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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: January to March

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 project will promote best practices and techniques for health-care waste management with the aim of minimizing or eliminating releases of unintended Persistent Organic Pollutants (UPOPs) to help countries meet their obligations under the Stockholm Convention on POPs. The project will also support the phasing-down and use of Mercury containing medical devices and products, while improving practices for Mercury containing wastes with the objective to reduce releases of Mercury in support of the nation's future obligations under the Minamata Convention. In minimizing releases UPOPs and Mercury releases, the project will result in improving the 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. This is envisaged to be done by the introduction of non – incineration technologies for the treatment of health care waste. As this waste stream is by far the largest hazardous waste stream and contains the highest amount of PVC, by doing so, this will ultimately reduce the generation of uPOPs from the healthcare sector by >90%.

The project also aims at 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. An inventory of mercury containing devices such as thermometers and sphygmomanometers were undertaken in all the seven HCFs. A BoQ for mercury free devices has since being submitted to UNDP – IRC for the procurement of alternative devices.

The project will equally focus on the treatment of bio-hazardous waste (sharp waste, infectious waste, etc.) in order to demonstrate, the usage of alternative treatment technologies, by introducing simple technology like the needle cutters and the provision of WHO standards - sharp boxes to all pilot health care facilities participating on the project, namely; University Teaching Hospital (UTH), Ndola Central Hospital (NCD), Kabwe General Hospital(KGH), Kapiri District Hospital(KDH), Mukonchi health Centre and Matero & Chilenje 1st Level Hospitals.

The project undertook the planned assessment of HCFs to establish the baseline of health care waste management in all the seven pilot facilities using the **I- RAT** assessment tool. The purpose of the assessment was to obtain an initial indication of the level of healthcare waste management in the pilot health care facilities.

The results of the assessment showed that under the administration of HCW, there were big gaps in policy and planning; training and budgeting. Under ward-level handling, classification and segregation was patchy. Posters and signage were almost non-existent. While transportation and treatment of HCW, the performance in all HCFs assessed was generally poor. The same applied to internal transportation and storage of HCW. Almost no HCFs had any action on haz/chem waste proper handling except for Matero Level 1 hospital.

During the reporting, period the project also calculated the required autoclave capacities for the treatment of HCW in the three cluster treatment facilities, using HCW generation data. Thus, the project will procure and install autoclaves as follows; an 850l capacity for UTH while Ndola Central will have 700 l capacity and Kabwe General Hospital – 450l capacity. Despite the limiting GEF funds available.

Under the same reporting period; a team of health care managers, were identified and a list drawn to be trained as Trainers of Trainers. This was followed by the reviewing of **51** training modules obtained from the Regional TOT training workshop in Nakuru -Kenya aiming at localizing the resource training materials.

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.

2. Project background

At the last count in 2013, there were 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 the four sub Saharan African countries implementing the 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.

The project has 4 components to be implemented over a five year period.

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.

Zambia attended an intensive training workshop which took place in November of 2016 in Nakuru Kenya. Six people were trained from the regional training as Trainer's of Trainers.

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

An inventory of mercury containing devices such as thermometers and sphygmomanometers were undertaken in all the seven HCFs. A BoQ for mercury free devices has since being submitted to UNDP – IRC for the procurement of alternative devices.

Component 3: Make available in the region affordable non-incineration HCWM systems and Mercury-free devices that conform to BAT and international standards.

During the reporting, period the project also calculated the required autoclave capacities for the treatment of HCW in the three cluster treatment facilities, using HCW generation data. Thus, the project will procure and install autoclaves as follows; an 850l capacity for UTH while Ndola Central will have 700 l capacity and Kabwe General Hospital – 450l capacity. Despite the limiting GEF funds available.

Component 4a. Evaluate the capacities of each recipient country to absorb additional non- HCWM systems and Mercury-free devices and distribute. An inventory of mercury containing devices such as thermometers and sphygmomanometers were undertaken in all the seven HCFs. A BoQ for mercury free devices has since being submitted to UNDP – IRC for the procurement of alternative devices.

Component 4b Expand HCWM systems and the phase-out of Mercury in the recipient countries and disseminate results in the Africa region BAT/BEP and related infrastructures improved and expanded in the recipient countries. Discussions were held to select proposed sites for autoclave installation. These being University Teaching Hospital, Kabwe General Hospital & Ndola Central Hospital.

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

the project has been submitting monthly reports to the UNDP – Regional Office – Istanbul Turkey.

