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Implementing Agency/Agencies): Ministry of Health

Project Title: Reducing unintended Persistent Organic Pollutants (uPOP) & Mercury releases from the Health Sector in Africa.

Project No(s):

Project Start Date:	**Project End Date:**
Original: August 2015	**Original: Dec 2019**
Actual: Nov 2016	**New: April 2020**

Fiscal Year: 2017

Reporting Period: April to June

Project Budget (US$) for the Reporting Period (*Use annual budgets in quarterly reports*):

	Original Budget (US$)	**Latest Signed Revision (US$)**
Core/Trac Resources (UNDP):	**115,500**	**220,000**
LCDF GEF	**148,148**	**148,148**
Total Budget (US$):	**263,648**	**368,148**

Submission Date: 31st March 2017

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1. Executive Summary

The Reducing of unintended Persistent Organic Pollutants (UPOP) & Mercury Releases in the Health Sector in Africa project aims to promote best practices and techniques for health-care waste management targeting at minimizing or eliminating releases of unintended Persistent Organic Pollutants (UPOPs) to aid countries meet their obligations under the Stockholm Convention on POPs. The project will also provide support in phasing-down use of mercury containing medical devices and products, with the objective of reducing releases of Mercury from the health sector to the environment in support of the nation's future obligations under the Minamata Convention. In minimizing UPOPs and Mercury releases, will result in improving healthcare waste management chain (e.g. classification, segregation, storage, transport and disposal). This is assumed to reduce the spread of infections both at healthcare facility level as well as in places where healthcare waste is being handled and finally disposed. This is envisaged to be done by the introduction of non – incineration technologies for the treatment of health care waste. Most often than not Health Care Waste (HCW) is treated by incineration means.

The project will contribute to the phasing down/removing mercury releases from the health sector to the environment, through a strategic and systematic removal of mercury containing devices (MCD) (i.e. thermometers & sphygmomanometers) and replaced with alternative mercury free devices on a 1:1 basis. A final bill of quantities (BoQ) for mercury free devices was submitted to UNDP – Istanbul Regional Hub (IRH) in May, 2017 for the procurement of alternative devices including other Health care waste support equipment.

The project is being implemented at eight health care facilities representing different levels of health care facilities, namely; University Teaching Hospital (**UTH**), Ndola Teaching Hospital (**NTH**), Kabwe General Hospital (**KGH**), Kapiri District Hospital (**KDH**), Mukonchi Health Centre, Matero & Chilenje 1st Level Hospitals and Mufulira's Kamuchanga District Hospital. This will demonstrate that high standards of Health care waste management can be implemented at all levels of health care provision.

The 2017 Project Steering Committee meeting was held on 5th of May, in Chisamba – Lusaka. The steering committee endorsed the 2017 annual workplan, approved the additional Healthcare Care Facilities (HCFs) – Chilenje and Matero level 1 Hospitals and formalised the use of the GEF steering committee as the project's Steering Committee.

During the reporting, period the project finalised the discussions on the procuring of the required autoclave capacities for the treatment of HCW in three cluster treatment facilities and included the purchase of a motor vehicle for transporting infectious waste from two satellite pilot sites to central cluster treatment facility. Thus, the project will now procure and install autoclaves as follows; a 850 l capacity for University Teaching Hospital (UTH) while Ndola Teaching Hospital (NTH) will have 250l x 2 capacity. The same capacity for Kabwe General Hospital. UNDP – Zambia Country Office will contribute additional funding to ensure that the necessary capacity autoclaves were procured for each HCF.

Under the same reporting period; the project convened two working group meetings to review policy and legal framework on health care waste management, one of which was attended by WHO Consultant Dr Ute Piper. The review meetings looked at several pieces of legislation that regulates health care waste management and focused on the Environmental Management Act (EMA No 12 2011) and the Public Health Act. The review meetings proposed the wording and text for inclusion in the Public Health Act, the main Act to house the health care waste management and mercury release issues.

