



Economic and Social Council

Distr.: General
16 December 2010
Original: English

Commission on Sustainable Development

Nineteenth session

2-13 May 2011

Item 3 of the provisional agenda*

Thematic cluster for the implementation cycle

2011-2012 – policy session

Report on the Intersessional Meeting on Solid Waste Management in Africa

25-26 November 2010, Rabat, Morocco

Chair's Summary

* E/CN.17/2010/1.

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Annex I

Rabat Declaration on Sustainable Waste Management in Africa

I. Introduction

1. The United Nations Department of Economic and Social Affairs (DESA) in partnership with UN-Habitat and UNEP organized a CSD Intersessional Consultative Meeting on “Solid waste Management in Africa” from 25 November to 26 November in Rabat, Morocco. The meeting was attended by approximately 80 participants, comprising Government representatives from 24 African countries, France, Portugal, Romania, Yemen ; representatives of public waste utilities, the private sector, academia, NGOs, international resource persons, UN organizations and other development agencies.

2. The African region is facing severe challenges in coping with the rapidly increasing volume and changing characteristics of urban and industrial wastes. The quantum of waste is increasing significantly due to economic growth, rising population, and increasing consumption and per capita waste generation. Apart from Municipal Solid Waste (MSW), emerging waste streams such as electronic waste (E-waste), health-care waste, plastic waste, construction and demolition (C&D) waste, and household hazardous waste have become matters of concern. These wastes, if not managed properly, will have a significant adverse impact on human health, ecosystems, and resources, which will threaten the sustainability of the region. Alternate models of growth that decouple economic growth from excessive use of resources and minimizes generation and disposal of wastes should be the strategy adopted. Promotion of Reduce, Reuse, and Recycle (3Rs) should form the key element of such a strategic approach.

3. The issues of open dumping and burning are rampant across the region, with open dumping dominating the waste disposal methods. Since this largely affects the potential opportunity to utilize wastes as valuable resources towards income generation, there is need for the complete phasing out of urban dumping and uncontrolled disposal.

4. There are a number of social issues such as the health and working conditions of poor women and children involved in unhealthy practices of waste collection and sorting, mainly in the informal sector. The development of appropriate recycling infrastructure and markets is not only an effective solution to eradicate open dumping, but also to address critical issues (working conditions, health, environment, and labor issues) of informal waste pickers.

5. It is important for African countries to institute appropriate policy frameworks and governance mechanisms leading to waste prevention, waste minimization and improving waste collection, processing, treatment, disposal and recycling. Few experiences in African countries show that integrating private, formal and informal systems of solid waste management can significantly increase efficiency and effectiveness of municipalities in delivering required services, and save municipalities valuable resources while also providing health and environment benefits.

6. The meeting was organized with the following objectives: (a) Strengthening the capacities of waste management utilities in Africa in addressing waste management challenges (through sharing of lessons learned and experiences gained; having a better understanding of

institutional and policy frameworks requirements; identifying gaps in policies and practices, etc.); (b) Identifying opportunities for building partnerships for expanding waste management services; (c) Developing communities of practice for scaling up of best practices (over the years, a number of good practices in sustainable waste management have emerged. Actions leading to scaling up of these practices are required. These actions could range from policy reforms to infrastructure development to raising public awareness); and (d) Empowering cities in addressing economics of solid waste management having a better understanding of policy frameworks and economic instruments.

II. Opening Session

7. In his opening speech, the Secretary of State in charge of Water and Environment of the Kingdom of Morocco focused on the importance of an integrated vision for solid waste management and the need to involve all key stakeholders. He stressed that solid waste must not be considered as a liability but rather an asset that can provide an opportunity for investments with positive social and economic outcomes while protecting the environment. He finally underscored the importance of involving the private sector with supporting legal and institutional frameworks.

8. Referring to the Commission on Sustainable Development (CSD), Ms Kenza Kaouakib-Robinson, Senior Sustainable Development Officer, United Nations Department of Economic and Social Affairs (UN-DESA), informed that CSD 19 is focusing on addressing the challenges and obstacles impeding the implementation of an internationally agreed agenda in five thematic areas that include waste management and sustainable consumption and production patterns, both closely linked to Integrated Solid waste Management (ISWM). She emphasized that ISWM and the 3R strategy, which call for a broader, more holistic way of viewing waste management are unique in that they integrate waste management with the key paradigms of sustainable production and consumption, greening the economies, and improving resource efficiency, which together could make a significant contribution towards sustainable development. She emphasized the importance of addressing the particular challenges of Small Island Developing States (SIDS). She expressed her hope that outcomes of this Consultative Meeting will provide practical solutions and meaningful input to CSD 19 and Rio+20.

