLSD and ACEMP to participate in a regional meeting held in March 2018 in Tanzania which helped create networks with key players in ASGM in the East Africa region, NAPE worked together with other regional partners and facilitated knowledge and experience sharing in the region, and UNACOH facilitated a group of six miners from different gold mining districts in Uganda to participate in an international conference in Denmark where they shared knowledge about mercury use in gold mining, group formation, advocacy approaches and skills, as well as gaining more experience on mercury-free gold mining technology.

6.3 Regional alliances created

A review of the Mercury-free gold mining project-related documents and reports as well as feedback from interviews with key project partners showed that the project supported efforts to create regional alliances in East Africa. The feedback from the stakeholders interviewed further shows that the challenges associated with the use of mercury in gold mining have a regional dimension to them and as such they require regional efforts to deal with them. To this end, the project created regional alliances through the following:

Regional Meeting in Kampala and Exchange visits

⁴ National Steering Committee on ASGM Meeting Report (October, 2017); accessed in October, 2018

As one of the partners who supported the implementation of the Mercury-free gold mining project, the National Association of Professional Environmentalists (NAPE) organised a knowledge and experience sharing meeting and invited regional partners from Kenya and Tanzania. The meeting was attended by UNACOH and other National Steering Committee members in Kampala.

Also, NAPE is working together with regional partners to facilitate knowledge and experience sharing in the region through meetings and exchange visits for example with Lawyers Environment Action Tanzania (LEAT). Plans were also made to have exchange visits as a way of facilitating the effective implementation of the Minamata Convention by the regional partners in their respective countries.

Regional Meeting in Dar es Salaam

In March, 2018, a meeting was held in Dar es Salaam, Tanzania that brought together partners from Uganda, Kenya and Tanzania. The Mercury-free gold mining project – New Horizons implemented by UNACOH supported stakeholders on the National Steering Committee from Uganda i.e. NAPE, NEMA, DGSM, MGLSD, ACEMP and UNACOH among others to participate in a Regional Meeting held in March 2018 in the Tanzanian Capital. The Dar es Salaam Meeting was aimed at creating networks with key players in ASGM in the East Africa region.

A key outcome of the regional meeting held in Dar es Salaam between partners from Uganda, Kenya and Tanzania; was the formation of a **Regional Network**. The regional network was created as a platform for the partners to further engage the stakeholders by creating networks in the East African countries to be used in advocating, promoting and sustaining mercury-free gold mining interventions in the region.

The Parallel Session on Health in Extractive Sector Session on the sidelines of the 65th East, Central and Southern Africa Health Community (ECSA-HC) Health Ministers Conference in Dar es Salaam

The 65th East, Central and Southern Africa Health Community (ECSA-HC) Health Ministers Conference was held in Dar es Salaam, Tanzania on 20th March, 2018. The conference brought together Ministers of Health from East, Central and Southern African countries, as well as representatives of other organisations. The agenda for the HES Parallel Session is highlighted in Box 5 (right).

Box 5: Agenda for the HES Parallel Session:

- UNACOH project experience sharing and opening the parallel session;
- The Minamata Convention;
- ASGM in Uganda and East Africa;
- The hazards of Mercury in ASGM and the response of the Mercury-Free Gold Mining Project; and,
- The Video Film (***Mercury, the Assassin***) Show
- Achievements and way forward.

On the sidelines of the 65th ECSA-HC Health Ministers’ Conference, UNACOH with support of the Danish Government through a Danish NGO, Dialogos held a parallel session on Health in the Extractive Sector (HES). The focus of the parallel session to communicate and discuss workable approaches for the region based on experiences from Uganda. Experiences presented were drawn from Dialogos-supported Mercury Free Gold Mining Project–New Horizons.

At this parallel session on Health in the Extractive Sector (HES) at the 65th ECSA-HC Health Ministers’ Conference, UNACOH was supported during discussions, sharing experiences and lessons learnt by representatives of some of the MFGM project stakeholders from Uganda.

