

HEALTHCARE WASTE MANAGEMENT

PROJECT BOARD MEETING MINUTES

Date: 14th December 2017

PROTEA COURTYARD – DAR ES SALAAM



World Health
Organization

LIST OF ABBREVIATION

HCWM	Health Care Waste Management
MOHCDGEC	Ministry of Health, Community Development, Gender, Elderly and Children
UNDP	United Nation Development Programme
DPS	Director of Preventive Services
POPs	Persistent Organic Pollutants
PHO	Principal Health Officer
WASH FIT	Water and Sanitation for Health Facility Improvement Tool
RHO	Regional Health Officer
UPOPs	Unintentional Persistent Organic Pollutants
M&E	Monitoring and Evaluation
Q&A	Question and Answer
MSD	Medical Stores Department
DC	District Council
HCFs	Health Care Facilities
BOQ	Bill of Quantity
PMU	Procurement Management Unit
PEHO	Principal Environment Health Officer
DAWASCO	Dar Es Salaam Water Supply Company
IPC	Infection Prevention Control
SMT	Steering Management Team
NIMR	National Institute of Medical Research
MNH	Muhimbili National Hospital
MOI	Muhimbili Orthopedic Institution
TAMISEMI	Tawala za Mikoa na Serikali za Mitaa
NGOs	Non-Government Organisation
HIV/AIDS	Human Immunodeficiency Virus/ Acquired Immuno Deficiency Syndrome
WHO	World Health Organisation
GEF	Global Facility Fund
WHO	World Health Organization

CONTENTS

PREFACE	ERROR! BOOKMARK NOT DEFINED.
LIST OF ABREVIATION	1
A. WELCOME REMARKS	1
B. OPENING SPEECH	1
C. BRIEF OVERVIEW OF THE HCWM PROJECT	2
D. PROJECT IMPLEMENTATION REPORT	2
F. CONSULTANCY REPORT ON HCW RECYCLING OPPORTUNITY AND WASTE ESTIMATION	3
G. HEALTHCARE WASTE MANAGEMENT PROJECT 2018 WORKPLAN	ERROR! BOOKMARK NOT DEFINED.
H. WAY FORWARD	6
I. ANNEXES	9

Welcome Remarks and Opening Speech

A. WELCOME REMARKS



The meeting started at 0930am; Dr Bwijo Bwijo, meeting facilitator invited the representatives from different organizations who attended the meeting. The meeting comprised of representatives from Government of Tanzania, UNDP, Muhimbili National Hospital, Mwananyamala Regional Hospital, Buguruni Anglican Hospital, Sinza Hospital, Mbagala Rangitatu Hospital, TANKO, TPHA, AGENDA and TINDWA.



Representatives from UNDP Istanbul Regional Hub – Mr. Jan & Mr. Selimcan

B. OPENING SPEECH



After the welcoming note, the meeting facilitator invited Mr. Kibiriti (the chairperson of the board meeting) to give an opening speech on behalf of Dr. Neema Rusibamayila (MOHCDGEC-Director of Preventive Services) who was not in attendance was attending similar official duties outside Dar es Salaam. The following were the key highlight in the speech: See speech details attached as annex 3.

C. BRIEF OVERVIEW OF THE HCWM PROJECT



The meeting facilitator invited the National Project Director (MOHCDGEC), Mr. Honest to give an overview of the HCWM project.

The following were the key highlight in the presentation:

- **Project Objective:** To implement Best Environmental Practices (BEP) and introduce non-incineration healthcare waste treatment technologies and mercury-free medical devices in four Sub-Saharan African countries (Ghana, Madagascar, Tanzania and Zambia) to reduce harmful releases from the health sector.
- **Project coordination;** the project is implemented by UNDP, under the guidance of the UNDP Montreal Protocol Unit/Chemicals. The regional component of the project is executed applying the Direct Implementation Modality (DIM) through the UNDP Istanbul Regional Hub. The UNDP Istanbul Regional Hub is responsible for overall management, backstopping and monitoring of the project, in close coordination with participating UNDP Country Offices and National Project implementing agencies.
- **Project roles and Activities:** to collaborate with Partner & Stakeholder Coordination, to establish Regional Expert Team, to establish Country Expert, Country capacity building and BET adaptation and Hospital engagement in the implementation of project activities, Technology Procurement Arrangements, Monitoring and Evaluation and Regional Communication, Outreach and Knowledge Sharing.

