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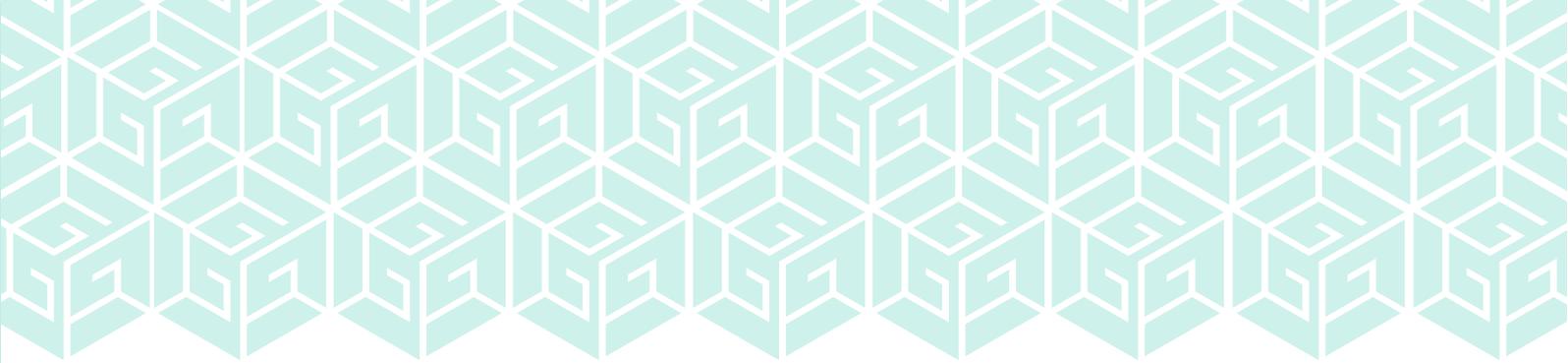
WASTE TO RESOURCES

IMPROVING MUNICIPAL SOLID WASTE AND HAZARDOUS
WASTE MANAGEMENT IN RWANDA

THEMATIC WORKING GROUP REPORT

October 2021 - October 2022





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ACRONYMS AND ABBREVIATIONS

CoK	City of Kigali
GGGI	Global Green Growth Institute
GHG	Greenhouse Gas Emission
MINICT	Ministry of ICT and Innovation
MININFRA	Ministry of Infrastructure
MoE	Ministry of Environment
NDC	Nationally Determined Contributions
NIRDA	National Industrial Research and Development
REMA	Rwanda Environment Management Authority
RFP	Request for Proposal
RURA	Rwanda Utilities and Regulatory Authority
WASAC	Water and Sanitation Corporation

FIRST THEMATIC WORKING GROUP REPORT

Lemigo Hotel, Kigali
October 2021





1

Background

The Government of Rwanda through the Ministry of Environment of the Government of Rwanda initiated a Memorandum of Understanding (MoU) with the Ministry of the Environment, Climate and Sustainable Development of the Government of the Grand Duchy of Luxembourg to strengthen cooperation and technology transfer between the two countries. Under this MoU, Grand Dutch of Luxembourg financed Waste to resource: Improving municipal solid waste and hazardous waste in Rwanda.

This is a three years project led by the Ministry of Environment and implemented by the Global Green Growth Institute (GGGI) Rwanda. It will focus on improving municipal solid waste, electrical and electronic waste in both City of Kigali and Secondary Cities respectively. The project started on 9th August 2021, and it was officially launched on 24th August 2021 by both the Honorable Minister of Environment and the Lordship Mayor of the City of Kigali.

2

Technical Working Group Meeting

A half-day first technical working group for the project was convened on 14th October at Lemigo Hotel. It was attended by key various technical staff from various institutions including the Ministry of ICT and Innovation (MINICT), Ministry of Environment (MoE), Gender Monitoring Office (GMO), Rwanda Environment Management Authority (REMA), National Industrial Research and Development Agency (NIRDA), Water and Sanitation Corporation (WASAC) and City of Kigali (CoK).

Welcome Remarks (MoE). MoE thanked all nominated technical staff from various public institutions and welcomed everyone to be part of the waste to resource project. MoE further highlighted that the technical working group was recommended during the first meeting of the project advisory committee on the launch of the waste to resource project.

Welcome Remarks (GGGI). GGGI emphasized the fact that involvement and participation of the nominated technical team will only make this project implemented successfully. In a few lines the project impact, expected outcomes and outputs were as well highlighted.