Under the same reporting period: the project attended and participated in other national and international meetings. e.g. The National Health Week Campaign and the regional board meeting held 1-3 June, 2017, in Istanbul – Turkey. The National health week is dedicated week at which Ministry of Health showcases and promotes the health wellbeing of the citizens. It provides health care services to the public and graced by the head of state. The project participated through its partner – Waste Master by displaying healthcare waste support equipment, good HCW management practises and explaining the UPOP & Mercury releases project to the general populace.

2. Project background

As per the Ministry of Health, the project implementing Agency, there are 1,674 health care facilities in Zambia, whose health care provision activities vary in nature. Thus, generating different quantities and types of health care waste. By and large this health care waste is treated by means of incineration. Zambia is among four sub-Saharan African countries implementing the Global Environment Facility (GEF) funded project on Reducing of UPOP & Mercury Releases in the Health Sector in Africa. Others been Tanzania, Ghana and Madagascar. The project will promote best practices and techniques for health-care waste management by introducing non–incineration technologies in treating HCW. As this waste stream is by far the largest hazardous and contains the highest amount of PVC, this will ultimately reduce the generation of uPOPs from the healthcare sector by >90%. These activities will be implemented in four (4) components over a period of five-years.

Finally, it's expected that improved HCWM practices once attained will reduce UPOPs, mercury releases and the spread of infections both at healthcare facility level as well as in places where healthcare waste is being handled. This will in turn protect the environment from air emission and surface/ground water pollution.

During this reporting period under:

Component 1. Disseminate technical guidelines, establish mid-term evaluation criteria and technology allocation formula, and build teams of national experts on BAT/BEP at the regional level.

Outcome 1.2. Country capacity to assess, plan and implement HCWM and phase-out of Mercury in healthcare built.

The Project undertook to review training resource materials obtained during the regional Master's ToT workshop in Nakuru Kenya and tailored them to the Zambian context and reduced the number of modules. These training resource materials will be used at the ToT workshop planned for Q3 – last week of July.

Component 2. Healthcare Waste National plans, implementation strategies, and national policies in each recipient country.

Outcome 2.1: Institutional capacities to strengthen policies and regulatory framework, and to develop a national action plan for HCWM and Mercury phase-out enhanced.

The project convened two meetings for the working group reviewing policy and legal framework on healthcare waste management. The WG reviewed the two main pieces of legislation governing the administration of HCWM, i.e. the Environmental Management Act under ZEMA and the Public Health Act under the Ministry of Health.

Component 3B: Demonstrate HCWM systems, recycling, mercury waste management and mercury reduction at the model facilities, and establish national training infrastructures.

Outcome 3.b.1: HCWM systems, recycling, mercury waste management and mercury reduction at the model facilities, and national training infrastructures established.

The project finalised the acquisition of the required autoclave capacities for the treatment of HCW in three treatment facilities and included the purchase of a motor vehicle for transporting infectious waste from two satellite pilot sites to central cluster treatment facility.

Under component 3 all but one activities were initiated (except for recycling which is capacity building of waste recyclers in principles of HCWM) **and are on track.**

3. Progress against Planned Results/Implementation

The following report outlines project implementation activities that took place in the Second quarter of the year. i.e. April – June, 2017.

Programme/Project output

Output	Output Indicator(s)	Baseline	Target	Progress Attained	Reasons if progress is below target	Remedial measures/ Action
1.0 National Component, Implemented on Health Care Waste, National plans and Policies.	1.1.1.1 Conduct baseline assessment for eight participating hospitals to establish current HCMW status	No baseline assessment information existed for the eight HCFs on current HCWM status.	Conduct IRAT, wash fit and chemical waste baseline in each of the eight HCFs.	Ongoing - IRAT was conducted in seven: UTH, NTH, KGH, KPDH, Matero & Chilenje L1 Hospitals & Mukonchi HC	Delay due to administrative and assessment tools development for chemical waste & wash fit	Project staff to develop tools and undertake the assessments in all 8 HCFs in Q3. -i.e. Chemical waste & WASH Fit
	1.1.1.2 Reviewed Training Manuals on HCW for different stakeholders.	No training modules in HCWM existed.	Review all 51 training modules and compress	Reviewed all 51modules and compressed them into 35 modules.		
	1.1.1.3 Hold Training of trainer's workshops.	No trained personnel in HCFs in HCWM in the three provinces.	Hold 3 provincial workshops to train 60 healthcare workers from eight HCFs on the project.	Ongoing initiated TOT preparations targeting 35 participants. Trainings split into 3 sessions.		
	1.1.1.4 Gender		Include gender inclusion in			

