SAHAB, Jordan

City Information

Population: 178,700 capita (2018), including 40,000 Syrian Refuges hosted in the local communities in Sahab city

Area (km²): 12.6 km²

Climate: Semi-arid environment

Main Economic Activities: Large Industrial, vocational and commercial clusters

City website: www.sahapjo.com

Country Information

Population: 10,171,480

Area (km²): 89,342.0 Km²

Economy and GNI/Capita: between $3,896 and $12,055. World Bank classification: Upper-middle income

Main Economic Activities: Jordan's economy is relatively well diversified. Trade and finance combined account for nearly one-third of GDP; transportation and communication, public utilities, and construction account for one-fifth, and mining and manufacturing constitute nearly another fifth. (https://en.wikipedia.org/wiki/Jordan#Economy)

Government Agencies responsible for guidance on waste legislation:
Ministry of Municipal Affairs, Ministry of Environment
MSW Sector Overview: City Level

Classification of MSW
The stream of MSW is mostly generated from households, commercial, and industrial entities sources placed in Sahab City

MSW Generation
The total amount of waste generated in 2017 was 40,000 tonnes/year and 368.65 per capita in Kg/year.

Collection Coverage and Type
85% of the waste generated is formally collected and disposed. No stations or infrastructure have been established for recycling and material recovery anymore.

Waste Composition
The waste composition at the Sahab Municipality can be seen in the table below.

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organic fractions</td>
<td>50</td>
</tr>
<tr>
<td>Food waste, vegetables &amp; fruits, yard trimmings and plant residues</td>
<td></td>
</tr>
<tr>
<td>Non-organic fractions</td>
<td>34.5</td>
</tr>
<tr>
<td>Paper and cardboards: 15%</td>
<td></td>
</tr>
<tr>
<td>Plastics: 16%</td>
<td></td>
</tr>
<tr>
<td>Metals: 1.5%</td>
<td></td>
</tr>
<tr>
<td>Glass: 2%</td>
<td></td>
</tr>
<tr>
<td>Others</td>
<td>15.5</td>
</tr>
</tbody>
</table>

Waste Management Practice
Regular waste collection and disposal practices. No further practices implemented along the chain of MSW at Sahab city.

Formal Waste Sector
The current waste practices are mostly provided by the public sector and very limited PPP contributions were reported until the moment.

Informal Waste Sector
The informal sector is leading the recycling industry in Jordan. Both individuals and private companies pick up recyclable materials from the public bins dispatched over the streets. The private companies purchase recyclables from individual scavengers (mainly plastic, paper, cardboards, metals, etc.) and export it outside for big formal recyclers.

Financing of MSW
The municipality usually collects waste collection taxes every year from household and commercial clusters. In addition, the municipality might get some non-permanent financial supports from the public authorities (Ministry of Municipal Affairs) as needed to continue the delivery of services.
Waste Management Challenges

- Improving the waste collection efficiency (enhance M&E) with digital route mapping approaches and vehicle tracking systems. Calculation of the gas emission and carbon footprint of the waste collection fleet would be prioritized.
- Establish database and data archiving system for the solid waste sector at the municipality
- Establish a recycling center to be the final destination of the separate collection systems might be approached by the municipality in selected commercial and institutional clusters at the city level to collect plastics, papers, cardboard, and metals of a marketing value. This would help the municipality in reducing the waste amounts delivered to the landfill site and creating jobs in fields of waste management. The recycling center could be used as model case for public awareness and behavior change campaigns which is very important to raise up the willingness to participate.

Technical Assistance

- On-job training and capacity building programs on solid waste management and recycling approaches.
- Monitoring and evaluation of the solid waste projects and recycling facilities
  (a) Primer on monitoring and evaluation
  (b) Record keeping and documentation
  (c) Monitoring tools
- Occupational and public safety training including:
  (a) First aid,
  (b) handling of hazardous/dangerous items,
  (c) Health risks and precautions.
- Technical assistance in developing operational plans and standardized SWM policies and procedures for solid waste management
- Elaboration of Key Performance Indicators (KPI) and performance assessment criteria
- Technical reporting and data presentation
MSW Sector Overview: Country Level

General description and overview of common practice
According to the National Municipal Solid Management Strategy (2015), the national production of municipal solid waste stands at about 2.6 million tons annually (an increase of 23 percent compared to 2010) of which 7% is recycled and 93% is landfilled.

