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CHAIR'S SUMMARY

International Consultative Meeting on Expanding Waste Management Services in Developing Countries, 18-19 March 2010, Tokyo, Japan

Background Paper
CSD18/2010/BP6

I. Introduction

1. The International Consultative Meeting on Expanding Waste Management Services in Developing Countries was held in Tokyo, Japan on 18-19 March 2010. As an inter-sessional event of the UN Commission on Sustainable Development (CSD 18-19), the International Consultative Meeting was co-organized by the United Nations Department of Economic and Social Affairs (UN/DESA), Ministry of the Environment, Government of Japan (MoE-Japan), and United Nations Centre for Regional Development (UNCRD), and supported by the Institute for Global Environmental Strategies (IGES). The issue of waste management, among others, will be considered by the CSD in its fourth implementation cycle, which will take place in May 2010 (CSD 18) and 2011 (CSD 19). Representatives of public waste utilities, private sector entities, national and local governments, local communities, scientific and research institutions, and civil society from twenty-one countries of the Asia-Pacific region, Africa, Latin America, Europe, and North America and nine international organizations, among other relevant stakeholders, such as UN DESA, UNCRD, UNEP, UNU, UN ESCAP, UN HABITAT, JICA, ISWA, and IGES, actively contributed to the deliberations of the meeting.

2. The rapid increase in volume and diversification of wastes resulting mainly from economic growth, urbanization, industrialization, and unsustainable production and consumption patterns severely impacts the global and local environment, natural resources, public health, local economies, and living conditions. It also threatens the attainment of the Millennium Development Goals (MDGs). Development of appropriate policy frameworks and institutional arrangements is essential for providing efficient waste management services to local communities, including women, and for overcoming health- and environment-related challenges resulting from poor service provision and facilities.

3. The Consultative Meeting was organized with the objectives to: (a) discuss waste management challenges in developing countries, with special attention given to least developed countries as well as potential solutions and opportunities to address these challenges within the context of sustainable development, highlighting the important role of women in waste management; (b) support the preparation of the Chair's summary of CSD-18; and (c) contribute to the preparation of the Secretary-General's

report for the follow-up session (Intergovernmental Preparatory Meeting [IPM] of CSD-19) and to other related processes inside and outside the UN system scheduled for 2010. The Meeting paid special attention to the impacts, barriers, and opportunities at the local level.

4. The Meeting was opened by Mr. Nobumori Otani, Parliamentary Secretary of the Environment, MoE-Japan. In his welcoming remarks, he emphasized the importance of sound waste management against the backdrop of rapidly increasing waste volumes and waste diversity. He underlined the Japanese Government's determination to address waste management challenges, including through 3R approaches, and also to meet its commitment to reduce greenhouse gas (GHG) emissions by 25 per cent by 2020, notably by integrating approaches to bring about a low-carbon society and a sound material-cycle society. Noting Japan's good historical waste management practices, he highlighted Japan's contributions to international discussions and progress concerning waste-related issues, including the promotion of the 3Rs in Asia through the "3R Initiative" since 2004.

5. Delivering his opening remarks, H.E. Dr. Luis Alberto Ferraté Felice, Chairman of the United Nations Commission on Sustainable Development (CSD-18) and the Minister of the Environment and Natural Resources, Guatemala, urged the international community to make concerted efforts to build climate-resilient societies and economies. He highlighted the fact that the hardest hit from climate change would be the poorer sections of society because of increased vulnerability to extreme weather events due to lack of adequate waste management services and infrastructure. Underscoring the importance of the objectives found in the MDGs and the Johannesburg Plan of Implementation (JPOI), Dr. Ferraté urged developing countries to build and implement effective partnerships to expand community waste management services. He also recommended that they identify alternative paths to prevent economic decline and environmental degradation. In this regard, the Regional 3R Forum in Asia, a regional cooperation facility, could serve as a good example for other regions and groups such as Latin America, Africa, and Small Island Developing States (SIDS).

6. The Director of the Division for Sustainable Development (DSD), DESA of the United Nations Secretariat, Mr. Tariq Banuri, introduced the CSD process and its objectives, including the fourth implementation cycle (CSD 18-19). He emphasized that waste management is at the heart of the sustainable development movement. He stated that the poor are capable of solving their own problems but cited economic, psychological,

institutional, and technical obstacles that present particular challenges for them. He also reminded the participants that the ultimate goal must be to reach "zero waste". He closed by urging active engagement to establish a global partnership on waste management.

II. Common Issues and Challenges in Developing Countries

7. Developing countries face a number of issues in expanding waste management services, in particular at the local level. Categorizing and addressing these issues will help enable local governments and waste management companies and other entities to successfully resolve these issues. The meeting identified the following issues as meriting urgent attention.

