

THE STATUS OF SOLID WASTE MANAGEMENT IN IN TANZANIA

A PAPER PRESENTED DURING THE COASTAL EAST AFRICA SOLID WASTE WORKSHOP HELD IN FLIC EN FLAC, MAURITIUS FROM 10 – 13 SEPTEMBER 2012

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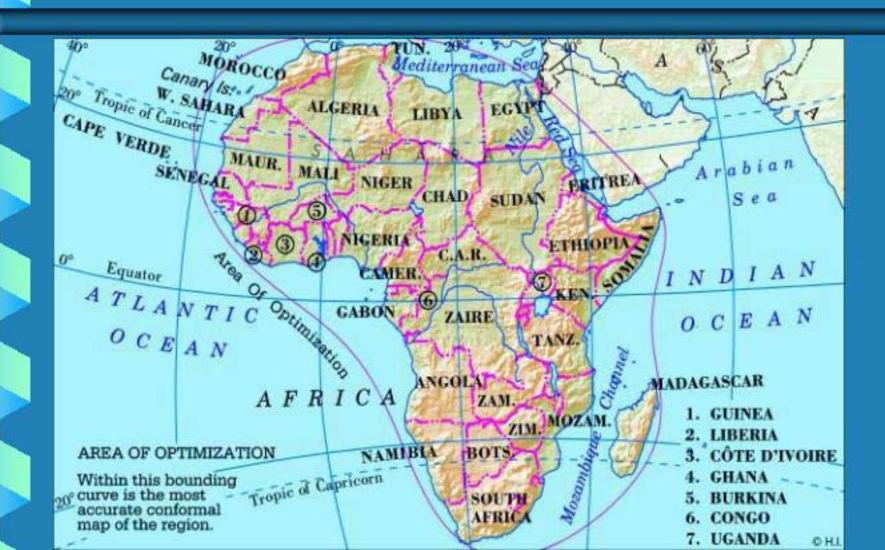


PRESENTATION OUTLINE

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- The perception of SWM in Tanzania
- Solid waste storage in urban local authorities
- Solid waste generation and storage in urban local authorities
- Solid waste collection and transportation
- Solid Waste Disposal
- O Initiatives to Improve SWM in Tanzania



TANZANIA IN AFRICA



The Map of Tanzania



The Country Profile – Tanzania

- Politics: Tanzania is a United Republic Tanganyika and Zanzibar to form Tanzania
- **O Area:** 945,000 sq km (365,000 sq. miles)
- **O Population:** 42,500,000 (IMF, 2008)
- Capital: Dodoma is the official capital and seat of Tanzania's Union Parliament. Dar Es Salaam remains home to government ministries and major institutions, including diplomatic missions.
- People: Some 120 ethnic groups on the mainland, none exceeding 10% of the population. There are Asian and expatriate minorities.
- O Languages: The official languages are Kiswahili and English; of these, Kiswahili is by for the more widely spoken.
- **Religions:** Christianity (35%), Islam (35%) and traditional beliefs (around 30%). (Zanzibar is roughly 98% Muslim).

Economy of Tanzania

- OGDP: US\$ 23.5bn (2010, IMF)
 OGDP per capita: US\$ 548 (2010, IMF)
 OGDP Growth: 7% (2012, IMF)
 OInflation: 19.8% (2012, IMF)
- **OMajor economic sectors:** agriculture, financial and business services, trade and tourism, manufacturing, mining, oil and gas exploration.
- OMajor trading partners: UK, South Africa, India, Japan, China, Kenya, and the UAE.

- Solid waste management (collection, transportation and disposal) is one of the key duties of all urban authorities in Tanzania.
- This is a legal obligation in accordance with the Local Government Act 1982 section 55 (g) and the Environmental Management Act of 2004.
- Efficient municipal solid waste management is an essential public service, which should benefit all urban residents.
- Since the Colonial era, Solid Waste Management in Urban areas has been regarded as a public goods or service whereby the Government has the duty to provide the Solid Waste Management Services, and the public has to pay for that service.

