Report on Workshop on Environmentally Sound Waste Management and Cleaner Production in Rwanda at Kigali Serena Hotel

1. Introduction

The Workshop on Environmentally Sound Waste Management and Cleaner Production in Rwanda was organised by Resource Efficient and Cleaner Production Centre and was held on 31 March 2009 at Kigali Serena Hotel, Rwanda. The workshop was opened by the Minister for Infrastructure (MININFRA), Hon. Eng. Linda Bihire and was attended by more than 100 participants from the ministries, districts, private and public sectors and UN agencies.



From left to right, there is Mr.Kalenzi Emmanuel (Head of Unido Operations), Hon.Eng.Linda Bihire (Ministry of Infrastructure), Mr. Aurelian Agbenonci (the UNDP Resident Representative), Mr. Anthony Ohemeng-Boamah (the UNDP Country Representative).

The opening session of workshop was facilitated by Mr. Emmanuel Kalenzi, Head of UNIDO Operations in Rwanda, who welcomed the participants to the workshop and introduced the Minister, guests from UNIDO and UNDP. He thanked all those who made the workshop a reality. He outlined the objectives of the workshop and the expected outputs.

Mr. Aurelian Agbenonci, the UNDP Resident Representative, emphasized the importance of using the 3R initiatives (Reduce, Reuse and Recycle) in waste management and the importance of role sharing of all stakeholders. He outlined the participation and role of the different UN agencies in waste management under the One UN Programming. The Hon. Eng. Linda Bihire, the Minister for Infrastructure, officially opened the worked and informed the workshop participants that Rwanda has declared its commitment to sound environmental policies and to translate this into action, we are out to mobilise partnerships to have the policies implemented. She was glad with UNIDO and the UN in general that they have already to Government's responded call on promoting environmentally sound waste management and cleaner production. She called for participation of all stakeholders in this noble cause. The Minister's expectations from the workshop included:

- Increased awareness about waste management and cleaner production across all the stakeholders.
- Sharing experiences.
- Enhancing synergy.
- Fruitful discussions and practical recommendations from the workshop.

Session One

The first plenary session focussed on the policy and legal framework for waste management in Rwanda and on the role of Resource Efficient and Cleaner Production Centre in Rwanda. The presentation on the policy and legal framework was delivered by Dr. Rose Mukankomeje, Director General of REMA. The presentation covered a brief introduction on the targets of MDG 7 on environmental sustainability and the challenges facing Rwanda on waste management.



She emphasized that Rwanda has no specific law or policy on waste management but there are laws and policies that recognize waste management as an important tool for sustainable development. The relevant

policies were cited as Environmental policy and sectoral policy on water and sanitation.

She outlined the specific articles (Articles 33 and 47) of the organic law on environment that regulate waste management practices in Rwanda. The responsibilities of REMA, RURA and decentralized entities in waste management were outlined and the importance of integrated waste management emphasized.

The second presentation covered the role of Resource Efficient and Cleaner Production Centre in waste management and promotion of cleaner production. The programme was presented by Dr. Patrick Mwesigye, UNIDO Consultant.



He outlined the role of the already established Resource Efficient and Cleaner Production Centre in Rwanda that included:

- Promotion of Cleaner Production
- Participation in Waste Management
- Facilitate environmental compliance of enterprises (collaboration with REMA and RDB)
- Involvement of Stakeholders
- Networking with other National Cleaner Production Centres (NCPCs) through UNIDO-UNEP Programme on RE and CP
- Participation in LVEMP Phase II
- Participation in Marrakech Process (SC and SP)

He called for participation of different stakeholders (from Government, Private Sector and the Public) to work closely with UN agencies to support the Centre in executing its role in promoting waste management and cleaner production.

Session Two

The second plenary session started with summary of UN Activities in Waste Management in 2009 by Dr. John Musemakweri, the Chairperson of the UN Environment Theme Group (ETG) under One UN Programme. He summarised the activities of the ETG and emphasised the component on waste management and plans proposed to improve waste management in general and Nyanza dumping site in particular.