Other institutions from the East Africa region included the Centre for Environmental Justice and Development (CEJAD) from Kenya and Agenda for Environmental and Responsible Development (AERD) from Tanzania.

Minamata Convention on Mercury Meeting in Zambia

The Africa Regional Consultative Meeting in preparation for the Second Meeting of the Conference of the Parties to the Minamata Convention on Mercury was held from the 9th to 10th October, 2018 in Lusaka, Zambia. The Uganda country updates were made by a Representative from the National Environmental Management Authority (NEMA). The representative from NEMA also gave updates on mercury-free gold mining project and showcased the project’s achievements as well at Lusaka meeting.

The presentation was well received and the Mercury-free gold mining project was recognised. At the same time, the project was highlighted in the meeting resolutions and recorded in the United Nations (UN) records as part of the final record of the Minamata Convention on Mercury.

6.4 Unintended results of the project

Documents review, interviews and consultations with various project stakeholders of the Mercury-free gold mining – New Horizons project revealed the following additional results (*both positive and negative*):

Positive unintended results of the project:

- **Establishment of a collaborative relationship with the Mining Unit of Uganda Police:**

The Mercury-free gold mining – New Horizons project managed to establish a close working relationship with the Mining Unit of the Uganda Police. This collaborative approach and working

“Before this project started, there was no working relationship with Uganda Police. They did not know of our existence but this changed with this project. We collaboratively worked and involved them in project activities such as key meetings” **KII with Project Partner**

relationship is a positive unintended project outcome which has led to the recognition of the project stakeholders by Uganda Police to the extent that Uganda Police regularly consults the project team on key mining issues and challenges in Uganda especially those in the project districts of Mubende, Namayingo, Buhweju and the greater Eastern Uganda mining districts of Karamoja. This is an unintended result of this the Mercury-free gold mining – New Horizons project.

- **Formation of an East African Countries Collaborative Effort on Mercury-free gold mining:** To an extent, the formation of a collaborative effort on Mercury-free gold mining is

“Problems related to insecurity and dangerous/ risky mining activities are due to presence of foreign unregistered miners. We don’t know where these people come from” **FGD with ASGMs at Buheeri Site, Buhana in Namayingo District**

attributable to the Mercury-free gold mining – New Horizons project and can be counted as one of the positive unintended project outcomes/ results.

After the meeting in Dar es Salaam, Tanzania; the three countries Uganda, Kenya and Tanzania agree to form a collaborative initiative to continue engaging and working together on Mercury-free gold mining in the region.

Gold mining in Uganda tends to draw foreign unregistered ASGMs from neighbouring countries such as Democratic Republic of Congo, Kenya, Rwanda, South Sudan and Burundi who normally cause a lot of problems not only to local miners but also the communities surrounding the mining areas. The East African countries therefore formed an initiative to coordinate and work together to tackle issues and challenges posed by cross-border activities of unregistered foreign miners and the proliferation of mercury in the mining sector.

Overall, feedback from various stakeholders interviewed including the miners revealed that the capacity building on mercury-free gold mining, advocacy for mercury-free gold processing and creation of alliances

has improved gold mining, boosted the miner’s confidence and empowered the miners to be become better miners.

Negative unintended results of the project:

Some of the supported artisanal small scale gold miners (ASGMs) after being equipped with mercury-free gold mining knowledge and skills as well as being supported to form associations and groups have become mobile and moved to other areas outside the project areas.

“Some of the trained miners keep moving in and out of this area and new untrained ones come in. We need to be training them regularly” **KII with Leadership of miners; Buheeri Mining Site, Namayingo District**

Some of the trained miners have for example moved from Namayingo District to other surrounding districts while others have gone on to engage in other trades outside of gold mining. Since some of the project interventions such as formation of support groups requires the miners to keep in one place and continue working together to ensure mercury-free gold mining. When the miners move away from the mining areas it affects the miners’ ability to improve and in a way this demotivates the miners who are left behind and it therefore leaves the affected groups and the project area short of trained miners. This therefore calls for a need for measures to ensure the trained miners are supported to remain within the project districts or even when they move to other districts they remain within the sector.