3. Progress against Planned Results/Implementation

The following report outlines project implementation activities that took place in the first quarter of the year. i.e. January – March, 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 Results of Baseline Assessments of pilot HCFs.	Assess HCWM in seven selected health care facilities.	Seven selected HCFs.	Near completed	WASH FIT & Chemical waste baseline yet to be undertaken.	Train TOTs to undertake baseline assessments.
	1.2 HCFs selected.	Bed capacity requirement in HCFs.	Seven HCFs selected – 3 clusters & 4 Satellite.			
	1.3 Reviewed Training Manuals on HCW for different stakeholders.	51 modules from TOT Regional Training workshop provided in Nakuru Kenya.	Review all training modules.	On –going activity.		
	2.1 Number of national HCWM strategies, policies, plans	Public health Act ZEMA's Technical guidelines on hazardous waste.	Incorporate HCWM in at least one national policy, Act or strategic plan.	Ongoing activity	Delay in approving of the annual work plan.	Hire a local Consultant as opposed to using working groups.

2.0 Institutional capacities to strengthen policies and regulatory framework and to develop a national action plan for HCWM and Mercury Phase –out enhanced. 3.0 HCWM Systems demonstrated at the model facilities	as well as number of drafts for HCWM related standards and guidelines available. 2.2 Project Steering Committee members appointed. 3.1 Number and types of Mercury containing devices and products determined. 3.2 Site identification and Assessment in readiness for autoclave installation. 3.3 list of mapped waste recycling Companies.	None existence of the Steering Committee for the Project. Determine quantities of MCDs & products in selected HCFs. Three sites identified. UTH, NCH & KGH One recycling Company available per province.	Establish a Project Steering Committee. Inventory all MCDs & Products present in HCFs. 3 sites identified & Assessed. Map all available recycling companies per province.	Ongoing activity Near completion Sites selection completed. Ongoing	Delay in finding an appropriate SC. - Non-availability of key stakeholder. ZEMA Inadequate list provided by key stakeholder.	Request the GEF Steering Committee to host the UPOP project. Engage ZEMA to complete the assessment of UTH. 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 for Seven Health Care Facility	Assess baseline of HCWM in all seven HCFs	33%	30 /04/2017	On-going –on track	-	2,500	0	0%
2. Review Training Manuals on HCW for different stakeholders (Senior management, Health workers and Supervisors).	Review all 51 training modules.	75%	30/04/2017	On-going –on track		7,000	5763.87	82%
3. Host Project Steering Committee	Establish a Project Steering	30%	31/03/2017	On-going –off track	Delay was due to on-going institutional	10,000	0	0%

	Committee				restructuring within MOH; A way forward has since been agreed to formalize the adoption of the GEF Steering Committee & co-opting some members specifically to deal with HCWM.			
5. Auto –Clave Installation preparatory activities	3 sites identified & Assessed.	66%	30/12/2017	On-going –on track		71,517	8,400.00	12%
6. Capacity building of waste recyclers in principles of HCWM	map all available recycling companies per province	20%	30/09/2017	On-going – off track	Intensify the research for more recycling Companies.	10,500	0	0%
Stationary	Office stationery					5,000	89.36	2%
PMC						70,000	17,320.34	25%
Total expenditure						**176,517**	31,573.57	**18%**

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. Inadequate information on who meets cost for site preparatory sites for auto-clave installation, hindering site preparation activities.
2. Delay in establishing the Project Steering Committee, delayed annual work plan approval.
3. Inadequate availability of funds limited the required volume capacity of autoclaves to be procured.
4. Mobilization of local financial resources to meet any shortfall required to purchase health care waste equipment. As the case is on autoclaves and internal & external transportation of health care waste (LOG 03 – Items in the HCW catalogue). The project can only procure autoclaves with the following capacities; 850 l –UTH; 2 x 250l (500l) – NCH while 250l for KGH, contrary to the calculated capacities after the assessment of health care waste generated.

Lessons learnt

1. There's need to discuss at policy level, Doctors & nursing school's preference of using Mercury containing devices (thermometers & sphygmomanometers) as opposed to digital mercury free – alternatives.

Success story

Conducting the baseline assessment of Health Care Waste Management reviewed some inadequacies in the handling of health care waste in all seven pilot facilities. However, the inadequacies identified are useful for the planning of project activities.

Planned Activities for Second quarter - 2017

- Review policy and legal framework e.g. Public Health Act, to include HCWM issues.
- Develop a mercury elimination strategic plan.
- Conceptualising recycling of non-infectious waste.
- Hold Training of Trainers workshops in HCWM.
- Review curriculum of health sciences training institutions to include HCWM.

Signed by IP Project Coordinator: FLORENCE MWALE

CEHO-G

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MINISTRY OF HEALTH
23 NOV 2017
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Signed by Assistant Resident Representative (UNDP.....

23/11/2017