2.0 Institutional capacities to strengthen policies and regulatory framework and to develop a national action plan for HCWM and Mercury Phase –out enhanced.	mainstreaming activity in all project sites. 2.1.1.1 Review National legislative framework to incorporate non-incineration technologies and reduction of mercury releases from the health sector. 2.1.2.3 Review Curriculum of health sciences training institutions to include HCWM	No gender desegregated data. HCWM & Mercury releases not regulated for in the Public Health Act & EMA as well as ZEMA's Technical guidelines on hazardous waste. No Health Sciences training institutions' curriculum currently incorporates HCWM	HCWM in eight project pilot sites. Incorporate HCWM in at least one national policy, Act or strategic plan. Incorporate HCWM in training institutions' curriculum.	Gender participation statistical recorded in each activity. Held two review working group meetings to incorporate HCWM. Targeting the Public Health Act. Held planning meeting with UNZA – School of Medicine-Public Health.	- Activity planned for Q3	
3.0 HCWM Systems demonstrated at the model facilities	3.1.1.1 Conduct Inventory of MCDs securing of storage space at sites.	determine quantities of MCDs & products in selected HCFs.	Removal and replacement of Mercury containing devices and products determined. **1,768** mercury thermometers & **352** Sphygmomanometers.	BoQs submitted to UNDP-IRH for procuring of equipment.		

	3.1.1.2 Autoclave installation preparatory activities. 3.2.1.1 list of mapped waste recycling Companies.	No identified sites for autoclave preparatory & installation activities. No data of HCW recycling Companies available per province.	Identify sites & Assessed. Map all available recycling companies per province.	BoQ for construction of autoclave housing received from NTH Concept note prepared on recycling potential.	- Inadequate list provided by key stakeholder.	Research for more recycling companies.

Progress on Implementation of Activities *(Quarterly based on agreed quarterly workplan)*

Main Activity	**Target**	**Progress against planned activities and targets**	**Planned Completion Date**	**Implementation Status (Completed, Ongoing-On Track, Ongoing-Off Track & Cancelled)**	**Reason (s) for slippage *(if progress and implementation is not on track)* and remedial measures taken**	**Budget & Expenditure Monitoring Framework**		
						Budget (US$)	Expenditure (US$)	Delivery (%)
1. Conduct a comprehensive Baseline Assessment of current HCWM in all project pilot Health Care Facilities	Assess baseline of current HCWM in all HCFs.	60%	30 /06/2017	off track	Removal of Kamuchanga from initial – sites. Chemical waste baseline planned for June 2016 but postponed to July2017.	2,500	0	0%

2. Review Training Manuals on HCW for different stakeholders (Senior management, Health workers and Supervisors).	Reviewed all 51 training modules.	75%	30/06/2017	off track	1st TOT – workshop planned for Q3	7,000	5851.27	84%
3. Hold training of trainers (ToT) workshops.	No trained personnel available	20%	30/09/2017	Ongoing – on track	TOT workshop planned for Q3	37,500	35,886.10	96%
4. Conduct gender inclusiveness in project activities.	No gender inclusiveness activities	10%	30/12/2017	Ongoing – on track	Carry out gender inclusiveness activities planned for Q 3.	1,531	0	0%
5. Curriculum review of Health sciences training institutions to include HCWM.	Hold three meetings with training institutions & engage consultant.	10%	31/12/2017	On-going – on track	planned for 1st meeting in Q3	15,000	0	0%
6. Review of National legislative framework to incorporate non-incineration technologies and reduction of mercury releases from the Health Sector.	Held two review working group meetings to incorporate HCWM. Targeting the Public Health Act.	60%	31/12/2017	On -going – on track	Planned follow up meetings in Q3 & 4	10,000	17,163.77	172%
7. Hold biannual national Steering Committee	Held one steering committee – May	50%	31/12/2017	Ongoing – on track	Planned for the next SC in Q4	10,000	0	0%