Dr. Jan Gajowski from UNIDO and the Project Manager for the Centre, described the different eco-efficiency methods and technologies for improvement of waste managers. He cited different case studies from Turkey, Japan, Austria, Thailand and India on how eco-efficiency has been used to save costs, increase productivity and improve waste management.



From left to right, we have Dr. Musemakweri John (UNDP,head of Environment Unity), Dr. Jan Gajowski (UNIDO, Project Manager), Eng. Daniel Kehrer (Wat Engineering), Henri Esseqquat (UNDP, energy officer)

Jan summarized the achievements of the Centre (with total expenditure of USD 216,000) since its establishment in October 2008 and they included:

- Safety and environmental protection, principles and strategies prepared
- Core staff members selected and hired
- The offices furnished and equipped
- Business plan for 2009 prepared
- Software for the calculation of ecoefficiency rate prepared
- The key factories in Kigali City approached (pre-assessment)

- Comprehensive in plant assessment at Utexrwa conducted
- 40 weak points identified at Utexrwa and cost effective elimination measures recommended
- 8 weak points eliminated at Utexrwa by organisational measures leading to the waste reduction and cost savings
- Process for the safe and environmentally friendly production of insecticide treated mosquito nets designed and the corresponding feasibility study prepared for implementation by Utexrwa
- The domestic waste situation in Southern province and Kigali City assessed
- Concept for the management of biowaste, health care waste and glass waste developed
- Movable demonstration equipment for the production of high quality briquettes from suitable bio-waste specified and procurement procedures initiated
- Brochure "Waste management in Rwanda, a driving force for jobs and innovation" in preparation

The third presentation was made by Mr. Henri Essequat, Energy Officer at UNDP and provided the background on Clean Development Mechanism (CDM) and Opportunities for Private Sector. He described the various options available to Rwanda in Carbon Trade and gave examples of the voluntary markets in Rwanda that include Clinton Foundation, biogas project for SNV and GTZ and bamboo planting. The case study for briquette as environmental friendly systems in urban areas solves charcoal problem minimizes and deforestation.

Mr. Daniel Kehrer, Project Director from Wat Engineering presented a paper on recycling management and landfill site technology. He described the different options for improvement of Nyanza dumping site and different technologies (based on Germany experience) for construction of new land fills in Rwanda.

Session Three

The third plenary session focussed on the activities that are being undertaken by the private sector and the districts. The first presenter was Mr. Celestin Sebuhinja, Head of Spinning at Utexrwa who described the benefits the company has benefited through implementation of Cleaner production since 2005. The company was able to realise cost benefits through efficient use of raw materials, energy (furnace oil and electricity) and motivated work force.

The second presenter was Mr. Paulin Buregeya, Director General from COPED, a private limited company that handles wastes in Kigali City. He described the different initiatives the company has been to introduce in waste management and the ambitious plans the company has. He was concerned about the lack of tariffs to regulate pricing of waste management services and threw the challenge to RURA to do the needful. He also decried the low levels of awareness on sustainable waste management. He gave a recommendations number of on improvement of waste management in Rwanda.



From left to right, we have Serge Ndayitabi, (District Environment Officer, Nyamagabe), Innocent and Paulin Buregeya (COPED), Celestin Sebuhinja (Head of Spinning at Utexrwa)

Mr. Serge Ndayitabi, District Environment Officer, Nyamagabe, presented a paper on Service delivery in Waste Management by Districts. He emphasised the challenges faced by district in environmental management. The challenges include waste management, water pollution, industrial discharges (especially from wet coffee processing). He decried the lack of funds by the districts and low environmental awareness by the population.