Summary of the Discussions

After welcome remarks, the Technical Working Group meeting continued with a presentation by GGGI on the project outcomes, activities, and progress and described the Terms of Reference being developed for a firm to conduct a feasibility study for a resource recovery center and detailed engineering design.

It was indicated that the project aims to integrate sustainability principles and circular economy approaches in waste management which will see a paradigm shift in turning what is considered waste into other useful materials. The table below indicates various discussed items and recommendations provided respectively.

S/N	Discussed Item	Provided Recommendation
1	Composting facility [The quality of compost goes hand in hand with upstream waste separation at source]	<ul style="list-style-type: none"> Ensure upstream community awareness to practice waste segregation or sorting in dwellings. To test future produced compost to comply with the national standards for compost.
2	Alignment of the waste to resource project and PP project in pipeline [Two projects should be harmonized to avoid future duplication of effort]	<ul style="list-style-type: none"> To avoid duplication of effort, waste to resources (W2R) project timelines should be squeezed and go ahead before PPP implementation. That way W2R will provide significant lessons learnt before tapping into huge PPP projects at scale. The project must identify stakeholders who are intervening in the sector and agree on various areas of collaboration.
3	Defined interventions in secondary cities [A defined interventions should be articulated for secondary cities]	The interventions for secondary cities will be well defined after the situational assessment of e-waste in both secondary cities and the City of Kigali.
4	Exist Strategy after project completion [GGGI should prepare CoK to take over after the project completion]	Develop an exit strategy to consider the sustainability of the interventions at Nduba. The project team should also work together to ensure complementarity with other ongoing and upcoming projects.

3 CONCLUDING REMARKS

MoE ended the session by thanking the participants and encouraging their attendance whenever invited. After the technical working group, all participants had an excursion to Nduba where different facilities shall be installed to valorize waste collected and transported to Nduba

The project team will:

- Possibility to implement the awareness and behavioral change communication (BCC) aspects of the project earlier on as the more separation at source is done at the household level, the more this will unlock and enable the development of waste to resource business models.
- WASAC, City of Kigali, Ministry of Environment, and GGGI to set up a follow up meeting to discuss harmonizing the City of Kigali PPP and the Waste to Resources project interventions that are specifically targeting Nduba.
- Before the project closes, an agreement should be drafted with different roles and responsibilities of the City of Kigali, and GGGI regarding the ownership and management of the equipment.

Minutes Taker	Minutes Approval
Juvenal Mukurarinda	Michelle De Freese
Senior Officer, Sustainable Waste Management	Senior Officer, Green Growth - Project Manager

SECOND THEMATIC WORKING GROUP REPORT

Kigali
15 February 2022





Figure 1: Members of the Thematic Working Group for the Waste to Resources project.

1 INTRODUCTION

GGGI hosted a full day second Technical Working Group (TWG) on the Waste to Resource Project on 15 February 2022. The meeting aimed to update the members on the progress of the project, implementation of the previous Technical Working Group's recommendations, review of the capacity needs assessment for the solid waste management preliminary study and Communication strategy and social behavior change communication (SBCC).

The TWG was attended by its members from various Institutions namely the Ministry of Environment (MoE), Ministry of Infrastructure (MININFRA), Ministry of ICT and Innovation (MINICT), City of Kigali (CoK), Rwanda Utilities and Regulatory Authority (RURA), Rwanda Environment Management Authority (REMA), National Industrial Research and Development Agency (NIRDA), Rwanda Green Fund (FONERWA) and GGGI project team.

In that TWG meeting, private waste collection companies including Ubumwe Cleaning Services, COPED group, and BAHEZA were invited to provide opinions and experience on the studies; a preliminary report for capacity need assessment and Communication strategy and social behavior change communication.

On behalf of GGGI, MUKURARINDA Juvenal welcomed everyone to the meeting and highlighted the key points to be discussed during the meeting and encouraged everyone to be practical in the discussion especially for documents to be reviewed.

Mr. KARURANGA Dismas, the focal point of the Waste to Resource Project from MoE gave his opening remarks. He reminded the audience that the Waste to Resource project was launched in August 2021 and highlighted that the project will have remarkable impacts on solid waste management in both the City of Kigali and Secondary Cities.