Policy issues:

- Lack of comprehensive policies, laws, and regulations to promote sustainable waste management;
- Weak implementation and enforcement of existing regulations;
- The link between waste management and resource consumption not fully understood, leading to waste management being addressed at the downstream level;
- Limited engagement of different stakeholders in the decision-making process in dealing with waste management;
- Sustaining policies despite changes in leadership;
- Waste economics is not integrated into policy-making processes; and
- Inadequate consideration of resource-saving measures and their economic return in overall policy and planning.

Institutional capacity issues:

- Weak data collection, documentation, and analysis; low reliability of data; and weak infrastructure for data sharing;
- Weak institutional framework with few or no national/local associations or 'champions';
- Lack of capacity for training waste management professionals, including women;
- Limited institutional capacity for raising awareness and engaging the public; and
- Limited capacity and/or willingness to address and improve the working conditions of the informal sector;

Financial barriers:

- Lack of funds both for investment in and operation of waste management facilities;
- Lack of information about and access to alternative financing mechanisms;
- Limited interest in funding from the private sector due to unclear business models; and
- Limited understanding of business potential in waste management.

Technological gaps:

- Lack of capacity for technology assessment and selection;
- Lack of access to, and information on, technologies, particularly new and cutting-edge recycling technologies;
- Apprehension concerning the suitability and performance of technologies in developing country situations; and
- Insufficient information sharing on technology failures

8. Recommended strategies to address the issues include:

- Assist national and local governments in developing and enhancing policy and regulatory frameworks in the waste sector;
- Support inter-country and intra-country policy dialogues to bring about better coherence and stronger linkages;
- Improve the recognition of linkages between waste management and resource consumption;
- Develop quality standards to enhance the marketability of recyclable materials;
- Create market opportunities for products from recycled materials;
- Incorporate stakeholder consultation as an integral part of the waste management decision-making process, including women's associations;
- Share experiences on successful and unsuccessful policy interventions;
- Develop locally relevant guidelines and manuals to support institutional capacity building;
- Encourage and strengthen institutional capacity to promote greater research and uptake of waste-*cum*-resource management concepts, technologies, and services;
- Establish specific programmes of institutional capacity building;
- Explore and promote institutional, financial, and business models that foster a basis for sustainable waste management at the local level;
- Establish targeted awareness raising, training, and public information programmes on waste-*cum*-resource management;
- Enhance information dissemination, networking, and outreach by generating and collating reliable data and information on waste management;

- Promote partnerships among different levels and stakeholders, including women;
- Develop models for waste management in unique and specific local conditions such as SIDS, landlocked countries, mountainous regions, coastal regions, etc.;
- Encourage and support development of comprehensive action plans at the local, national, sub-regional, and regional levels;
- Clarify the conditions and steps required for decoupling resource use and economic growth and disseminate this information to macro-level policymakers;
- Establish global mechanisms for international agencies and institutions, multilateral financing institutions, national and local governments, academia/research/professional bodies, and civil society organizations to support information dissemination, capacity development, technology support, policy dialogues, and innovative financing mechanisms;
- Raise solid waste management as an issue of public interest at the national level;
- Establish closer linkages with solid waste management and other major challenges such as climate change mitigation and attainment of the MDGs;
- Establish demonstration/pilot projects and disseminate the results through the media especially to policymakers; work with the local media to convey messages to policymakers;
- Develop very comprehensive waste management policies covering all aspects of waste management, including reduction of waste at the source;
- Establish regional and/or sub-regional mechanisms required to develop waste management plans that motivate policymakers;
- Enhance public-private dialogues on concepts and approaches in order to improve resource efficiencies;
- Quantify and highlight the multiple beneficial impacts of waste management such as on climate change mitigation, tourism, and poverty alleviation;
- Support higher educational institutions and other expert institutions in assessing technologies that can be adopted under local conditions;
- In selecting technology, give strong consideration to local capacity in the areas of operation and maintenance;
- Support international independent institutions such as the International Solid Waste Association (ISWA) in disseminating information on commercially-proven waste management technologies, with emphasis on economic and technical considerations;
- Harmonize data collection and analysis to facilitate effective waste management;
- Establish graduate certificate courses in waste management to develop qualified waste management professionals;

- Consider capacity building at all four levels (capacity building for policymakers, formal education [schools/universities], capacity building for waste management professionals, and awareness raising for civil society) to foster awareness-raising among the general public;
- Provide seed money to support subsequently self-sustaining business models;
- Encourage multilateral financial institutions in setting up specific budget lines for waste management;
- Develop specifications for the condition of used electronic and other equipment for export;
- Empower and build the capacity of actors at the local level; and
- Use both top-down and bottom-up approaches in mainstreaming national waste management policies.

