







## COUNTRY PROFILE on the solid waste management situation in Occupied

## **PALESTINIAN Territories**

## April 2014

## **BACKGROUND INFORMATION**

| Population <sup>i</sup> :                 | 4.421 million (mid, 2013)                              |
|---|--|
| Municipal Solid Waste (MSW) Generation:   | 1.387 million tons/year<br>(2012)                      |
| Per Capita MSW Generation <sup>ii</sup> : | 0.94 kg/day (2012)                                     |
| - Urban areas <sup>iii</sup>              | 0.9-2.05 kg/day (2012)                                 |
| - Rural areas <sup>iv</sup>               | 0.35-0.6 kg/day  |
| MSW Generation Growth:                    | 4 % per year; 1% per capita<br>per year                |
| Medical waste generation :                | 3,226 tons/year (2011)                                 |
| Industrial waste <sup>vi</sup> :          | 131,344 tons/year (2011)                               |
| Hazardous waste <sup>vii</sup> :          | 62,621 tons/year                                       |
| Agricultural waste <sup>viii</sup> :      | Gaza strip 440,000 ton/year<br>West Bank (no estimate) |
| C&D Waste <sup>ix</sup> :                 | Unknown  |
| Waste Tyres <sup>x</sup> :                | 5,550 tons/year (as rubber)                            |
| e-Waste:                                  | Unknown  |
| Packaging Waste:                          | Unknown  |

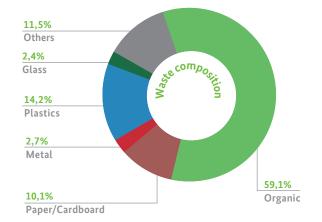
## Hazardous and industrial waste

| Number of hazardous landfills or plants (Chemical and physical treatment): |   |
|--|---|
| - Planned  | 0   |
| - Under construction   | 0   |
| - Constructed  | 1 HAZ landfill cell con-<br>structed in 1998, but never<br>went into operation due to<br>lack of economic feasibility<br>and lack of enforcement<br>(in Gaza)   |
| - Operational  | 0   |
| Types of disposal and treatments for medical waste:                        | Uncontrolled Incineration & sterilization using autoclaves and microwave. Other than the limited above pre-treatment if available; disposal of most medical waste takes place at sanitary landfills, random sites, and by open burning. |

## TECHNICAL PERFORMANCE

## Municipal Waste

| aput Trubto                             |                                  |
|---|----------------------------------|
| MSW Collection Coverage <sup>xi</sup> : |                                  |
| - Rural areas                           | 88 %                             |
| - Urban areas                           | 93 %                             |
| MSW Final Destination:                  |                                  |
| - Composted                             | less than 0.5 %                  |
| - Recycled                              | less than 0.5%                   |
| - Landfilled                            | 33%(42% WB, 22% GS) <sup>1</sup> |
| - Openly dumped                         | 67%                              |
| Number of Dumpsites:                    | 163                              |
| Number of Controlled Landfills:         |                                  |
| Number of Sanitary Landfills:           |                                  |
| - Planned                               | 2                                |
| - Under construction                    | 1 (GS)                           |
| - Constructed                           | 1                                |
| - Operational                           | 3 (2 WB, 1 GS)                   |
|   |                                  |



- 1- Calculated based on data obtained in 2013.
- i- PCBS. 1997-2016. http://www.pcbs.gov.ps/Portals/\_Rainbow/Documents/gover\_e.htm
- ii- Calculated for this report, includes medical, institutional, commercial, and industrial
- iii- Includes medical, institutional, commercial, and industrial
- iv- Includes medical, institutional, commercial, and industrial
- v- Calculated for this report.
- vi- PCBS (2011) http://www.pcbs.gov.ps/Portals/\_Rainbow/Documents/E\_ENV\_Tab1E.Solid%20Waste.htm
- vii- PNA (2010). National master plan for Hazardous Waste Management for the PNA, 2010
- viii- Zaghloul Samhan (2012) National Report on Solid Waste Management Sweep Net.
- ix- PCBS has reported the number at 911 tons/year (2011), http://www.pcbs.gov.ps/Portals/\_Rainbow/Documents/E\_ENV\_Tab1E.Solid%20Waste.htm
- *x* Calculated for this report.
- xi- PCBS 2011

Markus Lücke Project Leader markus.luecke@giz.de

waste facilities.