He also reminded the audience that the TWG was proposed by the Project Advisory Committee (PAC) during the launch of the project and that the main task of the TWG will be to help in reviewing project documents before being submitted to PAC for decision making.

The first technical working group took place on 14th October 2021, the second TWG was conducted to know the progress of the implementation of the previous TWG's recommendations, review the communication strategy and give inputs. He thanked all the participants for attending and wished everyone a good meeting.

2

IMPLEMENTATION OF THE PREVIOUS RECOMMENDATIONS

The Table below highlights respective key actions implemented on the provided recommendations on the previous thematic working group.

Table 1: Updates on the implementation of the previous recommendations

S/N	Discussed items	Provided Recommendations	Actions
1	Composting facility [The quality of compost goes hand in hand with upstream waste separation at source]	Ensure upstream community awareness to practice waste segregation or sorting in dwellings. To test future produced compost to comply with the national standards for compost.	The communication strategy and social behavior change communication are being developed and will be finalized End of March 2022. The communications strategy will provide more light on community engagements and provide guidance on key activities to be done during the awareness campaigns. [Not yet implemented]. GGGI plans to set up a meeting with RSB to discuss the possibility of setting up standards for recycled materials including produced fertilizers from composting activities.
2	Alignment of the waste to resource project and other projects in the pipeline, esp. Public Private Project (PPP) City of Kigali is aiming for [Two projects should be harmonized to avoid future duplication of efforts]	To avoid duplication of effort, waste to resources (W2R) project timelines should be squeezed and go ahead before PPP implementation. That way W2R will provide significant lessons learnt before tapping into huge PPP projects at scale. The project must identify stakeholders who are intervening in the sector and agree on various areas of collaboration.	The timelines for project implementations were revised to avoid future duplication of efforts and priorities for waste to resource project were agreed upon with the City of Kigali, and the primary focus will be on the infrastructure setting at Nduba including weighbridge and sorting facility plus community engagement. The project staff has mapped all involved stakeholders in the sector including public, private and development partners and areas of collaboration are being discussed accordingly.
3	Defined interventions in secondary cities [Defined interventions should be articulated for secondary cities]	The interventions for secondary cities will be well defined after the situational assessment of e-waste in both secondary cities and the City of Kigali.	Procurement process to recruit a consultant to do e-waste situation analysis is almost completed and key interventions for e-waste components will derive from the findings of the assessment. The assessment for e-waste will be completed in October 2022.
4	Exit Strategy after project completion [GGGI should prepare CoK to take over after the project completion]	Develop an exit strategy to consider the sustainability of the interventions at Nduba. [The project team should also work together to ensure complementarity with other ongoing and upcoming projects.]	GGGI and the City of Kigali are in process of signing the waste-to-resource implementation framework that will highlight key roles and responsibilities for each stakeholder for this project implementation and aftercare.

Follow up questions and respective deliberations after project updates.

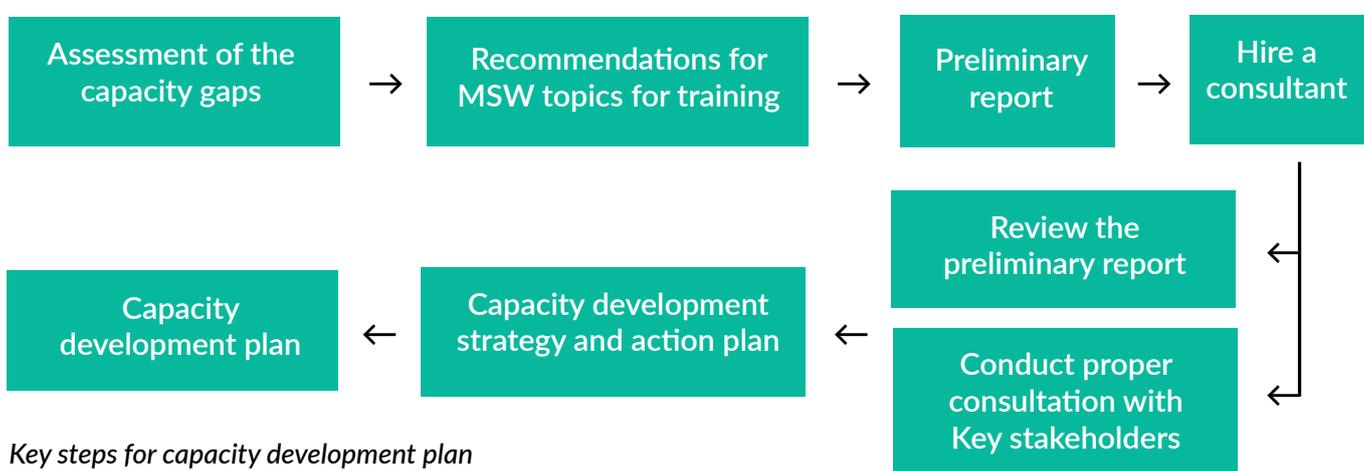
Table 2: Follow up questions on the project updates