6.5 Sustainability: ways to ensure ownership and lasting gains made by the project

The consultants rated the sustainability measures instituted by the project as *good* and the evaluation was based on the likelihood of sustaining project results and gains beyond the project’s lifespan as highlighted below:

Partnership and working together with like-minded stakeholders: The Mercury-free gold mining project – New Horizons facilitated interactions and creation of partnerships between different stakeholders such as NAPE, the Ministry of Gender, Labour and Social Development, Ministry of Energy and Minerals Development, other NGOs, Makerere University College of Health Sciences/School of Public Health, Districts, gold buyers and local leaders among other stakeholders to champion the Mercury-free gold mining interventions.

“By working together (NAPE, UNACOH, Makerere University and others); we have been able to drive the agenda of mercury-free gold mining. This effort needs to continue to sustain the project’s interventions” **KII with key partner**

The involvement and contribution of the different stakeholders in ensuring that there is Mercury-free gold mining in Ugandan gold mines is one way the project can be sustained. The partnerships created and working together are a good strategy that has shown potential that it can work and can be sustained by the stakeholders to ensure mercury-free gold mining. This therefore calls for different stakeholders to continue coming together and possibly scale up the Mercury-free gold mining project to cover other gold mining districts in Uganda to benefit more miners.

The Joint Annual UNACOH Scientific Conference: Every year, UNACOH and Makerere College of Health Sciences jointly organize the Annual Scientific Conference. This annual conference can be utilized to disseminate mercury-free gold mining information and findings to the wider academic and general public.



The pictures above show some of the participants at the last Joint Annual Scientific Conference (27th September, 2018) organized by UNACOH and Makerere College of Health Sciences

The above conference offers a sustainable platform for the dissemination of information and results from the mercury-free gold mining project and interventions in Uganda to the academic and scientific communities as well as to the general public who attend this conference.

Implementation of the Minamata Convention resolutions: Ensuring proper implementation of the Minamata Convention Resolutions is one of the ways to ensure sustainability of the Mercury-free gold mining efforts as the Minamata Convention calls for reducing mercury use and exposure.

“We are part of the bigger picture and therefore we need to also align our efforts to the global players” KII with **Project Leadership at UNACOH**

By ensuring that the Mercury-free gold mining project continues to be aligned to the guiding principles of the Minamata Convention; the project interventions such as capacity building on Mercury-free gold mining, advocacy of Mercury-free gold mining and creation of alliances for furthering efforts to reduce mercury use in gold mining will be sustained in the short and long term. Dialogos and the in-country partners therefore need to continue ensuring that the project interventions are aligned to the resolutions of the Minamata Convention as away to ensure mercury-free gold mining is achieved in Uganda.

On-going engagement with artisanal miners: Information generated from this evaluation and feedback from the miners revealed that creating an on-going engagement with the trained miners and those in areas not yet reached by the project is one of the sure ways to sustain the interventions of the mercury-free gold mining project.

“We are ready to continue working with UNACOH and the project. We need more support and please don’t abandon us” FGD with **Miners, Namayingo District**

According to the project reports, interviews with miners and local leaders; there is a need for UNACOH and the other project partners to continue working with and supporting the miners to ensure that the work started by this project becomes sustainable. The miners expressed willingness to adopt the new mining methods introduced by this project but at the same time, they appealed for continued support, technical oversight and linkages with Government and other stakeholders who can help them to further improve and move away from the poor and dangerous mining practices such as using mercury in ASGM.

Initiation of follow-on projects: One of the ways of sustaining some of the interventions and gains made by the Mercury-free gold mining project is the initiation of follow-on projects by different partners. NAPE has started a follow-on project to deal with environmental aspects of use of mercury in gold mining.