Finally, there is an overall need to bring about an attitudinal change in perceptions on waste so as to facilitate proliferation of upstream initiatives to make downstream initiatives much easier to accomplish.

III. Various Options for Expanding Waste Management Services for Local Communities

9. The three drivers for expanding waste management services—political, economic, and environmental—are not equally effective at the local level. There is a strong need for political commitment and support at the local level. There is a lack of translation of national policies into actions at the local level. This is further compounded by weak enforcement of regulations at the national and local levels. Expanding waste management services is often misunderstood as a deterrent to economic growth. However, the environmental, health, and social dimensions of waste management are being recognized and raised at local levels to an increasing degree.

10. The major barriers for expanding waste management services at the local level were identified as:
    - Lack of financial resources and the ability to access funding sources that are available;
    - Lack of information and access to technology precluded by an absence of reliable data;
    - Lack of capacity for developing and implementing integrated solid waste

management systems;

- Inability to deal with emerging and complex waste streams such as e-waste;
- Limited public awareness and stakeholder involvement, particularly women, in decision-making processes; and
- Divergence in and lack of coordination among agencies at the local level.

11. Recommendations to promote expansion of waste management services at the local level include:
    - Improve the skills and knowledge of local workers, both formal and informal, including women workers;
    - Tailor waste management strategies to local conditions to promote the shift from managing waste to considering waste as a resource and as drivers for partnership formation;
    - Develop viable business models to attract private sector investment, risk-sharing mechanisms having a strong social component addressing the needs of vulnerable sections of society such as public-private partnerships (PPPs), and micro-financing schemes particularly to support informal groups/NGOs, including women's associations;
    - Build and strengthen institutional capacity at the local level to share knowledge and to develop trained manpower;
    - Intensify awareness-raising at all levels and ensure engagement of different stakeholders in the decision-making process through active media campaigns, establishment of regular stakeholder consultation forums and empowerment of community-based organizations. Such programmes should not be limited to waste management only but should also be able to influence upstream interventions such as choosing right products, minimizing waste generation, increasing product reuse, etc.
    - Encourage source segregation at all levels (domestic, commercial, industrial, etc.) to facilitate recycling and recovery of valuable resources, and thus enhance economic opportunities from waste management;
    - Ensure greater transparency and accountability of public offices through, for example, simplification and streamlining of procedures for establishing waste management projects;
    - Foster interagency coordination among different local authorities for improved waste management;
    - Identify and promote the replication of success stories and recognition of "champions" at the local level, including women champions;

- Develop action plans to improve the working conditions of people engaged in informal waste management practices, especially waste pickers, to enhance their practices and improve their livelihood by bringing them into the formal sector with appropriate strategies to overcome the intrinsic issues;
- Development of specific strategies and programmes to manage emerging and specific waste streams such as e-waste, healthcare waste, construction and demolition waste, etc.;
- Develop effective mechanisms to ensure cost recovery and long-term financial viability of waste management systems and ensure that sufficient funding is allocated to waste processing, in addition to the money spent on collection and transportation;
- Facilitate the formation of sub-national regional collaboration and resource sharing among cities such as associations or leagues of municipalities as well as international inter-city networks;
- Secure the existence of a post-Kyoto Protocol carbon finance mechanism and contribute to making this financing model more easily available and applicable to waste management;
- Develop and disseminate appropriate decision support tools that can support waste management planning and technology choices;
- Share good practices on how to engage constructively and effectively with the informal sector;
- Ensure the existence of appropriate windows for financing, in particular for the informal sector;
- Establish effective coordination mechanisms for the work of international organizations in developing projects, in order to enhance the outcome and benefits generated;
- Strengthen the capacity of local governments to enter beneficial agreements with the private sector, monitor the performance of activities carried out under such contracts, and ensure that the contracted services are properly delivered; and
- Support the process to form a global partnership on waste management and help shape this facility towards the multiple and various needs of developing countries.

IV. Innovative Approaches and Strategies for Integrated Waste Management

12. Issues related to resource and waste management are intrinsically linked, and it is necessary to formulate an integrated approach. Integrated Waste Management (IWM)

provides such an opportunity. IWM is an inclusive strategy that maximizes opportunities for growth and employment and, at the same time, ensures that resources are conserved and human health is protected.