9. In his opening statement, Mr. Graham Alabaster, Chief, Water Sanitation & Infrastructure Section, United Nations Human Settlements Programme (UN-HABITAT), highlighted the changing urban landscape in Africa and the fact that seventy-two percent of Africa's urban population live in low-income areas. He indicated that this vulnerable group should be considered in planning interventions for solid waste management. He emphasized that solid waste management provided a good opportunity for linking service provision to income generation through recycling and reuse. He indicated that the meeting provides a good opportunity to form regional alliances and share expertise and experiences.

10. Ms. Khalida Bouzar, Deputy Director UNEP/DTIE indicated that the waste sector is facing four sets of challenges: the increasing growth in the quantity and complexity of waste

streams; the increasing risks of wastes to human health and ecosystems; economic unattractiveness of large scale reuse/recycling due to prevailing pricing systems and the high cost and technical requirements of creating waste management infrastructure. She also indicated that while developing waste management systems, it was important to take into consideration the informal sector. She also emphasized the need for national waste management strategies to take into consideration the needs and constraints at local level.

III. Importance of Integrated Solid Waste Management (ISWM)

11. An increasing challenge compounding existing resource limitations is the accumulation of waste resulting from the use of resources and leading to resource degradation, with consequent adverse impact on human health and ecosystems. The more economic growth there is, the more resources are consumed and waste generated. A strategic approach is therefore needed to address resource consumption and waste generation in a lifecycle perspective, and to stress the preventive principles such as integrated solid waste management (ISWM) and 3Rs.

12. In order to strengthen the information and knowledge base on waste quantities and composition, and their linkages with economic growth (such as GDP), countries should actively consider inventorying waste generation. For this purpose, it may be prudent to set up a commonly agreed, understood, and measurable set of key performance indicators (KPIs). The KPIs could assist each national government to track progress, facilitating in particular the decoupling of economic growth from environmental degradation and allowing for inter-country benchmarking.

13. To mainstream ISWM in the national economy, countries should create an enabling environment of sound policies, appropriate technologies, and effective institutional and financial frameworks towards: promoting waste reduction and segregation; improving the efficiency of collection and transport of waste; setting up community recycling facilities; ensuring participation of the informal sector; shifting from open dumping to secured sanitary land filling; monetizing carbon credits from recycling and processing of waste; and encouraging eco-innovations across supply chains.

14. Supporting ISWM includes support for the concept of Reduce, Reuse and Recycle (3R). Apart from economic gains (such as material and energy recovery) and social benefits (such as employment), the concept of 3R is linked to various global issues such as climate change; phasing -out of harmful substances such as ODS and POPS, etc.

IV. Barriers to ISWM and Recommended Strategies

15. Barriers to ISWM may be described in terms of policy, institutional, technological, financial and attitudinal aspects. While several initiatives have been put in place to address these barriers across the world including Africa, a systematic effort on a strategic basis and supported by partnerships is not commonly observed. The meeting urged concerted effort in

this direction, especially for the African region. Various deliberations and discussions in this regard led to the following observations and recommendations.

Policy

16. There is a need to emphasize national level policies on decentralization and empowerment of Local Authorities (LA). These policies should recognize the importance of city-specific strategic action plans for ISWM. The development of effective action plans requires appropriate data, adequate institutional capacity as well as mechanisms.

17. The term waste is not often clearly defined in many African countries. There is a need to have a specific waste and resource management framework so as to achieve better recognition and relative prioritization. Policy integration at Apex level should be supportive e.g. health related policies.

18. Waste management related policies should encourage regional solutions and take advantage of economies of scale. Currently, there is a disconnect between policies at national and local level and therefore a dire need to harmonize policies across all levels. This could be achieved through sub-regional dialogue on policies.

19. Policies should address rural areas (relevant to Africa) and not be limited to urban areas alone. There is need to improve on the implementation and enforcement of policies and regulations.

