



Launch of the Integrated Solid Waste Management (ISWM) Plan for Nairobi

'As the livelihoods of people improve, they more they tend to waste' increase in incomes is directly proportion to increase in waste hence the need for Integrated Solid Waste Management (ISWM) as a strategic approach for sustainable management of municipal solid waste.

The Deputy Director, UNEP Regional Office for Africa (ROA) Mr Peter Acquah, made opening remarks in which he highlighted estimated global municipal solid waste generation rates and the 2006 UNEP commissioned study of the Dandora dumpsite in Nairobi. Councillor Abong'o, Chairman Environmental Committee City Council of Nairobi (CCN), gave an overview of the main challenges faced by the council in management of solid waste within the city.

Caroline Wamae, Ministry of Environment and Mineral Resources Kenya, made a presentation on Nairobi River Basin Rehabilitation and Restoration Programme. Degradation of the river is caused by amongst other factors, dumping of wastes along the channel especially from the informal settlement areas that stretch along the river. Progress made by the programme was also highlighted.

Surya Chandak, UNEP International Environmental Technology Centre (IETC) Japan, gave an overview of the important considerations for developing an ISWM plan. He emphasised the need for creating local ownership of the process by all stakeholders to ensure success of the Plan.

Harro von Blottnitz, University of Cape Town, detailed lessons learnt from the development of an ISWM Plan in Maseru Lesotho. He highlighted the fact that there were many different previous and parallel activities on solid waste management in cities and that proper planning was impossible without accurate estimates of waste generation volumes and utilization. He stated that it was important to carry on with ISWM Plan actions instead of pinning all hopes on the completion of a new landfill site. He added that it was important for the Plan to be demanded and actively shaped by a local champion who understands that the Plan is necessary to save the city from drowning in waste and to make it one that can survive in the 21st century when resources become scarce. He emphasized the importance of integrating ISWM into development strategies and stated barriers hindering implementation of ISWM Plans as political, economic (e.g. lack of recycling incentives) and inadequate capacity on the ground for solid waste management.

Benjamin Njenga, CCN, made a presentation on the proposed implementation framework for the ISWM Plan in Nairobi. He described the planning and implementation phases and highlighted the expected outputs.



Training on Waste Characterization and Quantification with Future Projections

Day One (Morning and Afternoon Sessions):

The first session on 'Roadmap for Data Collection', covered the important factors and considerations made when developing an ISWMP. It also addressed challenges that participants would encounter while formulating the Plan.

The second session on 'Sample Collection and Analysis' dwelt on sampling methodology. Sample collection procedures, analytical methods, and waste composition was discussed.

This was followed by a session on 'Design of a Survey Study for Municipal Solid Waste' that highlighted information requirements and methodology for collection, analysis and data presentation.

Day Two (Morning Session):

Presentations covered quantification and characterization of industrial and healthcare wastes. Different types of industrial wastes were highlighted and categorized. The session on healthcare wastes covered its definition, basic information, categories and methods of disposal.

Participants were taken round the UN Compound for a practical demonstration of how the UN manages its solid and liquid wastes.

Work Plan for Collection of Baseline Information (Afternoon Session):

This was a planning session to outline main tasks for the National Task Team (NTT) and Research Assistants who would conduct the baseline study. The following details were discussed:

Main sources of information

1. Demographic and other related data presented by Dr. Harro von Blottnitz.
2. JICA Report.
3. Intermediate Technology Development Group East Africa (ITDG) – 2004 (now know as Practical Action).
4. Data from City Council of Nairobi (CCN)/ National Task Team (NTT).
5. Book: Solid Waste Management and Recycling: Actions, Partnerships and Policies. Hyderabad, India and Nairobi.
6. Plastic Waste Management Study. Kenya National Cleaner Production Centre (KNCPC).
7. Practical Action: Information from plastic manufacturers and recyclers.
8. Prof. Ngau – University of Nairobi (UoN), Eng. Njeri Kahiu – Jomo Kenyatta University of Agriculture and Technology (JKUAT) – Thesis/Dissertation of students.



United Nations Environment Programme

برنامج الأمم المتحدة للبيئة • 联合国环境规划署
PROGRAMME DES NATIONS UNIES POUR L'ENVIRONNEMENT • PROGRAMA DE LAS NACIONES UNIDAS PARA EL MEDIO AMBIENTE
ПРОГРАММА ОРГАНИЗАЦИИ ОБЪЕДИНЕННЫХ НАЦИЙ ПО ОКРУЖАЮЩЕЙ СРЕДЕ

9. Industrial waste:
 - a. Audit reports from NEMA.
 - b. KNCPC's studies.
 - c. Practical Action studies.
 - d. Jua Kali Association – Materials recycled from informal sector.
10. CCN – Data on waste received from dumpsite.
11. Solid waste management in Nairobi City. Tampere Polytechnic Finland (Mushtaq).
12. Other pdf files – Mushtaq.

Way forward:

1. Secondary data will be uploaded on a website that will be managed by the KNCPC and will include links on electronic wastes to be provided by Dr. Harro.
2. Hardcopy documents will be scanned and converted to PDF for uploading.

Division of Zones in Nairobi:

1. 10 study zones were identified according to political and administrative boundaries/ constituencies (Central Business District – CBD, Starehe, Kamukunji, Kasarani, Langata, Dagoretti, Westlands, Embakasi, Makadara and Dandora Dumpsite).
2. The CDB forms an extra zone and has been carved out of Starehe constituency while Dandora Dumpsite, which borders Kasarani, has been carved out of Embakasi.
3. Special attention needs to be given to waste disposal activities in informal settlement areas.
- 4.

Study Groups:

1. 33 Research Assistants (RAs – students) will be recruited for the study.
2. Special consideration was given when designating supervisors for the various zones due to the following reasons:
 - a. Embakasi: Mr. Marclus Mwai (Ministry of Local Government – MOLG) conducted a study in the area.
 - b. Makadara: Area has a high concentration of the industrial sites and Mr. Kelvin Khisa (KNCPC), who works in the area, has experience on industrial waste management.
 - c. Kamukunji: Currently experiencing a rapid influx of Somalis and the Government, through the Ministry of Nairobi Metropolitan Development (MNMD), has shown interest in the area. Mr. Timothy Ndongoro (MNMD) will coordinate the team.



United Nations Environment Programme

برنامج الأمم المتحدة للبيئة • 联合国环境规划署
PROGRAMME DES NATIONS UNIES POUR L'ENVIRONNEMENT • PROGRAMA DE LAS NACIONES UNIDAS PARA EL MEDIO AMBIENTE
ПРОГРАММА ОРГАНИЗАЦИИ ОБЪЕДИНЕННЫХ НАЦИЙ ПО ОКРУЖАЮЩЕЙ СРЕДЕ

- d. Dandora: Mr. David Kigo (CCN) has extensive working experience in the area and will coordinate the team.

AOB:

1. Eng. Njeri proposed that the NTT and RAs meet during start up to discuss modalities for interaction.
2. Activities will run parallel to each other and the NTT and RAs have to ensure that they are completed on time to meet deadlines.
3. Communication is an important part of the strategy and the study the NTT and RAs should keep in touch regularly.
4. Data collection tools should be developed early for the RAs to familiarise themselves with their zones and methods of sample collection and analysis – Prof. Harro assured participants that a data collection matrix would be ready in March for this purpose.