# **MAPUTO CITY MUNICIPALITY**

# Sharing the Experience on Hulene Dumpsite's Tragedy

Morocco, 27 June, 2018

#### BACKGROUND

#### Maputo - Capital City of Mozambique

- Location: Indian Ocean, South region of Mozambique
- Surface Area: 316 km<sup>2</sup>
- **Population:** 1.288.771 inhabitants
- Waste Generation: 1200 tones per day

**Urban:** Deposit/collection is done in  $1.1m^3$  containers placed along several avenues in the city. Transportation is done using compaction system vehicles.

Waste Deposit, Collection and Transportation

**Sub-urban:** Deposit/collection is done in 12m<sup>3</sup> containers placed along the streets in the neighborhoods. Each District has a micro-company that collects waste from house to house to the containers, and thereafter transported to the final disposal site by the trucks of type hooklife (Roll on-Roll off).

#### FINAL DISPOSAL, LIMITATIONS AND CONSEQUENCES

- Final disposal of waste in Maputo city is done at Hulene dumpsite which has already exceeded its capacity due to increment of waste generation in the city as result of population growths.
- Hulene dumpsite receives approximately 1200 tons/day of solid waste, attracting about hundred waste pickers who informally seek for recyclable waste.
- There are illegal houses built on the western side of Hulene dumpsite
- Maputo city municipality mobilized resources for the construction of a new sanitary landfill, but the works has not yet started due to constraints on resettlement of illegal residents in the proposed area.
- As result of the <u>(1) saturation of the capacity</u> of Hulene dumpsite, combined with the <u>(2) illegal human settlement</u> in the surrounding area of the dumpsite, and yet, the <u>(3) delay on the construction of the new landfill</u>, in February 19, 2018, a huge amount of waste collapsed at the dumpsite, causing the death of 16 people and injuring other 6.
- The collapse was triggered by rain water which made a waste cliff to slide in a low land area where houses have been illegally constructed, despite repeated warnings by the relevant authorities on the danger that could result from the establishment of those habitations.

#### **RESPONSE ACTIONS AFTER THE COLLAPSE OF THE DUMPSITE**

- Maputo Municipality immediately requested JICA to dispatch a survey team to understand the incident and provide some recommendation on how to avoid similar secondary disasters.
- Maputo Municipality decided to immediately resettle all affected households, including those considered risky groups.
- Maputo Municipality initiated a process of identification of a site to establish a temporary dumpsite as an initial phase for the closure of Hulene dumpsite.
- Maputo Municipality speeded-up the process of resettlement of the illegal residents living in the area where the new landfill is supposed to be constructed, to ensure that the project is materialized as soon as possible.
- Maputo Municipality intensified the civic education campaign on the risks of illegal construction in the dumpsite surrounding area.

#### LESSONS LEARNED FROM THE COLLAPSE OF THE DUMPSITE

- The management of dumpsites and landfills must not be seen as a second priority when compare to other sectors/issues such as health, education, etc... - dumpsite infrastructures are equally important and resources allocation (human, financial and material) and investment should be done using the same criteria.
- There is need to improve the land use planning system to avoid people living in the proximity to infrastructures such as dumpsites, to put their lives in danger.
- The tolerance/negligence of the illegal human settlement in risk area such as dumpsites is a risk itself, therefore, no pretext should be accepted to ignore the boundaries that are legally defined in regard to the proximity of residences to a dumpsite.
- From JICA experts we learned that the structure of a dumpsite infrastructure should comply with specific safety measures such as stable slope (Maximum slope angle 30 degrees) and others.
- There is need to organize the waste pickers activity to avoid future disasters resulting from their exposure to the risks of the activity.

#### FUTURE ACTION REGARDING MAPUTO WASTE MANAGEMENT

- Follow the recommendation made by the Japanese experts in order to avoid secondary disasters similar to that at Hulene dumpsite.
- Accelerate the construction of the landfill at Matlemele.
- Share the experience, lessons learned, including the recommendation by JICA's experts about Hulene to the rest of the country.
- Continuously conduct civic education to all citizens about the risks of the exposure to the dangers for living in a dumpsite surrounding areas.
- Sensitize the decision makers on the importance of the relevance of an adequate management of dumpsites and landfills, and its equivalent importance to other issues or sectors.
- Take advantage of JICA's new technical cooperation project (to be initiated soon) as a mechanism to improve Maputo Municipality's capacity in regard to waste management.
- Discuss and coordinate with ANGER (National Association for Waste Management) necessary actions aiming to improve the solid waste management current situation in the city and country.













# **Thank You Very Much for Your Attention**

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