20. Clear policies, frameworks and operational guidelines are needed to further engage the private sector. At the same time, policies that assign economic value to waste-pickers and field personnel need to be developed for their recognition and upliftment.

21. Policies should address rising concerns about the regulation of electronic or Ewaste. Waste management related policies should also address disposal of used vehicles through vehicle retirement policies and vehicle import policies. There is an equal need to improve on policy and enforcement of transboundary movement of wastes. Appropriate capacity building and training of custom authorities could provide significant benefit in tracking the transboundary movements of defunct electronic products and retired vehicles.

22. One of the most critical issues is the absence of strong political commitment to or political ownership of sustainable solid waste management and related sustainability issues – public health and the environment, reflected in the lack of accurate data and information on waste (waste generation, composition, collection, recycling and disposal). In most cases, data are generated from discrete donor driven projects.

Institutional

23. There are currently a multiplicity of institutions with overlaps, ambiguities on responsibilities and jurisdictions. Coordinated action of various national and local institutions

remains a challenge especially as regards the implementation of multi-stakeholder driven strategic action plans for ISWM. Building capacity of local authorities (Las) is also vital especially regarding the handling of waste streams such as hazardous waste. .

Training and capacity building programs should be mainstreamed into education to build more professionals in the waste management sector in Africa. Training should address operator (field) level as well. CBOs / communities may also be trained for management of decentralized waste treatment facilities. In this regard, setting of local training centers focusing on maintenance, operational and supervisory aspects could be useful in expanding effective waste management services.

24. Institutions critical to ISWM should include those engaged in the provision of infrastructure and operations as well as regulatory and enforcement institutions. Institutional arrangements and responsibilities should be clearly defined. Operational aspects should involve the private sector, and public-private-partnerships, with some degree of “control”. Involvement of professional organizations could be helpful in this regard. Such institutional mechanisms should be built/strengthened with regulation related responsibility being vested with the Government (so as to monitor the performance of private service providers).

25. Public health departments, who are generally responsible for waste management, often lack training/skills/experience in waste management. It is important to assign higher priority to waste related departments/divisions. Waste management departments should also have independent authority to handle all functions related to ISWM (planning, commercial, financial) with defined roles and responsibilities.

26. There is a need to set up a knowledge hub on waste management across Africa to publish research publications, hold annual technical events and waste-expos for dissemination of knowledge and promote regional networking, including transfer of knowledge across all levels and stakeholders (academia, managers, practitioners and field workers). Twinning (e.g., South-South cooperation) arrangements should be promoted and supported to promote shared learning, mentoring and networking

Technological

27. There is a need to develop Africa-specific technical guidelines suitable to the local context. The topics could include environmentally sound waste landfill guidelines (siting, design, operations and closure), standards and guidelines for incinerators for the destruction of health care waste etc. Guidelines must address complex issues such as treatment of leachates and biomethanation plants (including gas handling);

28. University researchers and field workers/professionals must work in partnership to develop appropriate and cost-effective technology, solutions/standards. This may lead to adaptations as well as innovations in waste to resource technologies. Funding should be mobilized to support partnerships-based and practice-oriented research.

29. Priorities should be given to technology options that entail resource (materials and energy) recovery. There is a need to promote biomethanation related technologies to take advantage of rich organic content (approximately 60~70%) in waste and hot climate in Africa. Waste to fuel (bricketing) can be a potential option to achieve energy security. .
30. Imported or foreign equipment often face problems of spare parts and less operational/technical support or back up. Although relevant technologies from developed countries are however needed for complex waste streams such as E-waste and hazardous wastes, indigenous technologies should be preferred and promoted to the extent possible. Information on appropriate technology is often “driven” by technology suppliers/vendors; recommending specific technologies. Independent assessments are important in the African context. Improved access to information related technologies will provide useful basis in this regard.
31. In Africa, the use of appropriate technology is “uneven”. Technology suitability needs to be checked using integrated frameworks (economic, environmental and social) such as Sustainability Assessment of Technologies (SAT). Importantly, SAT is participatory and hence can reflect local preferences and decisions. A holistic perspective is prudent (i.e. upstream-downstream) in making choices on technologies. Sharing of technology data sheets will be useful to understand the most suitable equipment/technology.
32. African countries may not aim at the highest standards on waste management at the outset. A step wise approach could be recommended – handle first immediate high priority problems e.g. set up separate collection systems for health care waste. In Africa, there is a phase of technology transition – especially regarding the management of existing dump sites. A phased or staged approach should be recommended.
33. For cost-reduction, optimization of collection and transport component of waste management is required (absorbs approximately 67% of the total cost). Special efforts are necessary to address narrow streets. In this regard, new and specialized vehicle designs are needed.
34. It is equally important to garner experience on the use of technology. Aspects such as preventive maintenance are important, operation and maintenance (O&M) Manuals or Guidelines for operators are needed, and on the job (in local language) training and practical capacity building programs such as how to prepare list of spare parts/spare parts inventory etc need to be addressed. Setting of workshops for maintenance of equipment is an essential part of waste management infrastructure – a consideration often lacking in the whole waste management system in Africa.