13. Policies and strategies for IWM should be addressed at the national level and should be considered as a part of the national programme for resource management. The Sound Material Cycle Society in Japan, Circular Economy in China, Thematic Strategy on Waste Prevention and Recycling in the European Union (EU), and Green Growth concept in the Republic of Korea are examples of such strategies. Developing countries may draw support and inspiration from such initiatives. However, for effective adoption of such strategies, there is a need for political support and harmonious coordination between the central government (including inter-ministerial coordination) and the local authorities.

14. Many types of regulatory, economic, and information-based policy instruments have been widely used for the promotion of IWM in developed countries. Economic instruments follow the Polluter Pays Principle and include user and tipping fees, penalties or disincentives, subsidies, pollution taxes, etc. There is a need to pilot the application of such economic instruments in developing countries. Based on their evaluation and local experience, the relevant policies and regulatory framework may be strengthened. These pilots may help further in structuring PPPs.

15. The scale, context, and priorities on resource and waste management vary from country to country. Availability and access to resources, resource demand, waste generation profile, institutional capacities, infrastructure, and degree of public involvement differ. Strategies for IWM are therefore not “one size fits all”. Even within a country, the challenges associated with resource and waste management may differ for the urban and rural contexts.

16. IWM strategies need to be highly region-specific and related solutions should be customized to suit the particular situations, priorities, institutional capabilities, and financial resources in the different parts of the world. For instance, immediate focus areas for developing regions were identified as improvement of collection coverage and efficiency, treatment and disposal infrastructure, and rehabilitation of existing open dump sites in a most cost-effective manner. Halting open dumping and improving current recycling practices should receive high priority. While these efforts are underway, policies and regulations to support IWM may be developed or suitably

strengthened. A campaign towards capacity building of stakeholders through training, pilots, and roundtables or workshops should be taken up by the local authorities in particular.

17. IWM-related programmes that offer a good scope for innovation to manufacturers (including Extended Producer Responsibility [EPR], Cleaner Production [CP], and Design for Environment [DfE]) to reduce amounts of waste, improve resource efficiency, and enhance cost savings should be encouraged. Waste exchanges should be promoted at industrial clusters, as such arrangements will divert waste from disposal to beneficial uses and, at the same time, save considerable cost by avoiding disposal.

18. National-level actions should include creation of national waste policies and regulations through waste management acts, rules, and laws; development of waste-related quality standards; introduction of market-based instruments such as taxes, fee, penalties, and subsidies; organization of the informal recycling sector; and training and capacity building for waste management. There is also a need to develop standards at national and local levels for products made using recycled waste.

19. International cooperation to regulate waste movement, maintaining an inventory of regional waste data to enable transparent waste exchange, and international policies and regulatory frameworks are critical to achieve IWM on a global scale.

20. More recently, revenues from Certified Emission Reduction (CER) units under the Clean Development Mechanism (CDM) have become attractive aspects of waste management. There are quite a few opportunities to reduce GHG emissions in the waste lifecycle. These opportunities can improve the economic viability of investments related to waste management. There is, however, an urgent need to build the capacity of local authorities in understanding CDM-related opportunities and train professionals in the developing world for the preparation of CDM projects. A programmatic approach to the CDM relevant to the waste sector at the national level is necessary.

21. Empowering (and not replacing) the informal waste recycling sector in terms of technology and finance will be useful. Leapfrogging could happen when coupled with the formal business sector for upscaling. Reaching and maintaining quality and environmental, health, and labour and safety standards will be key. This would lead to safe employment and a “green economy” as well as trigger innovations.

22. Strategies for IWM will work only when there is adequate institutional capacity. Extensive awareness-raising within communities, education, and capacity-building efforts are essential, especially in the developing world, supported by appropriate resources and "tool kits". This may require a long-term, well-designed capacity-building programme, grounded in multi-layered and cross-cutting stakeholder networks for knowledge exchange.

23. It is recognized that the "3R Initiative" is essential in further developing strategies for IWM. The 3R Initiative has been promoted in a series of the G8 dialogues since 2004 and the "Regional 3R Forum in Asia" was established in 2009 as a new platform for regional cooperation in Asia. This Regional Forum aims to facilitate high-level policy dialogues and promote practical 3R activities with the support of international institutions and private sector entities. Existing mechanisms such as the Regional 3R Forum in Asia should be expanded or replicated in Africa, Latin America, and other regions. In addition, new mechanisms such as the proposed UN Initiative on Global Platform for Waste Management should be established as a priority.

24. International and regional cooperation is essential for the promotion of IWM. These efforts could trigger sharing of information on national policies, regulations, and standards on the practicing of the 3Rs and be helpful in broadly disseminating best practices. Currently, there is a gap in this area and, hence, networking and information sharing mechanisms are needed at regional as well as global levels.

