

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

Report No.: AB2980

<b>Project Name</b>	Beka'a Emergency Water Supply Project
<b>Region</b>	MIDDLE EAST AND NORTH AFRICA
<b>Sector</b>	Water supply (85%);Sub-national government administration (15%)
<b>Project ID</b>	P103885
<b>Borrower(s)</b>	GOVERNMENT OF LEBANON
<b>Implementing Agency</b>	Council of Development and Reconstruction
<b>Environment Category</b>	<input type="checkbox"/> A <input checked="" type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> FI <input type="checkbox"/> TBD (to be determined)
<b>Date PID Prepared</b>	March 15, 2007
<b>Date of Appraisal Authorization</b>	January 19, 2007
<b>Date of RVP Approval</b>	March 20, 2007

### 1. Country and Sector Background

1. Prior to the July/August 2006 hostilities, Lebanon's water and wastewater sector was characterized by poor service despite the availability of relatively adequate water resources. Old and deteriorated infrastructure and inefficient operation and management contributed to: intermittent water supply (with some areas receiving water only a few hours per week); unaccounted for water in excess of 40 percent; and serious deficiencies in wastewater collection and treatment, causing unsanitary conditions and contaminating surface and groundwater resources.

2. In recent years, the Government of Lebanon (GOL) has undertaken a number of key sector reforms. A new water sector law (Water Law 221) was promulgated by Parliament in May 2000 defining the role of the Ministry of Energy and Water (MOEW) to policy, bulk water supply (both for potable and irrigation use), strategic planning and regulatory functions, while consolidating the number of water servicing authorities from 22 to 4 Regional Water Authorities (RWAs – North, South, Beka'a, Beirut/Mt. Lebanon) in order to improve efficiency in service provision. Initially these RWAs had responsibility for water supply and irrigation services; however, an amendment to the water sector law stipulating the reallocation of the wastewater sector responsibilities to the MOEW and the RWAs was ratified by Parliament in December 2001.

3. Among the areas that have drawn consistent attention in terms of shortage and poor quality of water is the Beka'a Valley and in particular the western region, which has been long targeted by the GOL for major improvements, but has not benefited until now from any significant infrastructure investment in the past 20 years. The population residing in the western part of the Beka'a Valley can be characterized as poor, with a high illiteracy rate of 35%, compared to the

national average of 8.8%,<sup>1</sup> and where unskilled, agricultural and unemployed labor represent about 30%, 12% and 13% of the population respectively.

4. Among the areas that have drawn consistent attention in terms of shortage and poor quality of water is the Beka'a Valley and in particular the western region, which has been long targeted by the GOL for major improvements, but has not benefited until now from any significant infrastructure investment in the past 20 years. The population residing in the western part of the Beka'a Valley can be characterized as poor, with a high illiteracy rate of 35%, compared to the national average of 8.8%,<sup>2</sup> and where unskilled, agricultural and unemployed labor represent about 30%, 12% and 13% of the population respectively.

5. Water quality studies indicate that the water being provided in the Western Beka'a area does not meet the World Health Organization (WHO) standards or Lebanese drinking water standards. Laboratory analyses of the water extracted from some of the existing wells (e.g., the Loussi wells) show the presence of high levels of nitrates from agricultural activities and wastewater seepage. Analyses also show that in several parts of the water distribution network, the water is contaminated with fecal material due most likely to wastewater infiltration and poor performance of the disinfection system. As a result of the degraded water quality and inadequate supply, a number of water-borne diseases such as diarrhea are reported in the area, especially among children.

6. Until recently water supply in the western Beka'a was under the responsibility of the Chamsine water authority, which was recently integrated into the Beka'a Regional Water Authority (BRWA). The BRWA which is now formed of the three newly-merged water authorities in the region (Zahle, Chamsine and Ba'albeck), as well as regional water boards and committees, is still struggling to become an integrated organization.