Economic and Financial

35. Economic instruments, such as polluter pays principles (ppp), need to be adopted while taking into consideration the local economy and willingness to pay. Raising finance through charging for waste related services in particular should be tested and further explored.

36. More involvement and awareness of financing institutions (FI) is required. The engagement of multilateral institutions such as the World Bank, the African Development Bank, is critical in financing waste management projects. National Governments should also provide loans and subsidies to “operators”.

37. CDM can be a good source of incremental revenue stream in implementation and operation of waste management projects. Concerted efforts, supplemented with practical training and guidance manuals should be made to encourage local authorities in Africa to take advantage of these international financial mechanisms.

Attitudinal

38. Waste is a resource – can be added value. This aspect is still not understood by some governments, communities and businesses. Additionally, waste generators often feel that waste management is the sole responsibility of the Government.

39. Waste segregation is often done informally and not yet at the desirable level. Waste should be segregated at source. Mixed waste is a risk as well as a missed opportunity. In this regard, community involvement is key. Awareness raising efforts need to be intensified including through extension officers, supporting waste-pickers and by forming informal-formal partnerships.

V. Involving the informal sector in Solid Waste Management

40. There is need to recognize the role of the informal sector in waste management. Waste pickers are deprived of legal entity. In this regard, effort should be made to address issues of their working conditions, health, and labour standards. Effective dialogue should be carried out to understand the complex nature of formal/informal interactions by involving local negotiators and NGOs. Specific training program targeting the informal sector, including training on new technologies for recycling, would provide added benefits.

41. It is important to promote dedicated units or centers for waste minimization and recycling. Establishment of such centres could help mainstream waste pickers activities.

42. It is necessary to address the health risks to all workers in the recycling chain, particularly women and children illegally engaged in waste picking, while continued focus is given to the economic benefits of recycling.

VI. Strengthening and creating partnerships

43. There is significant recovery potential in African countries, and through effective partnerships between local authorities, the private sector, and the informal sector, waste could be transformed into valuable resources – waste to energy and waste to economy and employment. National, legal and policy frameworks should support policies and institutional

measures favourable for scaling up such partnerships across the region.

44. While it was recognised that Africa has a wealth of experience and information, it was also noted that there is a lack of information sharing on various aspects of partnerships such as types of partnerships, conditions and competencies of partners. There is also a lack of appropriate policy, legal and institutional frameworks to promote and guide partnerships at various levels. While political will and awareness are key to expand and sustain partnerships, cities are not always empowered to enter into partnerships and cannot access international funding mechanisms independently. Recognizing the limited capacity of local authorities responsible for waste management, the meeting recommended the active involvement of all actors at local, national, regional, and international levels, including the informal sector. An important innovation could be the establishment of effective networking arrangements for exchanging information, best practices, tools and technologies among potential partners and stakeholders.

45. The meeting recommended building on existing partnerships on waste management. As a first step, collating information on existing partnerships is helpful. While considering international partnership models, existing and new partnerships should be tailored to the African context taking into account the differences and specificities of various categories of partners at international, regional, national and local levels.

46. In order to make partnerships effective, the political and institutional framework should be favourable to all key stakeholders and potential partners including municipalities, international business communities, small service providers (including the informal sector), international financing institutions, local and regional banks, NGOs and CBOs, to enable effective collaborative outcome.

