



WHY DO WE STILL HAVE A WASTE AND HEALTH PROBLEM?

Dr. Laila Iskandar

Arab Forum for Environment and
Development

HEALTH AND THE ENVIRONMENT IN ARAB COUNTRIES

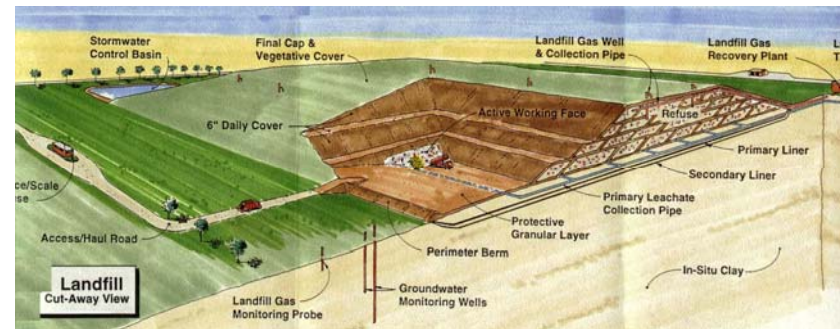
13th Annual Conference of the Arab Forum for
Environment and Development (AFED)

November 10-11, 2020

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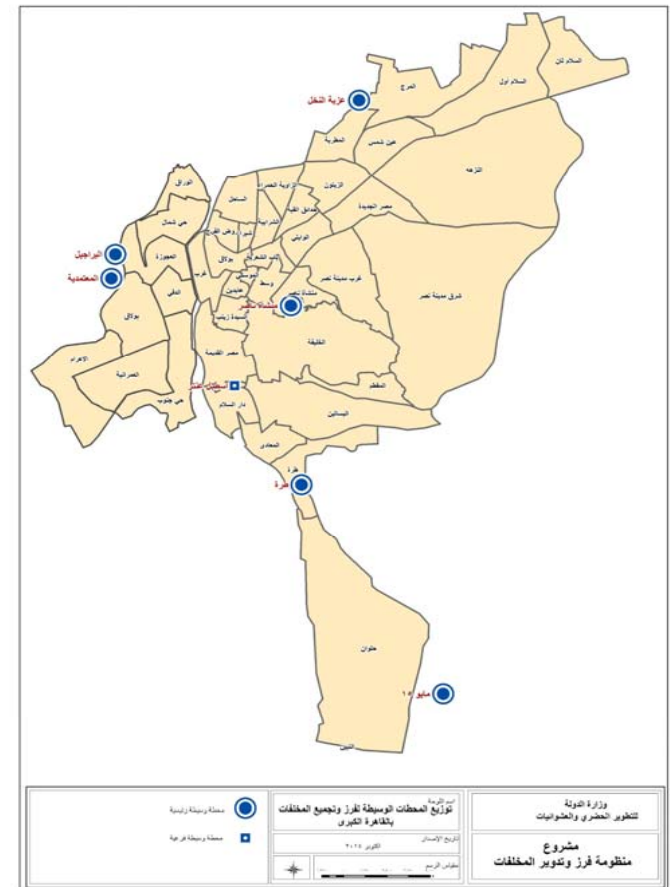
- Arab countries still suffer from poor management of wastes – municipal, construction and demolition, medical, electronic, industrial, etc.
- Some perceive the sector as a revenue generating one instead of a **public health sector** which merits sizable national budgets.
- This influences the entire legislative, policy and administrative context in which the sector operates.
- Others import expensive technologies and decouple it from climate change and the life cycle of materials or the circular economy.



- This is the costliest part of the system – 70% of the whole cost. Trucks, fuel, licenses, tires, maintenance, workers, etc. Cities are currently not making this financing available.
- Health aspects in most Middle Eastern cities require waste to be collected from source – homes, apartments, stores, hotels, businesses, etc. – especially in cities where education and environmental awareness is low.
- This requires a huge workforce. In cities in the north this workforce is paid minimum wages and more, is covered with health and social insurance and pensions.
- In many middle and income countries collection crews are **NOT** paid fair wages – if any – and are not covered with any protection.
- The occupation is stigmatized and only the poorest of the poor and the destitute accept to work in it. Formally employed workers exit from it.
- The poor enter this occupation because it is their last resort to making an honest living from recycling.
- **Result:** urban dwellers are exposed to health hazards from poor collection services.