7. In the aftermath of the hostilities and the resulting government budget constraints, the GOL sought to secure grant financing from the Lebanon Trust Fund set up by the World Bank and the Kuwaiti Government, administered by the Kuwait Fund for Arab Economic Development (KFAED), for the planned investments in water supply in the West Beka'a, while resuming implementation of the already approved investments in wastewater from the Islamic Development Bank.

## **2. Objectives**

8. The key development objective of the proposed government program for the West Beka'a and World Bank-financed project is to alleviate the precarious conditions of the area's water supply systems, which has been further aggravated by the recent hostilities and long-term neglect. More specifically, the project is expected to improve health conditions of the population of the West Beka'a through the provision of non-contaminated water in increased quantities by completely rehabilitating the area's water network. The project should also contribute to increased sustainability of the Beka'a Regional Water Authority through the regularization/

---

<sup>1</sup> Source: 2004 National Survey of Household Living Conditions published by the Lebanese Republic Ministry of Social Affairs.

<sup>2</sup> Source: 2004 National Survey of Household Living Conditions published by the Lebanese Republic Ministry of Social Affairs.

metering of large proportion of beneficiaries in the area, which are currently illegally tapping water from the network.

### **3. Rationale for Bank Involvement**

9. The Bank has been actively engaged in Lebanon's water sector since 1993; therefore the Bank is well placed to provide support to the GOL in re-launching and implementing its planned reform and investment program through policy advice and financial assistance. The sector is in dire need of investment and reforms to improve management and operational efficiency. As such, the Bank's goal is to continue its support to the sector by financing a portion of the GOL's planned investment program, while leveraging assistance from other donors to complete the financing plan and providing policy advice on the prioritization and implementation of the agreed reform program

10. Given the relative lack of investment in the western Beka'a region in the past and the area's higher poverty rates when compared to national averages, the Bank has agreed to GOL's request to finance a portion of the GOL's proposed water supply investment program for the region. During the project's appraisal, the team of KFAED has agreed to contribute, on behalf of the Kuwaiti Government, on a parallel basis of about US\$40 million and complete the program's financing plan.

### **4. Description**

11. The project will be financing rehabilitation and expansion of water production, storage, transmission and distribution systems in the villages of Er Raouda, Bar Elias, El Marj, Haouche el Harime and El Khiara with a current population estimated at 49,000 inhabitants (denominated under the West Beka'a investment program as Zone 1: Western Sub-zone).

### **5. Financing**

Source:	(\$m.)
Borrower	0
Special Financing	15
Total	15

### **6. Implementation**

12. Responsibility for project implementation will lie mainly with a project management team (PMT) formed within CDR. The PMT will be composed of a project manager and support staff, and will be responsible for the planning and coordination of all project activities, including procurement, supervision of construction works and implementation of the Environmental Monitoring Plan.

13. Given that the works to be carried out are under the jurisdiction of the BRWA, there will be a need for close coordination between CDR and the management of the BRWA in order to ensure a smooth handover of the facilities constructed. In addition, CDR and the BRWA will be

responsible for coordination with the MOEW, in order to avoid a duplication of efforts in the activities implemented by the planned investment program and the project.

14. The PMT will provide quarterly progress reports that monitor the progress of works financed under the project, the number of house connections rehabilitated, and the number of additional people connected to the water network. In addition, these progress reports will document the coordination efforts between CDR, the BRWA and the MOEW. These reports will be submitted to the World Bank, the MOEW, the management of the BRWA and the management of CDR.

## **7. Sustainability**

15. Building institutional capacity in the water and wastewater sectors has been identified as a key priority for its proper management and operation, and the Bank is committed to assisting the GOL in strengthening its water and wastewater sector institutions with financing to be provided under the Ba'albeck Water and Wastewater Project. In addition, the Bank team will, as part of its ongoing dialogue with the GOL in the water and wastewater sector, provide assistance to the government as it further implements sector reforms.