S/N	Discussed Items	Deliberation/Reflections
1	Issues of unavailability of standards for fertilizers from organic compost	As highlighted in the recommendation of the previous TWG, GGGI will set a meeting with RSB to discuss the possibility of setting up standards for organic fertilizers produced from composting activities.
2	Readiness of waste collection and transport companies to transport sorted and segregated waste on different dates to ensure the quality of collected waste for further valorization	CoK highlighted that they are reviewing contracts for waste collection and transportation companies and a component of collecting waste of separate date is included in the contract revision among the others and, In the contract review, the CoK insist private companies have compliant trucks
3	Possibility to target additional hazardous waste in Secondary Cities like medical and industrial waste rather than e-waste only.	As updated on the recommendations, the findings from the e-waste assessment will determine key actions to be implemented in Secondary cities. The GGGI project team will investigate the possibility of including other types of hazardous waste as suggested. However, it must be mentioned that medical wastes are well handled at the hospital and industries are minimal in Secondary cities.

3 REVIEW OF THE CAPACITY NEED ASSESSMENT PRELIMINARY REPORT

Juvenal introduced to the participants about the capacity needs assessment preliminary report for sustainable waste management, to help identify gaps at each stage of waste management and propose training topics to build capacity of stakeholders on waste generation and separation, collection, transfer and transport, final disposal, treatment, recycling.

The preliminary report for capacity need assessment was developed internally by the project team to assess the capacity gaps and provide recommendations for topics to be covered during training. The capacity needs assessment is an important activity that must be conducted before tapping into the capacity development plan. Then, a tool, a typical questionnaire, was developed to help understand the gaps and areas of interest to focus on during the capacity development plan. Figure 2 highlights key steps for the capacity development plan.



Key steps for capacity development plan

During the review of the preliminary report for capacity need assessment, a tool was shared and tested by all participants by doing ratings on different questions for current waste management across the value chain and operations at an organizational level. The aim of testing the tool was to see if it reflects actual issues and set up for waste management.

The rating was very low in most waste management practices such as waste segregation and storage at source, primary collection, street sweeping and drain cleaning, secondary waste storage depots and transfer stations, transportation, treatment, final disposal, capacity building, organizational structure, etc. However, the consultant will revise the tool and set it according to the level of expertise and functions of various stakeholders in the sector.

4 COMMUNICATION STRATEGY AND SOCIAL BEHAVIOR CHANGE COMMUNICATION

In the afternoon, The Communication Officer, Pamela BIRUNGI led the session on Communication Strategy and Social behavior change communication on sustainable waste management.

Participants were tasked to give inputs on communication strategy, the strategy aims to change their behavior, develop key messages for the target audiences, identify the challenges in the current value chain and system, and help the public understand what they need to do to be informed and start participating from their households, schools, or work.

It must be underlined that the awareness campaign will be conducted with the guidance of both City of Kigali and Secondary Cities

All participants completed a stakeholder mapping exercise, discussing who needs to keep in touch in waste management, those that are more involved in the waste value chain and presented challenges faced at each step of waste management to help identify a strategy that communications officers will agree to implement to help change the behavior of citizens. Communications officers from Fonerwa, RURA and MoE supported the exercise by sharing their insights and inputs.

Participants were grouped into 3 groups, each group composed of a technical expert, communications expert and waste collection company. They gave their inputs on stakeholder mapping and highlighted challenges met at each stage of waste management.



Group works on communication strategy

Tables 3 & 4 below highlight the summary of inputs given by 3 groups on stakeholders mapping and challenges that need to be addressed in terms of social behavior change communication using influence and interest relation table.