# This profile is an expert opinion, published with no official clearance.

## Policy and planning environment

- 1. The National Development Plan 2011-2013, the Palestinian National Authority, 2010.
- The National Strategy for Solid Waste Management in the Palestinian territory 2010-2014, the Palestinian National Authority, May 2010.
- 3. The Environment Sector Strategy, Environment Quality Authority, March 2010.
- 4. Master Plan for Healthcare Waste Management in West Bank and Gaza Strip, MTEAP, 2006.
- 5. The Palestinian Environment Strategy 2000-2010, Ministry of Environmental Affairs, 2000.
- 6. The development of a National Master Plan for hazardous waste management for the Palestinian National Authority, UNEP, February 2010. Draft was never approved.
- Palestinian National Strategy to achieve MDGs by 2015. June 2012
- 8. Cross-sectoral strategy for Palestinian local government and administration sectors (2011-2013)

## Legal framework

- The Environmental Law no.7 for year, 1999.
- The Palestinian Environmental Assessment Policy, 2000.
- The Palestinian Local Authorities Law no.1/1997
- The Public Health Law no.20 for year 2004.
- The Investment Promotion Law no.1/1998.
- The basic regulation on the Joint Service Councils of year 1996, and its updates, last in 2006.
- The Cabinet resolution no.53/2008, in relation to forming a national committee for following up the development of the national solid waste management strategy (NSWMS).
- The Medical Waste Management Bylaw 2012.

## **Institutional framework**

- Environment Quality Authority (EQA): has the role of development of the national strategies and plans of the solid waste in cooperation with other related institutions.
- Ministry of Local Government (MoLG) chairs the Steering Committee for the (NSWMS). MoLG is the co-chair for thematic sub-working group on solid waste management. Further, MoLG is responsible for monitoring the local authorities and joint service councils.

 Ministry of Health (MoH): monitoring the handling and managing the medical waste and licensing of operations of

- Ministry of Planning and Administrative Development (MoPAD): has a responsibility of integrating solid waste in the national development plans.
- The Steering committee for National solid waste management strategy is responsible for following up the implementation of the national strategy for SWM(2010-2014).
- The local authorities: responsible for solid waste management within their jurisdiction.
- Private sector: partially collects and transport the waste.
   Recycling and reuse as well, it is expected that operation of sanitary landfill in the south of the west bank will be contracted out to an international private sector.

### Private sector involvement

- Minimal participation in solid waste collection.
- No participation yet in disposal facilities, a international company is expected to operate the disposal site in the south of the West Bank.
- Private sector is mainly active in recycling of special streams such as construction and demolition waste in Gaza strip, recycling of e-waste illegally imported from Israel, few companies with small size active in recycling of plastic.
- Participation of private sector in transfer and transport is practiced in some areas in the west Bank, such as Nablus and Ramallah.

## **Options for improvement**

- Development of the legal framework; and enforcement of laws
- Environmental monitoring and waste information systems.
- Environmental management of waste facilities.
- Institutional building and improvement.
- Financial management for waste management
- Increasing cost recovery; development and upgrade of tariff systems, billing systems, fees collection system, cost accounting centre.

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The Regional Solid Waste Exchange of Information and Expertise Network in the MENA region

(SWEEP-Net) GIZ Office Tunis

B.P. 753 - 1080 Tunis Cedex - Tunisia

T + 216 71 967 220 F + 216 71 967 227 markus.luecke@giz.de

http://www.giz.de/en/worldwide/326.html www.facebook.com/GIZTunisie

www.sweep-net.org

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Adresses of the BMZ offices

BMZ Bonn
Dahlmannstraße 4
53113 Bonn, Deutschland
T +49 228 99 535 - 0
F +49 228 99 535 - 3500

poststelle@bmz.bund.de

BMZ Berlin Stresemannstraße 94 10963 Berlin, Deutschland T +493018535 - 0 F +493018535 - 2501

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