

**PROJECT INFORMATION DOCUMENT (PID)  
CONCEPT STAGE**

Report No.: AB6166

<b>Project Name</b>	Gaza Solid Waste Management Project
<b>Region</b>	MIDDLE EAST AND NORTH AFRICA
<b>Sector</b>	Solid waste management (92%); Sub-national government administration (8%)
<b>Project ID</b>	P121648
<b>Borrower(s)</b>	PALESTINIAN LIBERATION ORGANIZATION FOR THE BENEFIT OF THE PALESTINIAN AUTHORITY Ministry of Finance Ramallah, West Bank Tel: 972-2 240-0372 Fax: 970-2 240-5880 Email: <a href="mailto:mofirdg@palnet.com">mofirdg@palnet.com</a>
<b>Implementing Agency</b>	Municipal Development and Lending Fund (MDLF)
<b>Environment Category</b>	<input checked="" type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> FI <input type="checkbox"/> TBD (to be determined)
<b>Date PID Prepared</b>	December 15, 2010
<b>Estimated Date of Appraisal Authorization</b>	November 14, 2011
<b>Estimated Date of Board Approval</b>	February 28, 2012

**1. Key development issues and rationale for Bank involvement**

The closure regime imposed on the GS since 2006 together with the escalation of hostilities during the period between December 2008 and January 2009 has had direct and highly negative environmental impacts. This has been documented by the United Nations Environmental Program (UNEP)'s Environmental Assessment of the Gaza Strip Report issued in September 2009. This Report notes that the environmental degradation of the GS is very serious. This is due to a number of factors, the most critical of which are:

- Near saturation of the 3 existing main landfills (north, middle, & south) and the increasing risk to the very shallow and already threatened groundwater aquifers—the main water resource;
- Limited capacity to manage the generated waste (burning/leachate which pollutes ground water aquifer, unsafe scavenging, wild animals);
- Rapid population growth, limited land resources, and the resulting very high and increasing population density;
- Deteriorating capacity to collect the generated waste, due in part to the difficult economic situation and the resulting inability to pay for SWM Services and the dwindling municipal financial resources;
- Weak governance, primarily as a result of critical political and economic situation; and
- Lack of progress on priority environmental projects, and underinvestment in environmental systems

The situation has been further aggravated by the Israeli military actions which resulted not only in loss of life but also substantial amounts of demolition debris of damaged buildings some of which is contaminated with hazardous substances. Today, the total domestic solid waste

generated in the GS<sup>1</sup> is estimated at about 600-1000 tons per day (t/d), which is projected to increase<sup>2</sup> to about 1500 t/d by 2030.

On the positive side, the widely acknowledged success of the *Jenin Project* has raised consciousness on all sides (including among Israeli professionals, military as well as civilian) that with careful planning, good management and focused cooperation, the solid waste disposal problem can be tackled effectively; and that the environmental and health benefits are potentially widespread and accrue to both Palestinians and Israelis.

Institutionally, the Palestinian Cabinet issued Decree No. 13/49/05 of May 16, 2010 endorsed the 2010-2014 National Strategy for Solid Waste Management in the Palestinian Territory (The Strategy)<sup>3</sup>. The Strategy emphasizes the development of regional sanitary landfills in the WBG managed by Joint Services Council established for the purpose of waste management in an economy of scale, cost effective and sustainable manner. Already, JSCs in northern, central and southern West Bank have been established for this purpose. Similarly, in the GS, the PA had established the Middle Gaza Solid Waste Management Council in 1995, located in Deir El-Balah municipality, as a not-for-profit organization, for the municipalities of Khan Younis and Deir El Balah and surrounding nine municipalities and village councils located in the Middle GS.

Except for the Deir El-Balah Joint Services Council (DB-JSC), solid waste collection and disposal in Gaza is the responsibility of each municipality. DB-JSC landfill, built in 1997 with the support of the German Government, is the only one designed to meet sanitary standards. The remaining municipalities dispose their wastes in unsanitary dumping sites causing serious threat on the ground water aquifer and surrounding environment. These disposal facilities will reach the maximum capacity within the next two years, and cannot be extended as they are within 200 meters from surrounding housing developments and within 100 meters from the border with Israel<sup>4</sup>.