Session Four

The fourth session focused on plenary discussions where all participants contributed ideas on recommendations. The major from all the participants was that the recommendations from this workshop should be implemented with active participation of the relevant stakeholders. They noted that the establishment of Resource Efficient and Cleaner Production Centre in Rwanda is a big step in the right direction. Participants called for enhanced cooperation between UN agencies, private sector and Government of Rwanda in promoting Cleaner Production and improvement of waste management at all levels of society. Recommendations on how to solve poor waste management dominated the discussions as it was looked at as the time bomb likely to explode. The major recommendations included:

- Change of behaviour by all stakeholders towards waste management and implementing the simple concepts of Reduce, Reuse and Recycle.
- Integrated Waste management needs, to consider solid wastes and wastewater produced by industry and economics.
- Integrating waste management into the curriculum at all levels of education in Rwanda
- Decentralise waste management so that district have the facilities to manage wastes at local levels.
- Metal wastes should be given attention as well as they were not a subject of discussion at the workshop.
- Marrakech Process and LVEMP phase II should be taken in consideration as well as the Networking with other NCPCs for implementing of sustainable consumption and production.

- Implementation of an integrated preventive environmental strategy should be in place based on existing policies.
- Environmental friendly need to improve the quality of waste valorization
- Partnerships between private and government should be established to promote waste management.
- Government should provide tax incentives to investors in appropriate technologies for waste management and cleaner production.
- Research activities in waste management should be supported to provide appropriate and affordable technologies for enterprises in Rwanda.
- Task team in Waste management should be set up to give guidance on policies to the government on management of waste
- Continued support to RECPC in Rwanda for successful implementation of its program
- Set up demonstration projects at national and institutional level.
- Bring food materials to Kigali while in processed form. This will take industries to villages and hence infrastructure needed in villages. UNIDO through the RECPC should think of how to implement this approach.
- There is huge market in waste management and therefore local government, REMA and UNIDO and other partners can help to initiate this approach.

Closing Session

The closing session started with Mr. Emmanuel Kalenzi, Head of UNIDO Operations in Rwanda welcoming the Hon. Monique Nsanzabaganwa, Minister for Trade and Industry and thanked her for accepting to close the workshop. The recommendations from the workshop were then presented by Dr. Patrick Mwesigye, UNIDO Consultant, who emphasised the request from all participants that the recommendations should be speedily implemented and requested the Government to take more keen interest in implementing Cleaner Production and improvement of Waste Management in Rwanda. The continued support of the Government to the Resource Efficient and Cleaner Production Centre will ensure that the recommendations of the workshop are implemented.

In her closing remarks, the Minister for Trade and Industry, Hon. Monique Nsanzabaganwa, was happy that participants in the workshop had discussed in details the challenges facing Rwanda in waste management and cleaner production. She was impressed by the level of deliberations and the quality of papers presented. It was evident from the presentations that environmentally sound waste management practices and cleaner production attain environmental compliance, achieve efficient use of resources and prevents pollution at source. This shows that, as a country, we can competitive we be verv if adopt environmentally sound waste management practices and cleaner production in our dayto-day activities.



From left to right, we have Dr. Jan, Hon. Monique Nsanzabaganwa (Minister of Trade and Industry), Mr.Kalenzi Emmanuel

She appreciated the efforts being put in by Resource Efficient and Cleaner Production Centre in ensuring that enterprises manage their wastes better and become more competitive and can access new markets. She particularly challenged Resource Efficient and Cleaner Production Centre to entice more enterprises to embrace these concepts so that they become more sustainable enterprises best methods and apply in waste management. She also called upon districts to integrate waste management and cleaner production in their planning process. The involvement of the private sector is very critical in ensuring success of these programmes.

The Minister thanked the One UN Programming in Rwanda for the financial support and UNIDO for technical assistance provided to establish Resource Efficient and Cleaner Production Centre in Rwanda. She appreciated the work done by organisers of the workshop and pledged continued Government support in implementing the recommendations.

A vote of thanks to the Minister was passed by the Master of Ceremonies, Mr. Canisius Karuranga who appreciated her support and constructive remarks.



Master of ceremony, Mr. Karuranga Canisius He thanked the participants for their contributions and wished everybody successful implementation of the recommendations of the workshop.