See details in annex 4.

D. PROJECT IMPLEMENTATION REPORT



National Project Manager, Mr. Deogratias Mkembela was invited to give an overview of 2017 project implementation in relation to 7 project components.

- **Project Components:** These components are of two categories; Regional and National.
 - o **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 [Regional component]
 - o **Component 2:** Component 2. Healthcare Waste National plans, implementation strategies, and national policies in each recipient country [National component]
 - o **Component 3a:** Make available in the region affordable non-incineration HCWM systems and Mercury-free devices that conform to BAT and international standards [Regional component]
 - o **Component 3b:** Demonstrate HCWM systems, recycling, Mercury waste management and Mercury reduction at the model facilities, and establish national training infrastructures [National component]
 - o **Component 4a:** Evaluate the capacities of each recipient country to absorb additional non-incineration HCWM systems and Mercury-free devices and distribute technologies based on the evaluation results and allocation formula [Regional component]
 - o **Component 4b:** Expand HCWM systems and the phase-out of Mercury in the recipient countries and disseminate results in the Africa region [National and regional component]
 - o **Component 5:** Monitoring, learning, adaptive feedback, outreach, and evaluation

- **Planned & Completed Activities in 2017:**
 - o Review of the National Policy Guidelines for Healthcare Waste Management
 - o Review of the National Standards for Healthcare Waste Management
 - o Review of the National Action Plan for HCWM
 - o Review of the National Strategic Plan for Healthcare Waste Management
 - o Review of National Regulations for HCWM
 - o Develop National HCWM training materials & conducted TOTs training
 - o Supported mapping potential hospital plastic recycling industries & provide linkage with HFs
 - o Develop inventory of Hg containing medical devices in 5 project facilities and selected regional hospital & Sensitize sites on elimination of Hg containing devices
 - o Site preparation for installation of autoclaves (provide drawings, share the requirements for the autoclave installations e.g. water, electricity installation)
 - o Support one project site to introduce innovative HCW treatment technology a bio-digester (*Initial assessment at Mwananyamala Regional Hospital and design completed, awaiting to issue the contract*)

See annex 5 for details.

E. CONSULTANCY REPORT ON HCW RECYCLING OPPORTUNITY AND WASTE ESTIMATION

The facilitator invited Mr. Hussein Mohamed; School of Public Health and Social Sciences, Muhimbili University: Dar Es Salaam, for presentation as he brought forth the following:

- It is estimated that about 60-70 tons of healthcare waste is generated daily in the country, calls for a safe and reliable methods for its management.
- Plastics recycling in Tanzania, what is known? Recycling of plastic waste is already happening in our country. It is carried out mainly by small scale enterprises that join efforts with plastic scavengers to bring plastic waste into raw materials again.
- Why mapping of plastic recycles? It is estimated that plastic packaging and products contribute between 20-25% of HCW stream.

- Challenges associated with recycling plastic materials from healthcare facilities; the demand of plastics from HCF may not be enough to suffice the demand by the industries and safety of plastic waste; especially those that may have stains of blood and that may draw attention among recyclers.

See annex 6a for details



F. WASTE ESTIMATION

Mr. Hussein Mohamed; School of Public Health and Social Sciences, Muhimbili University: Dar Es Salaam, furthermore continues to explain the following in regard to the Estimation of the amount of Healthcare Waste by categories in five Pilot Healthcare Facilities in Dar Es Salaam:

- Healthcare wastes can broadly be categorized into infectious waste and non-infectious waste; however, this classification remains true only when proper segregation and separation of waste is practiced
- The amount and type of healthcare waste generated by a healthcare facility is a determinant factor on the methods of healthcare waste management (HCWM) including treatment and final disposal
- HCW generation depends on numerous factors such as:
 - Type of health care facility,
 - Healthcare facility specialization,
 - Available waste segregation options,
 - The number of beds in the healthcare facility
 - Proportion of patients treated on a daily basis

