

SOLID WASTE MANAGEMENT

FACTSHEET 1/2016

The COOPI's fact sheet on solid waste management is part of a series of documents produced by the Research and Programs Innovation Office on specific issues of major interest to the organization.



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CORE MESSAGES

FACTS AND FIGURES:

2 – 3 billion people live without access to basic waste services.

Potential impact of improved waste management in reducing greenhouse gas emissions across the economy is at 15% - 20%.

1.3 billion tonnes of food waste are generated every year (9% total GHG emissions worldwide)

Data: Global Waste Management Outlook (2015)

- « *Solid waste management* is the process of handling and disposal of organic and hazardous solid waste » (Sphere Handbook). Solid waste can greatly vary in type and quantity, for example: i) municipal solid waste (MSW); ii) waste electrical and electronic equipment (WEEE); iii) healthcare/medical waste (HCW or MW); iv) disaster waste (DW); etc. Waste of these categories can be partially/totally hazardous.
- Hazardous waste is dangerous or potentially harmful for human health and the environment, thus particular procedures in handling, treatment and disposal are required.
- Waste management affects public health, and in particular “environmental health”.
- Waste management has important social (protection), economic (several people are involved in informal waste management activities), political (city cleanness is relevant for consensus), health (disease outbreaks) and environmental (water and soil contamination, greenhouse gas emissions) implications.

SOLID WASTE MANAGEMENT FOR COOPI

COOPI considers waste management as part of the **environmental sustainability**, as defined in the Environment and Disaster Risk Reduction Policy. The same policy recalls that waste management is a component of conservation and proper **management of natural resources** promoted by **Agenda 21**, the programme for the 21st century proposed in the 1992 UN Conference on Environment and Development in Rio de Janeiro.

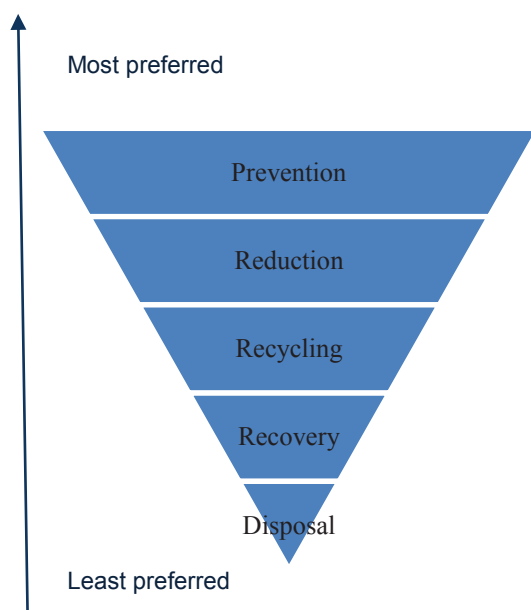
COOPI has built some experience in waste management, with specific projects in Serbia, Somalia, Morocco and Palestine. Other actions – addressing livelihoods, poverty alleviation and food security – had important waste management components. For examples, waste collection was included in “cash for work” schemes, involving vulnerable people; remediation or simple cleaning of dumpsites is a common activity for WASH projects, especially when implemented in urban or peri-urban areas.

In all COOPI programs, great attention is dedicated to establish a positive and reliable **collaboration with public authorities** in charge of waste services, especially local administrations and public utilities. This collaboration can have different forms (e.g. formal partnership, simple support to the service, complementary activities), but always an **analysis of the situation** (including stakeholders), especially challenges and constraints, is shared in order to identify appropriate solutions. COOPI intervention aims not only at the enhancement of the existing system, but also at the **involvement of vulnerable people**, improving their living conditions, starting from their livelihoods. Finally, actions are always part of a **medium-long term strategy**.

KEY CONCEPTS

COOPI considers the following key concepts in all the waste management actions:

- Both affected population and relevant authorities are involved in planning and implementation of all the actions, including regular sensitization campaigns.
- All the solid waste management steps are analysed before any intervention. They are: i) generation, ii) storage (or segregation); iii) collection (plus transfer and transport); treatment & disposal (including composting, recycling and recovery).



- Waste management is an important opportunity to work on protection (e.g. outcasts), income generating activities (e.g. collection schemes, recycling), support to agriculture (e.g. composting), access to energy (e.g. anaerobic digestion), health (e.g. community sanitation programs, healthcare waste), environment (e.g. dumpsites remediation).
- Activities are defined considering local priorities and the EU waste hierarchy (picture aside).
- Effective and sustainable interventions require years to be implemented. Emergency actions are quite easy and quick to plan and implement.
- In humanitarian contexts, COOPI adopts key actions, key indicators and guidance notes defined by The Sphere Handbook ([link](#)).

Waste hierarchy, adapted from UNEP 2013, *Guidelines for National Waste Management Strategies*

COOPI'S BEST PRACTICES

ASSISTING VULNERABLE HOUSEHOLDS AFFECTED BY LIMITED LIVELIHOOD OPPORTUNITIES IN WEST BANK AND GAZA STRIP (Palestine)

Since 2002 **COOPI was active in both the West Bank and the Gaza Strip** in supporting the most vulnerable Palestinian families, starting from giving access to temporary jobs and better education opportunities. In Gaza, in particular, projects focused mainly on sanitation and environment preservation, enhancing local capacity in waste management.

In 2011-2012 a specific project supported 995 households (6.174 direct beneficiaries) – 522 households in Gaza – involved in “**cash for work**” initiatives. 7 municipalities of Gaza benefitted from 442 people paid to support **municipal solid waste collection in urban areas**. Different people were involved, in three lots (June-September, September-December, December-February), each one with 60 days of remunerated work. **Workers were contracted, trained, insured and provided with appropriate tools and protective equipment.**



Palestine
Ph. Alessandro Gandolfi /
Parallelozero

In coordination with and the supervision of local municipalities, workers collected waste using **donkey carts**. Waste was transported to transfer stations, where dedicated trucks provided haulage to the disposal site. In such a way, municipalities of the Gaza Strip could benefit from a **cleaner and more hygienic environment**, with a reduced fuel consumption.

IDENTIFICATION AND SUPPORT TO MANAGEMENT PRACTICES OF HAZARDOUS MEDICAL WASTE IN THE HOSPITAL OF KHAN YOUNIS, GAZA STRIP (Palestine)

Healthcare waste management in the Gaza Strip had been neglected for many years, with little attention paid by healthcare facilities and public authorities. Neither public nor private institutions had specific technical knowledge, data were not reliable, and mismanagement in handling and disposal of hazardous component was very common.

In 2011-2012 the healthcare waste management system was assessed, analyzing all the stakeholders, and visiting healthcare facilities and treatment and disposal sites (e.g. incinerators, hazardous waste landfill). A program of intervention was proposed, with a set of actions with different priority levels.



Palestine – the Gaza Strip
Ph. Marco Caniato

A project targeted the Hospital in Khan Younis because relevant, interested in the topic, limitedly affected by political influence, and hosting the only regularly working incinerator in the Gaza Strip. Different activities were implemented: capacity building (training of managers and administrators, in-presence training of nurses, doctors and supporting staff), development of written procedures, procurement of tools for waste segregation according to waste categories, recommendations to improve incinerator performances, data collection and analysis, sharing of results with other healthcare facilities and advocacy.

The project was ambitious and faced several challenges. Nevertheless, it was very innovative in the area and raised great interest and appreciation among different stakeholders.