- Cities need to locate mid-point places where small quantities of waste are consolidated into larger transport vehicles and/or sorted into various components: e.g. organic and non-organic, etc.
- Middle income countries do not plan these facilities adequately.
- Consequently, collectors allocate transfer stations informally turning their neighborhoods into unsanitary places . They sort materials, store, trade and establish small and medium enterprises – and undertake industrial recycling processes in their residential areas.
- These two issues became intertwined: neighborhoods where recyclers live are transfer stations where waste is recovered.
- Cities trying to ‘reform’ and ‘modernize’ this situation seek to replace these transfer neighborhoods with remotely located, formally designed transfer stations.
- They overlook the loss of income which results from the loss of materials to the recoverers and the cost of transport to these new locations.
- **Result:** unsanitary transfer stations/recycling neighborhoods exist in urban centers.



- This involves numerous choices: composting or producing biogas from the organic fraction, recovery and recycling of non-organic fraction, converting residues to refuse derived fuel (RDF), incineration for energy (numerous technologies), etc.
- This is **costly**. It requires financing. Middle income countries are currently not providing this.
- This is **complex**. Middle income countries do not have enough experienced people to manage these facilities and processes.
- This requires guaranteed **efficiency of collection**. This does not currently exist in middle income countries.



- Landfills often turn into controlled or uncontrolled dumpsites. This occurs along a continuum: from **all** the waste to only the remaining **fraction** after recovery and recycling.
- This requires **engineering and technical preparation** of landfills as well as efficient, safe capture of methane gas, leachate collection and monitoring of landfill linings.
- It is **costly**. Landfills require financing. Currently middle-income countries are not providing this.
- It is **complex**. Middle income countries do not have enough experienced people to manage this.
- Designated landfills end up being dumpsites.



- A National Strategy needs to lead the handling of waste into a clear direction and a **unified administrative model** across the waste management chain.
- Tendering, bidding and contracting processes are fraught with **legal, administrative and organizational challenges in government.**
- Financial resources required to operate the system are **high and unavailable.**
- **Investment costs** i.e. infrastructure and equipment must be supported by government/donors/private companies.
- Operational costs need to be accurately **calculated and allocated** to the system
- Facilities managing final disposal costs **ALL** need a gate fee as their uninterrupted operation is linked to the cleanliness of the city.

- Effective waste management **requires adequate planning and oversight** from both local and national governments under a unified coherent framework.
- Currently, **roles and responsibilities are unclear** and there is a lack of one full framework managing the system. Lack of coordination between all stakeholders/actors.
- Need to improve siting of facilities, costing of service and provision of financing required to protect health of urban and rural populations
- **Weak law enforcement results in open** burning and uncontrolled dumping.
- **Lack of integration between formal and informal sectors** leads to fragmentation of service, lack of recognition of the informal sector and poor service provision.
- Limited monitoring of system results in inferior service.

Plastic Packaging Companies partner with the Informal Sector to Prevent Plastics from Burning or Leaking into Waterways.

- Starting with Nestle, Cairo has been implementing a year long reverse credit scheme with the traditional collectors, processors and traders of PET who recover more than 50% of Cairo's municipal waste.
- E-wallets are used to compensate the recyclers. The digital disruption facilitates reaching more than 1000 recyclers and monitors, validates the thousands of tons of plastic recovered.
- PepsiCo, Unilever and Al Ahram beverages to join in 2021.
- The Ministry of the Environment is on board. The scheme embeds Extended Producer Responsibility aspects that spring from the context of the city of Cairo and other emerging markets.

ENVIRONMENTAL IMPACT

Increasing the recovery and recycling of PET in Egypt, resulting in the decrease of plastic waste creating a cleaner environment

FLOW OF RECOVERED AND RECYCLED MATERIALS



DISBURSEMENT OF REVERSE CREDITS TO EACH VALUE CHAIN ACTOR

SOCIAL IMPACT

The financial reward mechanism helps beneficiaries, especially women collectors, enhance their livelihoods, their spending on education and healthcare.



Thank You

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