	5th 2017							
8. Conduct inventory of MCD	Determined the number of MCDs.	70%	30/06/2017	Ongoing – on track	Planned for remaining HCFs in Q3 & 4	12,000	0	0%
9. Auto –Clave Installation preparatory activities	3 sites identified & Assessed.	66%	30/12/2017	Ongoing –on track	Planned engagement with ZEMA for EIA clearance.	71,517	23,660.05	33%
10. Training in the operation...						10,000	0	0%
11. Capacity building of waste recyclers in principles of HCWM	Map all available recycling companies per province	20%	30/09/2017	Ongoing – off track	Intensify the research for more recycling Companies.	10,500	0	0%
12. Purchase office Stationary						5,000	282.55	6%
13. PMC						70,000	16,042.70	23%
Total expenditure							**98,886**	**%**

Notes on Country Programme Outputs:

- Country Programme Outputs and specific programme/project outputs need to be stated with their indicators and baselines (as indicated in AWPs, in quarterly reports) to allow for linkages of stated activities to planned results. Updating the progress on performance on these outputs will be done in APR, Annual and End of programme/project reports. The End of programme/project reports should report cumulative results.
- **In quarterly reports,** the comparison is between the beginning and the end of the quarter in relation to annual targets. Baseline is at beginning of year.
- **In annual reports,** the comparison is between the beginning and end of the year in relation to the Life of Activity (programme life) targets. Baseline is at beginning of year.

- **In end of programme/project reports,** the comparison is between the beginning and the end of the programme/project. Baseline is at beginning of programme, project and CPAP cycle.

Progress towards achievement of results.

Challenges

1. Delay in implementing certain activities which depend on availability of key stakeholders like - ZEMA & UNZA – School of Medicine – Public health.
2. Inadequate information on who meets cost for site preparatory sites for auto-clave installation, hindering site preparation activities.
3. Need to discuss Doctors & nursing school's preference of using Mercury containing devices (thermometers & sphygmomanometers) as opposed to digital mercury free – alternatives. Especially, that equipment is expected in September 2017.
4. The project needs to mobilise resources from alternative sources (as per recommendations from IRH) to procure additional required items to demonstrate BPT such as internal and external transportation.

Lessons learnt

1. Constant engagement of key stakeholders will enhance project activities implementation.
2. Participation (as UPOP project) in National events such as National Health Week, promotes the project's presence and buy ins from the public and other government departments.
3. There's need for MOH to mobilize funds to facility the preparatory activities for the construction of autoclave housing.

Success story

Promotion of exchange visits among HCFs in June 2017. E.g UTH staff visited Matero level 1 hospital to share information on chemical waste management.

Planned Activities for third quarter - 2017

- Distribution of non-Mercury Containing Devices.
- Initiate recycling of non-infectious waste.
- Hold Training of Trainers workshops in HCWM.
- Gender mainstreaming activity in all project sites.
- Review curriculum of health sciences training institutions to include HCWM.
- Review policy and legal framework e.g. Public Health Act, EMA and Local Government Act; to include HCWM issues.

Signed by IP Project Coordinator: ..... FLORENCE MWALE

CCHO-G

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MINISTRY OF HEALTH
23 NOV 2017
DIRECTOR OF HEALTH PROMOTION
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Signed by Assistant Resident Representative (UNDP..... 23/11/2017