47. In view of the above observations and recommendations, participants unanimously adopted the "Rabat Declaration on Sustainable Waste Management in Africa" (see Annex I).

48. The participants expressed appreciation for the generous support of the Government of the Kingdom of Morocco, in hosting the intersessional meeting and further requested that the host country officially submit the Chair's Summary of the meeting, including its Declaration as annexed, to the forthcoming 19th Session of the Commission on Sustainable Development.

Annex I

Rabat Declaration on Sustainable Waste Management in Africa

1. Representatives responsible for solid waste management from twenty-eight countries, including twenty-four from Africa, together with representatives of UNDESA, UNHABITAT, UNEP, UNCRD and experts from the sector, debated the various priority issues on solid waste management in Africa and related topics, on 25 - 26 November 2010 in Rabat, Morocco.
2. The purpose of the meeting was to identify the special needs of the African continent, develop a clear position for the forthcoming session of CSD 19, and build a coalition, through which good practices can be shared and replicated for the benefit of reducing the negative impacts of improper waste management on the environment and health, and to take advantage of the various economic benefits of sustainable solid waste management, focusing on poverty alleviation.

The participants concluded that:

3. Waste management issues are not of sufficiently high priority for many national and local governments in Africa. One of the key requirements for the implementation of sustainable solid waste management in Africa is the explicit support at the political decision making level. Recognition of the contribution that sound solid waste management practices can make to sustainable development, coupled with adequate allocation of resources, will enable national and local governments to make significant progress in solid waste management.
4. There is an urgent need to formulate and implement comprehensive national policy, legal and institutional frameworks, with linkages to human health and environmental protection to support solid waste management. Decentralization and empowerment of local authorities is crucial.
5. Access to and availability of funds, a pre-requisite for establishing waste management systems and infrastructure, need to be enhanced both at national as well as local levels. This should be coupled with various financial instruments and mechanisms to ensure sustainability.
6. Awareness raising, education and capacity building in the field of waste management at all levels and of all stakeholders are crucial for the African continent. In this regard, intensive efforts should be made by governments, institutions, NGOs, regional and international organizations, to ensure that appropriate initiatives are implemented.
7. Although, some expertise is available within the region, good and bad practices are often not shared. There is a need for regional or sub-regional associations/partnerships which can

be achieved by building on existing networks, developing new ones where necessary, and working with the UN system, International Financing Institutions and other partners.

8. Well designed integrated solid waste management systems can be a more profitable business if based on the reduce, reuse and recycle (3Rs) principle. Indeed, the fact that much of recyclable waste from the African region is transported to other continents for reprocessing, indicates that there are lost economic benefits for the region. There is a need to have a greater understanding of these benefits as a driving force to promote integrated solid waste management practices and to focus on waste as a resource.
9. The role of the informal sector is under-recognized and needs to be strengthened. Its formal inclusion in the waste management process will benefit all stakeholders. The legislative environment in African countries can be strengthened to create enabling conditions for improving the living and working conditions of the informal sector.
10. Adequate information, on solid waste is lacking. Information on the volumes of waste produced and its composition will allow informed decisions on investments and technology selection. To ensure improved service coverage, local authorities and other service providers should be encouraged to put in place monitoring systems to collect data and information to direct and secure investments.
11. The issue of trans-boundary movement of waste into Africa raises concern. Aside from the risks to human health and the environment, new and emerging waste streams, such as e-waste, will further stress waste disposal. Enforcement of international conventions is required including through regional cooperation.
12. Although Africa is undergoing the most rapid urbanization, there is need to consider solutions for mega-cities, smaller urban centres and rural areas. Adopting a “one size fits all” approach will not be appropriate, given the diversity within the region.
13. Building partnerships involving all key stakeholders including, international financing institutions, the private sector, local and regional banks, NGOs and CBOs will enhance effective waste management practices.
14. The participants declared that solid waste management represents a challenge but that its improvement will offer multiple benefits for Africa. They therefore fully endorsed the outcomes of the meeting as a key contribution to the forthcoming CSD 19th Session, in May 2011. The support of the Government of the Kingdom of Morocco, in hosting the meeting was gratefully acknowledged. The participants further requested that the host country submit the outcome of the meeting, including the Rabat Declaration to the forthcoming 19th Session of the Commission on Sustainable Development.

26 November 2010