25. Recommendations in the area of policy integration include:
    - Increase the examples demonstrating the operationalization of national waste-related policies at the local level in order to improve the effectiveness of national-level policy instruments for action on the ground; and
    - Utilize a greater variety of policy instruments and cross-policy integration, such as eco-housing policies to require on-site management of organic waste through composting/bio-methanantion.

26. Recommendations in the area of economic instruments include:
    - Introduce volume-based fees to reduce waste;
    - Cross-subsidize charges depending on income levels; utilize charges that incorporate incentives for waste recycling;
    - Link and co-collect charges for waste management services with charges for other services such as water, sanitation, and electricity; and

- Build community trust to enhance acceptance of fees, etc. by the public.

27. Recommendations in the area of managing different waste streams include:
    - Decentralize waste management to small- to medium-sized towns, utilizing community engagement, composting/biomethanation technology, market creation, training, and incentives such as the CDM;
    - Manage special waste streams such as food waste from restaurants;
    - Consider integrated treatment of waste streams such as sewage sludge and food waste with municipal solid waste; and
    - Utilize dedicated timing and routes for collection of recyclable materials; establish common recycling centres.

V. Issues with the Informal Sector

28. Informal waste pickers and recyclers make significant contributions to sustainable resource management. They reduce municipalities' expenditures for waste collection and disposal, provide inexpensive second-hand products, and make secondary materials available for local industries. However, despite the benefits gained by the work carried out by the informal waste sector, they continue to receive little attention from governments. The informal sector also gives rise to serious social and environmental concerns. Workers are exposed to biological, chemical, and physical hazards; their activities often generate environmental pollution; their livelihoods are often insecure. Many governments discourage informal waste management activities, in some cases even going as far as banning these activities.

29. The challenge for policymakers is to try to alleviate or solve the multitude of problems related to the informal waste management sector while maintaining and further developing their beneficial activities. Some governments recognize the value of the informal waste management sector and have taken steps to improve living and working conditions in this sector. However, it is still rare for governments to engage with the informal sector in a constructive way.

30. Recommendations in the area of engagement with the informal sector include:
    - Involve and organize the informal sector to increase recycling, possibly including the provision of assistance to engage in waste-product conversion as an entrepreneurial pursuit;

- Recognize and address barriers in formalizing the informal sector;
- Examine protecting and using the informal sector while operationalizing PPPs; and
- Recognize and address the informal sector's interest in pursuing legal status and gaining professional skills.

VI. Building Partnerships* to Enhance Technical and Financial Cooperation towards Sustainable Waste Management at Local Level

31. Considering the limited financial and technical capabilities of municipalities in developing countries, international cooperation is necessary for capacity building, technology transfer, diffusing best practices and experiences among cities, and forging effective partnerships for the expansion of waste management services at local level.

32. A new global partnership on waste management could help achieve the MDGs' goal related to sustainable development. It would include international organizations, professional associations at the national level, civil society, including women's associations and youth, the international donor community, municipal associations, and the private sector for scaling up the: (a) implementation of an enabling policy framework for efficient and required waste management services; (b) replication of feasible and affordable technologies, including 3R measures; (c) pro-poor community-based waste management in support of income generation and poverty eradication, (d) generation of meaningful data on various aspects of waste composition and generation in support of the development of a meaningful baseline information; and (e) PPP, in order to make waste management services sustainable and incremental.

33. The Partnership could be established as an effective platform to address a range of issues and opportunities in sustainable waste management at the local level. It would complement ongoing international initiatives and processes such as the Regional 3R Forum in Asia, the 3R Knowledge Hub, UNEP's Resource Panel and Global Platform on Waste Management, the Marrakech Process, and other relevant initiatives. The participants supported the establishment of the proposed new Partnership and interest was expressed in joining it upon its establishment.

34. The participants expressed their deep appreciation to the MoE-Japan for organizing and

* The Partnership on Sustainable, Low Carbon Transport (SLoCaT), which focuses on both reducing greenhouse gases and improving the overall sustainability of transport in developing countries, could serve as an example.

hosting this important meeting. They also expressed their appreciation to UN/DESA and UNCRD for co-organizing this consultative meeting, as well as other institutions and agencies for their valuable contributions to it.

35. The Chair expressed the Government of Japan's intention to continue its support for similar activities, including the forthcoming follow-up meeting in early 2011, as an input to CSD-19.

36. The participants affirmed their wish that the present Chair's Summary along with all necessary documentations from this meeting be presented by the MoE-Japan, on behalf of all the participants, to the Commission on Sustainable Development at its eighteenth session in May 2010.