About 50% of MSW is food waste and 35% packaging waste, which is potentially available for recycling. The rate of MSW generation ranges from 0.34 to 1.07 kg / capita / day; with an average value of 0.91 Jordan ranks similarly to other developing countries but significantly less than more developed countries. MSW collection coverage is estimated at 90% for urban areas and 70% for rural areas. Most of MSW daily deliveries are diverted to the closest unsanitary landfills and/or dumpsites.

Apart from current solid waste production, Jordan’s prospect for continued population growth implies a doubling of the current population (estimated at about 9.5 million individuals, including about 1.3 million refugees hosted in communities and camps) by the year 2035, making innovative solutions in the municipal solid waste sector imperative and overdue.

The SW recycling industry in Jordan remains untapped and most of the different existing and running SW recycling and waste picking activities are informal and limited to the private corporates, CBOs and NGOs as well as the individuals. As an estimate, 5 – 10% of Jordan’s SW is being recycled at the moment, as there is no large-scale and effective government-run MSW sorting practices or recycling system yet in place. However, the public awareness and willingness of the local community in Jordan for waste recycling and separation practices are also not reaching the required level.

Waste Generation (per capita/year)
The rate of MSW generation ranges from 0.34 to 1.07 kg / capita / day; with an average value of 0.91 Jordan ranks similarly to other developing countries but significantly less than more developed countries.

Collection Coverage
MSW collection coverage is estimated at 90% for urban areas and 70% for rural areas.

Number of Landfills/MSW Disposal rate (tonnes/year)
19 official controlled dumpsite and one sanitary landfill site in Jordan. 2.6 million tons per year of waste disposed.

Recycling Rate
An estimate, 5 – 10% of Jordan’s SW is being recycled at the moment, as there is no large-scale and effective government-run MSW sorting practices or recycling system yet in place.

Waste management of Organic fraction (composting, anaerobic digestion)
Not available yet

Energy Recovery Rate
Not available yet
City Level

Aimed at improving Waste Management in General
No dedicated strategies or policies and national objectives are adopted for the municipal solid waste management.

Aimed at addressing Climate change and reducing SLCPs through waste related activities
N/A

Country Level

Aimed at improving Waste Management in General
At National level, the Government of Jordan has adopted strategies, which relate to the management of municipal solid waste. These strategies include the following:

- The Jordan 2025 – A National Vision and Strategy
- The recent National MSW Management Strategy (NMSWMS);
- The National Environmental Strategy;
- The National Energy Strategy; and
- The National Strategy on Public-Private Partnerships (PPP).

Aimed at addressing Climate change and reducing SLCPs through waste related activities
**Legislation**

**City Level**

Legislation governing MSW management
No specific instructions issued by the municipality to regulate the MSW management and the municipality is applying the provisions of the Municipal law and its regulations.

Guidance for MSW management (after legislation, before inspection activities)
Not available yet.

Inspection activities/supervision and enforcement of legislation
No dedicated instructions or regulations consider the inspection activities applied yet.

**National Level**

Legislation governing MSW management
The MSW management is governed by the following laws:
- Municipalities Law No. 41 (2015)
- Anticipated draft Waste Management Framework Law (it recently approved by the Parliament in April 2018)
- Environment Protection Law No. 6 (2017)
- The Joint Services Councils Regulation No.113 (2016)
- The Regulation for Nuisance Prevention & Waste Collection Fees within Municipal Borders No.68 (2016)

Guidance for MSW management (after legislation, before inspection activities)
The National Strategy of Municipal Waste Management is considered as a guidance for improving the MSW management in Jordan.

Inspection activities/supervision and enforcement of legislation
The Ministry of Municipal Affairs take the responsibility to supervise the performance of the local municipalities in Jordan, inspect and enforce the legislation concerning the MSW management at national level.

**Current Projects or Activities Aimed at Reducing SLCP Emissions**

[provide a brief description]

**Key Stakeholders**

Sahab Municipality
Additional Useful Information

[Include brief description/Title and weblink]

Contacts

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Waste Initiative Country Contact

Municipal Waste Representative (if different from the city contact for the Waste Initiative)

Other Municipal Representative