Stakeholder's mapping

High influence, low interest (Keep satisfied)

MINECOFIN
RDB
MINECOFIN
PSF
RSB
Food & Drug Authority
MoH

High influence, high interest (Manage closely)

Ministries (MoE, MININFRA, MINALOC)
REMA
RURA
WASAC
CoK

Low influence, Low interest (Monitor)

RSB
Churches
Media
Households

Low influence, high interest (Keep informed)

FONERWA	Institutions
NIRDA	NGO's
RAB	Media
Private Sector	Community
Academia	MINEDUC
Bilateral organizations	MIGEPROF
International Funding	MINICOM

Placing stakeholders across the value chain and challenges provided at each step-in waste management

Sorting to source	Collection	Transport	Treatment	Disposal
<ul style="list-style-type: none"> Waste generators CoK/Local Government Waste collection companies REMA RURA MoH MINICT 	<ul style="list-style-type: none"> CoK/Local Government RURA Companies Waste generators REMA MoE MININFRA WASAC MINICT 	<ul style="list-style-type: none"> CoK/Local Government RURA Companies Waste generators REMA MoE MININFRA WASAC MINICT 	<ul style="list-style-type: none"> RURA REMA Recycling companies Private sector NGOs/ international Finances CoK/Local Government WASAC MINICT 	<ul style="list-style-type: none"> CoK/Local Government REMA MINICT WASAC RURA PSF WASAC
<ul style="list-style-type: none"> Community behavior Financial capacity for households for sorting facilities 	<ul style="list-style-type: none"> Unprofessional companies Lack of finance for appropriate vehicle Lack of skilled labor Road network issues Low rate of fee payment Lack of awareness 	<ul style="list-style-type: none"> Mixed wastes Road network & Accessibility Unprofessional vehicles Traffic jam Few hours of working 	<ul style="list-style-type: none"> No strategy to encourage investment in recycling mixed waste collection No incentives for waste No skills and knowledge in the Sector Lack of financial capacity /no investors Lack of treatment facilities 	<ul style="list-style-type: none"> No sanitary landfill Landfilling of mixed wastes No financial for improvement Environmental pollution Social impact to the community

3 RECOMMENDATIONS

The TWG recommended the following as next steps to ensure smooth implementation of the project:

- Continue working on the pending items and ensure they are implemented as per project timelines including follow up on the procurement process, dialogue with RSB on the possibility to set standard on compost, and finalize the implementation framework between CoK and GGGI;
- Finalize the capacity need assessment preliminary report and communication strategy and social and behavior change communication as per project timelines;
- Start to work on leveraging more funding for waste to resources projects;
- Develop a tool/approach to monitor project achievement against its results especially to measure GHG emission reduction.

THIRD THEMATIC WORKING

GROUP REPORT

Fatima Hotel, Musanze
14 - 17 October 2022



1

INTRODUCTION

The third thematic working group for waste to resource: improving municipal solid waste and hazardous waste management in Rwanda was convened in Musanze from 14 to 17 June 2022 at Fatima Hotel. This is a recurrent quarterly activity under the project where members of the technical working group are gathered to orient project activities and it is the space where waste to resources project team provides implementation progress to key technical government counterparts.

The thematic working group started with opening remarks from both the Ministry of Environment (MoE) and the Global Green Growth Institute (GGGI). The representative from the Ministry of Environment, Mr. Dismas KARURANGA, thanked all the members of the technical working group for their participation and hinted at the importance of the project as it is contributing to the implementation of Nationally Determined Contribution (NDC), especially for the mitigation of Greenhouse Gases Emissions (GHG) of the waste sector.

In his remarks, Juvenal Mukurarinda, on behalf of the Country Representative, thanked everyone to have come to the third thematic working group. Juvenal highlighted again that the waste management sector is a public service with no business viability that needs government attention to ensure its sustainability. With the increase of urbanization and population growth especially in urban settings, various enablers must be introduced to achieve short, medium and long-term national development agenda. The waste-to-resource-to project will bridge the gaps in terms of waste management data at disposal sites (Nduba) and pilot activities will open for future bankable projects. Juvenal ended his remarks by wishing everyone a fruitful thematic working group.

The third thematic working group aimed at reviewing three reports, e-waste, gender, and capacity need assessment and ultimately to present the project implementation progress. Members who attended a third thematic working group are: the Ministry of Environment (MoE), Ministry of Infrastructure (MININFRA), Ministry of ICT and Innovation (MINICT), Rwanda Utilities and Regulatory Authority (RURA), Rwanda Environment Management Authority (REMA), Rwanda Development Board (RDB), City of Kigali (CoK), National Industrial Development Agency (NIRDA) and Water and Sanitation Corporation (WASAC).