One the other hand, UNACOH is also poised to start two follow-on projects to deal with advocacy issues related to use of mercury in gold mining as well as furthering the principles of the Minamata Convention which calls for reducing mercury use and exposure in gold mining.

“One way we need to ensure sustainability is through initiating new projects to take forward the interventions and activities of this project” **KII with Project Partner**

During FGDs and KIIs, Miners and Local Leaders in Mubende and Namayingo Districts suggested other ways to ensure sustainability of the Mercury-free gold mining Project as follows:

- Develop a support supervision and mentorship plan to ensure that there is on-going mercury-free gold mining capacity building for miners, advocacy for mercury-free gold mining as well as creation of alliances at all levels to be able to guarantee the gains made by the project;
- Developing miner exchange programs for miners from different districts to be able to visit the mines where miners have been trained in mercury-free gold mining. This will help the miners learn best practices from each other and implement the good practices when they return to their home district/mining areas.

6.6 Project implementation challenges

This sub-section highlights the challenges encountered during the implementation of the Mercury-free gold mining Project – New Horizons according to feedback from the project partners, KII interviews with key stakeholders and FGDs with ASGMs in Mubende and Namayingo Districts:

Death of first Project Coordinator: The death of the first Project Coordinator affected and slowed down the initial stages of project implementation. This was a setback which negatively impacted on the

“The death of our Project Coordinator affected the project start. We fell behind and lost time before a new Coordinator came in to coordinate the project” **KII, UNACOH Leadership**

linkages that had been created among the project implementing partners (NAPE and UNACOH). As much as a Project Coordinator was brought on board to replace the first

one who passed away, it affected the smooth start of project implementation as valuable time and linkages were lost. As much as this change was managed well it caused a setback by delaying and disorganising the smooth implementation of the project in the initial stages.

Delayed release of project funds: The project team experienced a delay concerning the release of the initial project funds which were disbursed in the second quarter. The delayed disbursement of the project funds affected the smooth beginning of the project. The delay affected the project work-plan and led to a rush in the implementation of activities in the 2nd and 3rd Quarters (April and August, 2017). The project team had planned activities, set dates for activities implementation as well as mobilizing project partners and ASGMs for field work which got disorganized as a result of the delayed release of funds.

Closure of the Mubende gold mines: The directive by Government of Uganda to close the Mubende gold mines negatively affected the smooth progress of the project. The project training and demonstration equipment and infrastructure which had been set up at Lugongwe Demonstration site in Kitumbi Sub-county, Mubende District had to be dismantled and in the process some of the equipment was lost (*stolen*), and valuable project time and money were lost in the confusion that ensued as a result of closing the mines in Mubende. This set back demoralised the ASGMs and it affected smooth implementation of the project. The demonstration equipment and infrastructure were then moved to Buheeri demonstration site in Buhaana Sub-county in Namayingo District.

Delays in getting chemicals and other consumables for use in processing blood samples for the study: During the scientific study on Mercury exposure and its effects on miners, there were

unnecessary delays because the chemicals used in processing the blood and urine samples as well as the consumables needed by the Government Analytic Laboratory were not available in Uganda. It took quite a long time before the chemicals and consumables were procured and the processing of the blood and urine samples from the miners started.

“We experienced delays at the start due to lack of consumables we needed to have samples processed. Also, institutional capacity was low and we needed to first sort out this issue as well” **KII with a Project Team Member**

Also, getting Borax which is used in the alternative gold mining approach introduced to miners is a big challenge. The miners have been taught how to use the

alternative gold mining technology but Borax which is a safer chemical used instead of mercury is not easy to get by the local miners. This negatively impacts the project’s efforts to move the miners away from mercury and in the long run it will also curtail the project’s sustainability.

