

# **Working Group 3:**

## Municipal Organic Waste Management

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# Background

- In some cities as much as 79% of municipal waste is organic. Thus, organic waste management needs priority attention.
- Organic waste presents unique challenges during waste collection, particularly in hot and humid climates, where timely collection and disposal are critical.
- Great biomass energy potential exists in the Asia region compared to Europe and North America.

## Lessons learned (1)

- One country has recovered as much as 98% of organic waste from households, with much of it going towards livestock feed.
- Composting efforts may be easier to start if organic waste from food industry entities is used rather than household organic waste, because the quality of the organic inputs can be more closely controlled.
- Options exist for making composting appropriate for various socio-economic conditions and climatic considerations
- Creative financing solutions (such as credits under the CDM) are already in use to (1) recover costs and (2) reduce the burden on public budgets.

## Lessons learned (2)

- Cases already exist in which organic waste is being composted on a small scale in urban settings.  
Ex: Low-cost barrel-type composting in slums
  - Provides training for slum dwellers, resulting in income generation through sale of compost.
- Methane recovery can also be used to generate energy, reduce greenhouse gas emissions, and generate income.
- In some countries, the privatization of waste collection has brought both cost savings and greater operational efficiency. Some countries have been successful in ensuring quality by conducting public tenders for waste collection contracts, with these contracts strictly stipulating the collection services to be provided.

# Ongoing Issues: General

- Solutions must consider the circular loop as a whole.
  - e.g. 1, While downstream efforts typically comprise the bulk of organic waste-related efforts, upstream efforts should not be ignored. For example, increasing the percentage of compostable materials in a product will assist in later efforts downstream.
  - e.g. 2, Organic waste will be under-utilized as resource if sufficient users do not exist later on in the loop.
- Identification and adoption of the best available technologies remain key issues. Support from NGOs and from the private sector will assist greatly.
- Economies of scale may not exist in many countries, meaning:
  - (1) subsidies from the government are necessary, as the private sector lacks incentives to participate;
  - (2) cross-border efforts may be necessary for economies of scale to succeed.

## Ongoing Issues: Specific

- The market for compost may be limited, with compost having a value close to zero or even a negative value. As a result it is critical to:
  - ...develop markets for compost.
  - ...develop standards within each country for compost quality.
  - ...reduce costs in producing compost to make composting economically viable even if the potential sale price is low.
- Public awareness must be enhanced to overcome misconceptions about food safety, such as public resistance to purchasing food cooked in biogas-fueled ovens.
- Organic waste also presents complex challenges during its reuse, particularly with regard to food safety when used as livestock feed or compost.