2

THEMATIC WORKING GROUP PROCEEDING

The thematic working group was conducted for three days where on days one and two, members were given ample time to review, make inputs, and recommendations to three tabled reports namely e-waste situation assessment, gender situation assessment and action plan for MSW and e-waste, and capacity need assessment for both private and public sector for sustainable MSW.

Also, the project team created different respective topics for member's debate (discussion) for e-waste, gender and capacity building to bring attention of the government's priorities on the above-mentioned topics. This will help consultants to align their write-ups with ongoing and planned government priorities.

On day three, the project team presented the current project implementation progress and lesson learned in year one for the project implementation.



DAY 1 & 2

Revision of Three Inception Reports

During the studies revision, two groups were created for thorough review and discussion around reports, to come out with clear inputs, comments and recommendations that will guide consultants to produce sound reports.

The outcome from groups on the three reports was perfect and consultants were advised to review the studies from consolidated comments for final approval before starting the next steps for data collection. The consultants were given one week to finalize the reports (to be submitted by 24 June 2022) and the members will cross check if all comments and inputs were addressed within one week as well (29 June 2022).

A separate file with consolidated comments, inputs and recommendations on respective reports was produced and shared with consultants.

DAY 3

Project Implementation Progress

On the last day of the thematic working group, the waste to resource project team presented the project progress. It has been indicated among the 21 activities that are supposed to be implemented for year one, 20 activities are on track and one activity is off track. It is worth mentioning that year one of the projects will be completed as of July 2022 according to the approved donor financing agreement.

The activity that is off track is the sorting equipment infrastructure planned to be constructed in Nduba. The project team could not find a qualified firm for an attempted tender for this activity. It was decided to be retendered and the deadline for the Request for Proposal (RFP) is planned on 30 June 2022.

3 RECOMMENDATIONS

Members of the thematic working group commended the good work that is being done by the project team to ensure the waste to resource project is successfully implemented.

In his closing remarks, Mr. Dismas, emphasized the fact that the project is not GGGI's but rather for the government where everyone's effort is encouraged to ensure it creates impact in its areas of interventions. One key recommendation made is that activities that are off track should be clearly documented highlighting reasons for delays and clear actions made to fast-track them.



FOURTH THEMATIC WORKING GROUP REPORT

La Palme Hotel, Musanze
18 - 21 October 2022



1 INTRODUCTION

The fourth thematic working group for Waste to resource: Improving Municipal Solid and Hazardous Waste Management in Rwanda was convened at La Palme Hotel in Musanze from 18 to 21 October 2022.

This is a recurrent quarterly activity under the project management where members of the technical working group are gathered to technically orient project implementation and such meetings are used by the project team to present the project progress.

The fourth technical working group meeting started with opening remarks from the Ministry of Environment, lead institutions overseeing the project implementation. Mr. Dismas KARURANGA from the Ministry of Environment thanked all members of the technical working group for their participation and hinted that the project

interventions will create enabling environment and mitigate GHG emissions for the (solid) waste sector.

The focus of the fourth thematic, technical, working group was to review and validate three projects namely a draft report for e-waste situational assessment and capacity need assessment for both the City of Kigali and Secondary Cities, an interim report for gender assessment and action plan for improvement of Municipal Solid Waste and e-waste management, and draft report for capacity need assessment and ultimately to present the project implementation progress.

Members who attended the fourth thematic working group are: Ministry of Environment (MoE), Ministry of Infrastructure (MININFRA), Ministry of ICT and Innovation (MINICT), Rwanda Environment Management Authority (REMA), Rwanda Development Board (RDB), City of Kigali (CoK), National Industrial Development Agency (NIRDA), Gender Monitoring Office (GMO) and, Water and Sanitation Corporation (WASAC).

2 THEMATIC WORKING GROUP PROCEEDINGS

The thematic working group was conducted for three days where on days one and two, members were given ample time to review, make inputs, and recommendations to three tabled reports. On day two, the project team also provided the project implementation progress.

DAY 1 & 2

Revision of Tabled Reports and Project Implementation Progress

To maximize inputs for tabled reports, three groups were formulated to further review and discuss the reports to come up with clear inputs, comments and recommendations that will guide consultants to produce sound reports. The outcome of groups discussions for the three reports was perfect and all three reports were validated with amendments to incorporate all comments provided by the members of the technical working group.