Inadequate water for use in the alternative wet method of gold processing: Gold mining and processing requires the miners to use substantial amounts of water. The gold mining areas in Mubende, Namayingo and most of

“We are grateful to UNACOH for donating to us a tank for water storage. The processing of gold requires us to use a lot of water in sieving which was a problem for us” **FGD with miners at Buheeri Mining Site in Namayingo District**

Eastern Uganda are affected by water shortages yet the alternative gold mining technology given to the miners requires use of water in sieving the gold particles from the rocks and soil. These areas are faced with severe water shortages and as such this puts the use of the alternative approach promoted by the project at risk of not being used.



The pictures (left) a water tank donated by UNACOH to the gold miners and (right) a miner showing the sack used in the alternative gold processing method at Buheeri Demonstration Site, Buhaana Sub County in Namayingo District

As highlighted in the pictures above, the miners tap water for use in sieving and other gold mining processes from the water tank donated by UNACOH. With the capacity building support, water tank provided and technology on how to use water in the alternative gold mining techniques; the majority of the miners and local community are grateful to the Mercury-free gold mining project for introducing to them a safer alternative to gold mining.

Influx of foreign unregistered miners into Ugandan gold mines: Gold mining in Uganda has become a magnet for foreign unregistered miners from countries such as

“Some of our local people are beaten and displaced from their land by people we don’t know who are coming from outside Uganda. It’s a big problem for us as leaders” **KII with Top Leadership in Mubende District**

Democratic Republic of Congo, Kenya, Rwanda, South Sudan and Burundi. When these foreign miners enter the mining areas such as those in Mubende and Eastern Uganda, they normally cause very many problems including causing insecurity since some of them are armed and engage in many bad activities that are harmful and negatively affect the local miners and surrounding communities. For example, the land wrangles and evictions in Mubende are partly due to the influx of foreign miners and gold buyers who have got no regard for the land rights of the local communities and people.

Problem of buying good gold ore with reasonable amounts of gold for demonstrating the gravity concentration method with borax: The project team experienced a challenge of buying good gold ore for demonstrating GCM with borax to ASGMs in the project sites. Quite often, the gold pit owners would sell to the project team gold ore that had very low amounts of gold. As a result, the partners found challenges demonstrating the gravity concentration method with borax the miners yet this was one of the pillars of this project to show the ASGMs that there was an alternative option of gold mining and processing other than using mercury in gold mining.

Introducing new technology which is not supported by on-going technical support: Feedback from the miners and local leaders in both Mubende and Namayingo Districts showed that the miners appreciated the introduction of the new mining technology and divorced from the use of mercury in gold mining.

“The new technology and mining methods require on-going technical support before miners can fully understand and appreciate it. We should not introduce new things to them and walk away immediately” **KII with key Project Partner**

However, what was not appreciated was the fact the new technology and mining methods were not supported with on-going technical support on the ground. Other than the local trainers the project did not put in place a technical person to help and guide the local miners on a regular basis on the new mining technology. This challenge was highlighted by miners, local community and district leaders as well as some of the implementing partners and it was noted that the possibility of miners reverting back to use of mercury was high given that they were not being supported on a regular basis with the new technology.

7 Conclusion, Lessons Learnt and Recommendations

The following evidence-based conclusions, lessons learnt and recommendations were drawn from the end of project evaluation of the Mercury-free gold mining – New Horizons project:

7.1 Conclusions

Overall, the Consultant agrees that Mercury-free gold mining – New Horizons project was successful. The project was able to create a positive impact for the artisanal small-scale gold miners (ASGMs) and other project stakeholders especially the partner organisations (*UNACOH, NAPE, Dialogos and DASAM*), as well as the communities surrounding the gold mining areas in Namayingo and Mubende Districts as well as other districts such as Buhweju, Busia, and Nakapiripirit among others where the project had interventions.