• However, due to rapid urban growth, coupled with scarcity of funds many urban authorities are facing, and the reluctance of the urban dwellers to pay for the services, represents a phenomenal challenge.

• While cities and towns are generating an everincreasing volume of waste, the effectiveness of their solid waste collection, transportation and disposal systems are declining.

• Urban local authorities problems are often considered as problems that need long-term solutions, which Tanzanian cities and towns cannot explicitly afford.

• The reasons for not managing this domain is due to the weak financial structure and institutional incapacity of urban local authorities to handle these problems.

• As a result, the Government of Tanzania, through the Local Government Authorities is now looking into a different approach whereby a joint cooperation and investment between public/private and/or formal/informal sectors is needed.

• The main challenge however is to identify and verify the role that the formal private and/or community and informal private sectors can effectively play in delivering services for waste management, while the Government or its Local Government Authorities maintain their role and obligation of delivering Quality Solid Waste Management Services by which their effectiveness and efficiency is mainly gauged.

Solid waste generation and storage in urban local authorities - 1

- One of the challenges that SWM in Tanzania has been facing in many urban authorities has been the storage of waste at the source of generation, especially at the household level.
- The types of containers or facilities used for the storage of solid waste depend on nature of the premises; be they individual household, office blocks, commercial or industrial.
- The existing regulations have given specifications for the types of refuse storage containers/dust bins, but these have been difficult to adhere to due to the unavailability, their costs and security, as many of them are stolen and sold as scrap metals.

• As a result, many households have been using out of standard containers for the storage of their refuse, ranging from salvaged drums/tins, paper bags, plastic paper bags, jute bags, sacks, or even just being thrown on the bear ground, thus making it difficult for/its collection, and hence its accumulation in their vicinity.

Solid waste collection and transportation - 2

- With regard to solid waste collection and transportation in urban local authorities, less than half of the solid waste generated is collected.
- Commonly used trucks for collection and transportation include rear and side loaders, which are open and closed body types; while in some urban authorities they employ compactors, tractors and trailers and hand-driven pushcarts.

Solid waste collection and transportation -3

• The commonest problems facing collection and transportation of waste in urban areas is the high operational costs.

• High operational costs can be attributed to poor choice of vehicles, the distance from the collection point to the disposal site.

• Other factors leading to poor SW collection and transportation are inaccessibility to some of the localities, poor condition of Solid Waste Collection Vehicles, improper planning of collection routes and frequencies, lack of supervision, unfaithful and poorly motivated workers, just to mention a few.

Solid waste disposal - 1

- Urban Local Authorities of Tanzania are facing problems as far as solid waste disposal is concerned.
- Many urban authorities still operate either open dumps or controlled dumps for the final disposal of solid waste.
- Open dumps involve indiscriminate disposal of wastes and limited measures to control operations including those related to the environmental effects.
- On the other hand, the few cities that have a form of controlled dumps operate with some form of inspection and recording of incoming waste, practice compaction of waste and application of soil cover materials.

Solid waste disposal - 2

In reality, most of the dumps have in place limited measures to mitigate other environmental impacts.

• Operated open dumpsite and controlled dumps still practice unmanaged contaminant release and do not take into account of environmental cautionary measures such as **leachate** and **landfill** gas management.

• As cities and towns grow and generate more waste, the environmental impact from open dumps and controlled dumps become increasingly intolerable.

Initiatives to Improve Existing Disposal Sites

- The conversion of open or operated dumps to engineered landfills and sanitary landfills is an essential step to avoid future costs from present mismanagement. However, this is very costly and requires a sophisticated engineering design and construction which many urban authorities can not afford. This requires a Central Government Intervention.
- At the moment, the Government has prepared a Master Plan for three Cities namely Dar es Salaam, Arusha and Mwanza with an aim of constructing well functioning Sanitary Landfills.
- We have a regulation in place for the control of Solid waste and Hazardous waste.
- The first step and challenge in upgrading open dumps to sanitary landfills involves reducing nuisances such as odors, dust, vermin and birds.
- This can be achieved by engaging a waste compaction mechanism and the application of soil cover materials to reduce or limit vermin, odors and flies.