Respective consultants were given two weeks to finalize reports (week to finalize the reports to be submitted by 04 November 2022) and the members will cross check if all comments and inputs were addressed within one week after submission (11 November 2022). Written comments were appropriately sent to consultants for review and incorporation in the main reports.



Figure 1: Members of the Technical Working Group reviewing respective reports

On the third day of the workshop, 20 October 2022, the project team had the opportunity to present the status of the project implementation. Mr. Juvenal on behalf of Global Green Growth Institute highlighted that overall, the project implementation is going on well and on track.

The major challenge that the project is still struggling with is on the procurement and delivery process for the infrastructure setting part of the project to be set up in Nduba due to the COVID-19 pandemic and the current global recession mainly caused by the War in Ukraine.

With regard to procurement, for the first attempt of the tendering process, the project team was unable to find a qualified firm. Therefore, the team decided to unbundle the tender into two: one for supply and installation of the weighbridge facility and another one for the design and build of a sorting facility at Nduba tender.

DAY 3

Visit of the entrepreneur and dumpsite operator in Musanze district

The last day of the workshop was dedicated to site visits of the two firms dubbed Golden Insect Ltd and BIDEK group which are recycling organic waste into organic fertilizers. Golden Insect Ltd, is a small-scale center that professionally and commercially breeds insects and other living macro & micro-organisms for feed, food, and other uses.

The Owner and CEO, Xavio, mentioned that the company uses redworms to decompose organic waste that does not contain either oil or salt into vermicompost. Redworms have a capacity to stabilize and sequester greenhouse gases (such as methane and carbon dioxide) that comes from bio-waste, therefore, contributing to climate change mitigation.

According to the owner, the company has the capacity to produce between 10 tons to 100 tons of vermicompost a month. The other waste products that Golden Insect produces are maggots which are hatchlings from Black Soldier Flies (BSF) that fed organic waste to grow, hence reducing waste. Maggots are said to be highly nutritious for chicken and fish.

Xavio mentioned that this is an area where people are yet to understand, and the demand is still low for organic fertilizers produced with such technology.

He went on to mention that his fertilizers are much safer than industrial fertilizer as his fertilizer does not render soil acidic. The company is planning to expand however unfortunately has not funds to do so.



Figure 2: Vermicompost produced using redworms.

The implementation of the installation of the weighbridge is ongoing and so far, all civil works and manufacturing of the weighbridge are all completed but waiting for the shipment of the weighbridge from India. As per the contractor, the weighbridge will be shipped on 18 November and reach Kigali on 23 December, 2022 of which afterward it will be installed and ready to start. The procurement process for the sorting facility is also almost completed and the firm is expected to be on board by end of November 2022. It is worth mentioning that such delays in procurement and implementation of the above-highlighted infrastructures have heavily affected the project disbursement among other project activities.

Other challenges include delays in response from government institutions for activities that are implemented jointly. This is being observed in activities linked with awareness campaigns for proper waste management in the City of Kigali and other requests.

The other visited company is BIDEDEC group a dumpsite operator of the Musanze district dumpsite. Like other local dumping sites, the site is semi-controlled where organic waste is separated from mixed waste. The dumpsite is estimated to receive around the 80 tons per day.

The sorted organic waste is mixed properly with cow dung, pig, and chicken manure to produce highly organic fertilizers. The company CEO mentioned they can produce organic fertilizer within 21 days as opposed to conventional composting. Systems and windrow systems that take at least four months to produce organic fertilizers.



Figure 3: CEO BIDEDEC showing around produced fertilizers

At the dumpsite, due to a lack of recycling infrastructure, huge amounts of inorganic, recyclables, have formed a mountain which will ultimately cause environmental and public pollution. The CEO noted that Government should avail enablers for investors to bring in infrastructure, especially at the disposal site or to transfer stations to maximize waste diversion at dumpsites hence creating business opportunities for the private sector and minimizing reliance on virgin materials for products productions.

3 CONCLUSION AND RECOMMENDATIONS

Members of the thematic working group commended the good progress of project implementation. The representative from the Ministry of Environment thanked again the members for their participation and asked them to continue to do so as they are central to the achievement of the project and making changes. The members recommended project team continue documenting well challenges faced during the project implementation.



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