The project provided an opportunity to showcase how artisanal miners can be supported to stop bad mining practices such as using mercury in ASGM and embrace new technology and mining methods that are not harmful to occupational health and that are less hazardous to the miners and the environment. The project built the capacity of the miners as far as embracing safer mining methods are concerned and this offers lessons learned and a foundation which can be used to scale-up and replicate similar projects in other parts of Uganda.

On balance, despite the relatively short implementation period (*21 months*) and challenges encountered during project implementation, it is clear that the project *goal and objectives* of the Mercury-free gold mining project – New Horizons were valid and beneficial and with broader stakeholder engagement in a more participatory process can promote and increase buy-in for even better results for future related projects.

Evidence from the information gathered from the different stakeholders (*project partners, miners, gold buyers, district and local leaders, CSOs and local communities*) has shown that the MFGM project – New

“The problems the miners faced as a result of using mercury which is a dangerous substance; show that this project was timely. From the knowledge we have acquired we can now use the alternative method with no harm to us” **KII with Chairperson of miners group from Namayingo District**

Horizons was *relevant* and aligned with priorities of the beneficiaries and partner organisations with regard to building capacity on Mercury-free gold mining among selected ASGMs and the partner organisations, and documentation of use of Mercury in ASGM in the country, undertaking international advocacy for Mercury-free gold processing, and enrolling ASGMs and partners in international networks, as well as creating local, national and

regional alliances. This is more so because the problems associated with the use of mercury in gold mining in Uganda; which necessitated this project are still prevalent and as such there is a strong need to continue and possibly expand the interventions of this project to ensure more districts/ areas with gold mining are covered as a way of containing the problem of use of mercury in gold mining.

Overall, the project’s main areas of achievements were in the areas of capacity building of the artisanal gold miners, the partner organisations and stakeholders, increased awareness about the problem and dangers associated with use of mercury in ASGM in Uganda, creation of alliances at all levels, research and documentation of the magnitude of the dangers associated with using mercury, creation of partnerships and networks at national and regional levels as well as ensuring compliance with the Minamata Convention Guidelines on Mercury use in ASGM among other key achievements of the project.

In addition, evidence from various stakeholders (*including the miners themselves*) suggests that organizing the artisanal gold miners

“The information and skills we have got from this project now gives us confidence to deal with different people. Now I can stand and talk in the LC meetings and make a point.....before I was not confident” **KII with trained miner from Lugongwe Site in Mubende District**

into associations and support groups and equipping them with various knowledge and skill sets including leadership and management skills; have contributed to turning the ASGMs into a new pool of confident miners which has improved mining practices and promoted their ability to engage with other stakeholders such as Government/local government leaders, technical officials from the project districts, CSOs working on related interventions as well as empowerment to engage in community affairs.

However, in order to consolidate gains made and promote wider impact and sustainability of the Mercury-free gold mining project; more remains to be done in expanding the scope and reach of the project in other areas of the country, primarily by building on the successes realized and linking lessons learnt and best practices to the efforts being undertaken at the national level through strong partnerships not only among the project partners (*UNACOH, NAPE, Dialogos and DASAM*) but also with organisations like NEMA, and Government of Uganda agencies charged with supporting interventions to reduce mercury use in ASGM as well all Development Partners (*donors*) including Dialogos. Closer collaboration between the Dialogos and the in-country project partners and other Development Partners can ensure support for this work and also raise the profile of Mercury-free gold mining project – New Horizons at different levels.

Also, long-term sustainability of the project interventions should be promoted by continuing to encourage buy-in of key beneficiaries and stakeholders at all levels and emphasizing collaborative working relationship both internally with the in-country project partners and as well with stakeholders in the project districts, national and regional levels.

7.2 **Lessons Learned**

From the review of Mercury-free gold mining project related information, interviews and analysis of data/information collected from different stakeholders, the following important lessons learnt were documented:

- **Meaningful change requires team work:** Team work and good working relationships between partners and project stakeholders is important, enhances performance, increases opportunities for learning and capacity building among the implementing partners. This lesson was picked by the implementing partners, the miners, local leaders and gold buyers because previously before the project came in the different stakeholders were working individually but this project encouraged team work and good working relations as a way of not only building capacity among the partners but also improving the health and the working environment of the ASGMs regarding mercury use and occupation safety in the project districts.