The DB-JSC has identified a site adjacent<sup>5</sup> to the Rafah municipality dumping site, which seems to be large enough to accommodate a sanitary landfill that could service the entire Gaza. Except for southern Gaza, there are no vacant areas in the middle and northern Gaza that would meet the minimum criteria and that would not encroach in the Israeli security buffer zone. Project preparation is expected to benefit from the studies that will soon be launched by UNDP, with

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<sup>1</sup> No reliable data exist on per capita waste generation in GS but it is estimated to be between of 0.4-0.7 kg/capita/day. It is also estimated that about 24 t/d of healthcare and about 50 t/d of industrial solid waste are generated in GS, all disposed at existing dumping sites.

<sup>2</sup> Based on population projections by Palestinian Central Bureau of Statistics and waste/capita generation per PA's 2010-2014 SWMS

<sup>3</sup> The Strategy covers eight strategic objectives, namely: an effective legal and organizational framework for SWM; strong and capable institutions; effective and environmentally-safe management of SW services; financially viable and efficient SWM services and activities; principles and mechanisms suitable for managing medical, hazardous, and special wastes; increasing the participation of the private sector; a more participating and aware community; and effective information and monitoring systems.

<sup>4</sup> Israel has established a security buffer zone along its western border with the GS which has been gradually extended to 1,000 meters within which limited construction is allowed.

<sup>5</sup> According to the DB-JCS the proposed land for the project is privately owned to be acquired either through direct sale transaction or long term lease.

support from the Government of Japan, for extending some of these facilities and for the safe disposal and recovery of building debris from the December 2008-January 2009 hostilities.

## **2. Proposed objective(s)**

The overall project objective is to improve solid waste disposal services in the middle and southern Gaza Strip. This objective will be met through the provision of efficient waste management and environmentally friendly sanitary waste disposal services in middle and southern JSCs member municipalities which could be extended to other potential client municipalities in the Gaza Strip.

## **3. Preliminary description**

The project cost is estimated at US\$25 million and Bank's contribution would be about US\$10 million. A beneficiary contribution of about US\$1.5 million equivalent for land acquisition and incremental operating cost is expected. Furthermore, donors' contribution in the order of US\$13.5 million equivalent is estimated to be required. Several donors have already expressed interest in cofinancing this project including the European Union, French Development Agency and Islamic Development Bank. Specific commitment is expected with the finalization of the feasibility study and clear identification of needed investments. This project would be implemented over a period of five years and consists of the following components:

***Component 1: Infrastructure Development (US\$18m)*** for constructing a sanitary landfill (including land acquisition) and at least one transfer station; sanitary closure of dump sites in the targeted area; and provision of collection equipment and containers, waste management equipment at the landfill and transfer station(s);

***Component 2: Institutional Strengthening (US\$1m)*** for improving the institutional capacity of participating JSCs in solid waste collection and disposal services and sustainable cost recovery; strengthening monitoring and reporting on environmental aspects of transfer stations, the new landfill facility, and the closure and rehabilitation for interim use of dump sites; and public awareness on SWM at the regional and local levels;

***Component 3: Pilot development of waste recycling and composting systems (US\$3 million)***, for feasibility studies, technical assistance and financing of pilot waste recycling and composting schemes; and

***Component 4: Project Management (Estimated at US\$3 million)***, for incremental operating cost, Municipal Development and Lending Fund (MDLF) management fees, and technical assistance in public awareness, construction supervision and monitoring and evaluation.

## **4. Safeguard policies that might apply**

***Environmental Safeguards:*** The safeguard policy on Environmental Assessment (OP4.01) is triggered by this project. To mitigate any potential negative impacts an Environment and Social Management Plan (ESMP) will be prepared for the project and will be incorporated in the Project Operations Manual and any relevant rehabilitation or construction contract to be established and financed by the Project. The consultant supervision contract which will be

established under this project will be responsible to ensure that the ESMP is maintained and adhered to throughout the project implementation.

**Social Safeguards:** The safeguard policy on Involuntary Resettlement (OP 4.12) is triggered and a Resettlement Action Plan (RAP) will be developed to ensure that the treatment of Project Affected People (PAPs) is in compliance with applicable Bank rules and regulations. Specifically, compensation for land acquisition and loss of income for people involved in waste recovery is anticipated, and specific measures will be developed to address these issues. The project will benefit from the experience gained in the West Bank at both, the Jenin project and the ongoing Southern West Bank Solid Waste Management Project.

## **5. Tentative financing**

Source:	(\$m.)
Borrower	1.5
Special Financing	10
Donor Cofinancing	13.5
Total	25

## **6. Contact point**

Contact: Ibrahim Khalil Dajani  
Title: Senior Operations Officer  
Tel: 5366+241 / 972-2-236-6541  
Fax: ++972 2 236 6543  
Email: idajani@worldbank.org  
Location: Gaza, West Bank and Gaza (IBRD)