## **8. Lessons Learned from Past Operations in the Country/Sector**

16. The Bank's has had a long-term involvement in the water sector in Lebanon and has provided assistance to the GOL in the preparation of a sector strategy paper which has served as the basis for the agreed reforms that need to be carried out. In parallel, the Bank has been financing the Ba'albeck Water and Wastewater Project (BWWP – US\$43.5 million), for which a mid-term review has been recently carried out. Based on this involvement and on the Bank's overall experience on post-conflict reconstruction, the following lessons have been learned and reflected in the project design:

17. Implementation arrangements: Implementation of other water supply and wastewater projects in Lebanon (with CDR) has experienced delays, mainly related to the bidding process and contract award. With the implementation arrangement currently in place, CDR's Board has to approve every step of the bidding process and contract award, which in the past has typically resulted in lengthy processes. As such, the Bank has reached an agreement with CDR on streamlined implementation arrangements that will accelerate the procurement of the sole civil works contract under Component 1, and that will empower the project management team with decision-making authority to accelerate the contracting and implementation of the remaining project activities following World Bank procurement guidelines.

18. Capacity building for BRWA: Previous Bank experience in post-conflict reconstruction has shown that institutional capacity building efforts have invariably led to implementation delays complicating the implementation of emergency projects. As such, the proposed project has eliminated capacity building activities in its design. Key capacity building activities will be carried out under the institutional building component of the on-going BWWP. Given the fact that BRWA is still in its infancy and much more has to be done over the long-term to ensure that the BRWA becomes a cohesive utility that is sustainable in the long-term. As such, the GOL recognizes that a long-term focus on capacity building efforts is a key priority to improving the

sector's sustainability, with efforts that will have to be continued beyond the completion of the BWWP being required.

19. The Bank's increased role in post-conflict reconstruction over the past decade has provided a significant amount of experience that can be relevant to this project. Now guided by OP2.30 Development Cooperation and Conflict, the Bank's reconstruction efforts put a premium on early but selective engagement, flexibility in design and implementation, coordination with donors and other partners, and close monitoring and evaluation. Moreover, the Bank's recent experience in Iraq has highlighted the importance of a simple and flexible project design to allow for adaptation to changing circumstances. The proposed project has adopted many of these lessons into the project design, including minimizing the number of procurement packages, leveraging donor financing, i.e., the Kuwaiti Government, through the Kuwait Fund for Arab Economic Development (KFAED), has agreed to finance on a grant basis the remaining portion of the investment program.

## 9. Safeguard Policies (including public consultation)

Safeguard Policies Triggered by the Project	Yes	No
<a href="#">Environmental Assessment (OP/BP 4.01)</a>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Natural Habitats ( <a href="#">OP/BP 4.04</a> )	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Pest Management ( <a href="#">OP 4.09</a> )	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Physical Cultural Resources ( <a href="#">OP/BP 4.11</a> )	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Involuntary Resettlement ( <a href="#">OP/BP 4.12</a> )	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Indigenous Peoples ( <a href="#">OP/BP 4.10</a> )	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Forests ( <a href="#">OP/BP 4.36</a> )	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Safety of Dams ( <a href="#">OP/BP 4.37</a> )	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Projects in Disputed Areas ( <a href="#">OP/BP 7.60</a> )*	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Projects on International Waterways ( <a href="#">OP/BP 7.50</a> )	<input type="checkbox"/>	<input checked="" type="checkbox"/>

## 10. Contact point

Contact: Mohammed Benouahi

Title: Lead Water and Sanitation Specialist

Tel: (202) 458-1664

Fax: (202) 614-4022

Email: [Mbenouahi@worldbank.org](mailto:Mbenouahi@worldbank.org)

Location: Washington, DC (IBRD)

## 11. For more information contact:

The InfoShop

The World Bank

1818 H Street, NW

Washington, D.C. 20433

Telephone: (202) 458-4500

\* By supporting the proposed project, the Bank does not intend to prejudice the final determination of the parties' claims on the disputed areas

Fax: (202) 522-1500

Email: [pic@worldbank.org](mailto:pic@worldbank.org)

Web: <http://www.worldbank.org/infoshop>