“Coming together has helped us to learn as a team, form support groups and we have been supported unlike before when we were working individually” FGD with Miners at Buheeri Site in Namayingo District

- **Politics destabilizes and interferes with project implementation:** Interviews with various project stakeholders showed that politics at both national and local levels played a big part in interfering with the smooth implementation of the project especially in Mubende District.

“With a single announcement, we were out of business in Mubende. Our time and energy spent in setting up a demonstration in the district was wasted” KII with Project Leadership

The different stakeholders (*project team, miners, local leaders and even gold buyers*) interviewed during this end of project evaluation pointed out how they got affected by the decision by the Government of Uganda to close the gold mines in Mubende District. For example, the project team had to dismantle the alternative gold mining demonstration equipment which had been set up for use in training miners on mercury-free gold mining in the district. The project team and miners learnt an important lesson in that if the national and local politics concerning the sector are not in order; project implementation is adversely affected;

- **The era of Government and civil society organisations (CSOs) being apart is long gone:** Feedback from KII interviews with project partners highlighted the importance of the Government and local CSOs working together, sharing knowledge, learning and skills in the area of mercury-free gold mining. The project leaders, technical team, miners, law enforcement agencies such as the Minerals Unit of Uganda Police and local leaders lauded Government and local CSO working together as a key lesson learned that benefits all stakeholders. The project technical team was generous and open in sharing and transferring knowledge, lessons learnt and skills to other project stakeholders. This was a key lesson learnt by all stakeholders;

“We can do so much more if we are together in finding solutions to problems in the sector” KII with a key Project Partner

- **NGOs and CSOs are better placed to provide solutions to ASGM challenges:** The implementation of the Mercury-free gold mining project -New Horizons has shown that communities are looking and longing for solutions to solve problems and improve mining activities. However, evidence from the project team and from interactions with the miners revealed NGOs and CSOs implementing interventions on reduction of mercury in ASGM are better placed to provide the solutions. The partnership between Dialogos and the in-country project partners such as UNACOH, NAPE, Dialogos, DASAM, NEMA and MGLSD among others was able to bring Bantoxics (*a Philippines-based NGO*) with experience in dealing with mercury in ASGM; to build the capacity of the AGMs and partners in Uganda on mercury use in gold mining as well as introducing alternation technology and mining method known as the gravity concentration method with borax for gold

processing. This experience therefore showed that NGOs and CSOs implementing interventions on reduction of mercury in ASGM are better placed to provide the solutions.

- Importance of engaging and building trust with the ASGMs:** The artisanal gold miners are a unique group of people and the work they are engaged in is quite sensitive. Therefore, for any of the partners to engage and work successfully with these people, there is a great need to understand them, build trust and assure them that your interventions are not aimed at hijacking their activities and certainly not that one is not out to arrest them. Once, this is done, they open up and cooperate with the project, provide all the relevant information about their work and participate in project activities. This is the best way to work with unregulated informal entities by ensuring that they get to trust you first before anything else.

“Miners were quite suspicious at the start but once we built trust with them they opened up and cooperated”
KII with a key Project Team member

7.3 Recommendations

The recommendations are based on the evidence and feedback obtained from the Mercury-free gold mining project – New Horizons stakeholders reached during the end of project evaluation:

7.3.1 Recommendations to Dialogos, DASAM and the in-country project partners (UNACOH and NAPE)

- The networks and collaborative efforts created should be sustained:** Efforts should be made to ensure that the networks and collaborative efforts created between stakeholders by the Mercury-free gold mining project -New Horizons are sustained. The project has created local, national and international networks and these need to be sustained by Dialogos or other funders working closely with the local in-country partners (UNACOH and NAPE);
- Borax and other consumables should be brought nearer to gold miners:** The gold miners should be helped to have easy access to borax which is crucial in the use of alternative and safe gold mining technology. Currently, it is difficult for the local ASGMs to access borax but if support to have borax available within reach in the gold mining areas this will go a long way in ensuring safe gold mining in the project districts;
- Study the Mercury-free gold mining initiative and domesticate it to local miners:** The Mercury-free gold mining initiative should be studied more and domesticated to the local miners to ensure that miners completely do away with use of mercury in gold mining by making them embrace the alternative mining technology and use of safer methods;
- ASGMs should strengthen the existing associations and support groups and where possible form more:** The miners (ASGMs) and gold buyers in the project districts with support from other stakeholders such as CSOs should continue to organize themselves, strengthen the existing associations and support groups and where possible form additional associations and support groups for easy coordination, harmonization of their activities and also for accessing interventions such as loans and other forms of support provided by Government, Local Governments and NGOs for purposes of improving the conditions and well-being of ASGMs.

The associations and support groups should also be used as avenues for recognizing and licensing ASGMs by Government and Local Governments as well as for providing more training by CSOs.

- Identify and deploy skilled technical mentors:** The project should identify, bring on board and work with more skilled and experienced technical people (*mentors*) to support the artisanal gold miners on using the new mining methods on a routine basis in addition to few existing project partners’ technical teams/ mentors; and,
- The Mercury-free gold mining project should be scaled up:** The project and its interventions have demonstrated results at all levels in Mubende, Namayingo and other districts and should

therefore be scaled-up within the project area and also replicated to cover more artisanal gold miners in other districts of Uganda where there are gold mining activities.

- **The project partners should set up their own standard pit with good gold ore for proper demonstration of GCM with borax:** The project partners should procure land and set up a standard pit with good gold ore for proper demonstration of the gravity concentration method with borax in Namayingo, Mubende and other project gold mining districts where the partners are working with ASGMs in Uganda. Securing a standard pit with good gold ore will go a long way in ensuring the ASGMs are properly guided as far as the GCM with borax is concerned.

Feedback obtained during the interviews also revealed that stakeholders wanted the standard gold pits should also be used to demonstrate to the ASGMs how safe gold pits are constructed. This will go a long way in demonstrating to the gold miners the standard ways of constructing safe gold pits in the project districts.

7.3.2 Recommendations to other project stakeholders (including Government):

- **Government should expedite or fast-track the policy and legal regulations to improve gold mining:** There should be a concerted effort by the Government of Uganda, Local Governments and national leaders such as Members of Parliament (MPs) to fast-track the enactment of laws, policies and regulations to regulate gold mining in Uganda;
- **More advocacy should be done:** There should be more advocacy efforts by NGOs, CSOs, academia, Government of Uganda, media houses as well as and local leaders in order to create more awareness on the negative effects of using mercury in ASGM. The advocacy campaigns should be targeted to the young people especially the in-school and out-of-school youth; and,
- **Regular post-project follow-up support should be provided:** The Local Government (*district leadership*) in partnership with organisations such as NEMA, NAPE, UNACOH, OSH Department at MGLSD, Ministry of Energy and Minerals Development among others should be involved in providing regular post-project follow-up support to the artisanal gold miners including periodic training on better mining practices, regular visits to the mining areas and miners by the designated technical mentors and other project stakeholders to ensure that the miners are supported to put into practice the knowledge and skills acquired from the interventions of the mercury-free gold mining project.

8 Annexes – Data collection tools and Reference documents

8.1 Annex 1: Data Collection Instruments

- Tool 1: Documents Review Checklist
- Tool 2: Key Informants Interview (KII) Guide
- Tool 3: Focus Group Discussion (FGD) Guide
- Tool 4: Observation Checklist

8.2 Annex 2: List of reference documents reviewed