- Determination of generation of HCW is important for HCWM:
 - procurement of equipment and supplies
 - collection and storage of HCW
 - planning size of the room for installation of autoclave
 - containers for storage of HCW
 - transport and disposal methods
 - recycling of plastic wastes and other recyclable materials
- Information on the quantity of each category of HCW obtained is useful for planning HCWM activities such
 - The size of the room for autoclave machines,
 - size and amount of waste collection containers,
 - Planning for transport and final disposal facilities of HCW
- Infectious plastic waste from healthcare facilities can be recovered and made available for recycling by proper segregation from the generation unit
- Proper segregation of HCW by health workers at the generation point is possible and be effected by provision of enough waste storage containers at appropriate locations within the healthcare facility
- To control exposure of community members from waste emanating from HCFs, hospital administration should restrict scavengers from collecting plastics in their facilities so that the plastics can be made available for potential recyclers
- Healthcare facilities should develop a business model on how effectively plastic waste can be a source of income using existing opportunity of plastic waste recycling industries
- Detailed assessment of HCWM in pilot project hospitals for relatively longer duration is recommended. This should involve collecting and analyzing data from each generation unit, detailed study on the factors affecting each stream of HCWM (from generation to final disposal) and putting more emphasis on the behavioral aspect of HCWM.

See annex 6b for details.

Question and Answers Were Invited for Session One Open Discussion.

Question: There was a concern on the issue happened in Mkuranga in regard to emission of UPOPs. Can this project do something about it?

Answer: This project cannot intervene the situation due to the limitations from its designs, but also the mentioned situation is handled by the ministry through other plans.

Question 2: What about the issue of other industries which are doing recycling, how much will we sell our materials?

Answer: The market will determine the price

Question 3: What is the assurance that waste autoclaved from healthcare facilities will be rendered harmless before sold to recyclers?

Answer: The technology to treat waste which will deployed meet international standards, and is proven in decontaminating waste completely

Question 4: What is the scope of recycling in this project?

Answer: Focus for now is on plastic, then the project will move to food waste and biological waste like placenta

The meeting facilitator, thanked members for being attentive during this session and resume the chair to the chairperson ready for the board meeting.

G. HEALTHCARE WASTE MANAGEMENT PROJECT 2018 WORKPLAN

The chairperson invited Mr. Mkembela; Project Manager, to present the 2018 Annual work plan. But before the presentation the chairperson insisted this session targets board members, the rest of invitees should remain observers.

2018 - Work Plan Presentation

See details attached in the work plan

Questions and Answers Pertaining to 2018 Work Plan.

Question: Why only five sites were selected?

Answer: *This is a pilot project, therefore 5 sites in Dar es Salaam were selected to enable easy monitoring of the project.*

Question: Do we have the exact numbers of attendees of these forth coming training?

Answer: *The number is yet to be determined, ministry of health will share the details regarding the number and venue for trainings.*

Question: Can the board members meet at least quarterly?

Answer: *The project team will revisit the budget and determine the feasibility of conducting board meeting on quarterly basis.*

Question: In the meeting, board members asked on the status regarding construction of the buildings for installation of HCWM treatment technologies

Answer: *All the project sites indicated that they are on track on the construction work.*

H. WAY FORWARD

- Share the link to presentations done during the meeting
- Board members urged the project team to conduct board meeting in each quarter of 2018 to share project implementation progress

- Establish forum for stakeholders of HCWM in Tanzania for the purpose of sharing information pertaining to HCWM activities.
- Regional Health Management team should be involved in the planning and monitoring project activities.
- MOHCDGEC to invite Zanzibar representative in the board meeting.

Chairperson invited representatives from MOHCDGEC, Department of Environment-Vice President's Office and UNDP to give final remarks and thank board members before the meeting was closed.

MOHCDGEC

Project coordinator from MOHCDGEC, Mr. Honest Anicetus, invited representative from TANKO company; Mr. Kayombo to demonstrate the needle smelting technology, which brings the solution of sharps waste management, specifically on needles. The coordinator used the opportunity to thank board member for the fully participation in the meeting.

Department of Environment-Vice President's Office

The representative thanked members of the board and other participants for their participation. The representative insisted that the project implemented is so fundamental in building the country capacity to properly manage HCW. Also, she urged the project team to communicate with different stakeholders and between ministries regarding the project implementation. The representative insisted on importance of including Zanzibar in some of the project activities.

UNDP

Project manager thanked the board members and other participants for their presence. He made a note that all corrections about the 2018 budget and recommendations given by board members will be considered and meeting report will be shared to all members before the next board meeting.

Chairperson closed the session with a vote of thanks to all participants. He thanked the project team for organizing a board meeting, and their dedication in implementing the 2017 work plan. He asked the local government to commit themselves in the project, and complete the construction work before the installation of HCW treatment technology early 2018.



Stephen Kiberiti.
Board Chairperson.

Signature:

Date: 30/01/2018



Bwijo Bwijo
Board Co - Chairperson.

Signature:

Date: 01/02/2018

LIST OF PARTICIPANTS

<i>SN</i>	<i>Name</i>	<i>Title & Organization</i>	<i>Cell no</i>	<i>Email address</i>
1	Deogratias Mkembela	Project Manager- HCWM	755194544	deogratias.mkembela@undp.org
2	Hussein Mohamed	Lecturer	714217172	hmohameds1@gmail.com
3	Nashiri A.Mahiki	Environment Health Officer	784707787	nmahiki@moh.go.tz
4	Maimuna Salum	TINDWA MEDICAL	718007350	wnemanager@tmhstz.com
5	Elizabeth Fupe	Quality Assurance Coordinator	713277921	Bettyfupe224@gmail.com
6	Chang Ke Lee	TAMKO KGRF&B	1088812398	Changkilee1004@hanmail.net
7	Honest Anicetus	National Coordinator - HCW	754311115	hanicetus@yahoo.com
8	Gaudence Kayombo	TANKO KGRF&B	754302290	gckayombo3@gmail.com
9	Dr. Joseph S. Kiani	MOI-Mbagala	719893025	josephkiani@yahoo.com
10	Veilla E.Matee	Muhimbili National Hospital	754289213	veillamatee@yahoo.com
11	Juma Matoka	PO-RALG-Dodoma	766298878	matokajm@gmail.com
12	Birago Joseph	SEHO - MOHCDGEC	653112844	jbirago@moh.go.tz
13	Bwijo Bwijo	UNDP	689113116	bwijo.bwijo@undp.org
14	Miraji Mohamed	MOHCDGEC	653000011	
15	Lucy P. Sozigwa	Municipal Health Secretary	717310783	Lucypaulo2000@yahoo.com
16	Chrispin R. Kayola	MOI/C Sinza	713448382	kayolakps@yahoo.com
17	Stephen Kiberiti	MOHCDGEC	719324016	skiberiti@moh.go.tz
18	Theophil Likangaga	MOHCDGEC	782520231	theolika@gmail.com
19	Kulthum Nancy Shushu	NEMC	784880086	kulunancy@hotmail.com
20	Toyi V. Midabe	MOHCDGEC	784453891	toymidabe@yahoo.com
21	Miriam Adam Mongi	EHO – Sinza Hospital	688761699	mongimiriam@gmail.com
22	Sifa Mgaya	EHO- Mwananyamala	754316387	sifa.kebby@gmail.com
23	Raphael J. Barua	Buguruni Anglican HC	712997962	baruaraphel@gmail.com
24	Silvani Mng'anya	AGENDA	762986953	semnganya@gmail.com
25	Rehema Sanga	UNDP	682845935	rehema.sanga@undp.org
26	Noah L. Mwasalujonja	MOHCDGEC	715668651	noahmwasala@yahoo.com
27	Dr. Melkiory Masatu	CEDHA	754800793	mmasatu@gmail.com
28	Edmund Kayombo	TANKO KGRF&B	765474311	ntendele@gmail.com
29	Selimcan Azizoglu	UNDP IRH		selimcan.azizoglu@undp.org
30	Jan-Gerd Kuehling	Consultant UNDP		Kuehling@etlog-health.de
31	Beatrice Moshi	TPHA	769182067	beatricemoshi@gmail.com
32	Robert M. Kitundu	MOHCDGEC	765520057	rmkitundu@gmail.com
33	Edwin P. Bisakala	TMC- Mbagala R3	712460548	edwinbisakala@gmail.com
34	Anania	BAHC	752314469	anania@gmail.com
35	Kiwale I Okama	Ag MOI/C MRRH	713368711	isdorykiwale@gmail.com
36	Allen Kalongola	MHO - Ubungo	766387837	allenkalongola@gmail.com