

**INTEGRATED SAFEGUARDS DATA SHEET
APPRAISAL STAGE**

Report No.: ISDSA8349

Date ISDS Prepared/Updated: 17-Mar-2015

Date ISDS Approved/Disclosed: 23-Mar-2015

I. BASIC INFORMATION

1. Basic Project Data

Country:	Lebanon	Project ID:	P147854
Project Name:	Lake Qaraoun Pollution Prevention Project (P147854)		
Task Team Leader(s):	Maria Sarraf		
Estimated Appraisal Date:	30-Mar-2015	Estimated Board Date:	22-Jul-2015
Managing Unit:	GENDR	Lending Instrument:	Investment Project Financing
Sector(s):	Agricultural extension and research (10%), General water, sanitation and flood protection sector (90%)		
Theme(s):	Water resource management (100%)		
Is this project processed under OP 8.50 (Emergency Recovery) or OP 8.00 (Rapid Response to Crises and Emergencies)?			No
Financing (In USD Million)			
Total Project Cost:	50.00	Total Bank Financing:	50.00
Financing Gap:	0.00		
Financing Source			Amount
Borrower			0.00
International Bank for Reconstruction and Development			50.00
Total			50.00
Environmental Category:	B - Partial Assessment		
Is this a Repeater project?	No		

2. Project Development Objective(s)

The development objectives of the project are to reduce the quantity of untreated municipal sewage discharged into the Litani river and to improve pollution management around Qaraoun Lake.

3. Project Description

The project will comprise the following components:

Component 1. Improve the collection of the municipal sewage (US\$ 45.5 million).

This component will finance activities that increase sewerage collection in areas where waste water treatment plants have already been constructed in order to maximize the utilization of investments already made:

Expansion of sewage network to connect to the Zahlé WWTP (US\$26 million)

The Zahlé Wastewater Treatment Plant (WWTP), which is part of Lebanon's wastewater master plan, is currently under construction with funding from the Italian Protocol. The plant is expected to become operational in October 2015. The plant is designed with a capacity for a daily flow of 37,300 m³ for 2015 and 56,000 m³ for 2030. The plant will connect to an existing network of about 350 km. The project intends to finance: the construction of about 106 km of new sewerage network, the rehabilitation of part of the old network, and 6,000 new house connections. According to the final design, the gravity sanitary sewage network will not require any pumping station. The area that will be covered is: Greater Zahlé (including Karak and Ksara); Saadnayel; part of Taalabay; Quaa El Rim; Hezzerta; and part of Forzol.

The project is also expected to finance the completion of sewage coverage to Anjar WWTP (the funding of which is under discussion with the Italian Government) and Aitanit WWTP (constructed by USAID).

Component 2. Promotion of integrated pest management and good agricultural practices to reduce agrochemical pollution in upper Litani (US\$ 1.5 million).

Farmers in the upper Litani basin often use high amounts of fertilizers and pesticides, leading to increased levels of nitrates and pesticides in the Litani River. This component will promote adoption of sustainable production systems among farmers in the upper Litani basin, by introducing selected IPM (for example, reduced pesticides application) and GAP (for example, reduced fertilizer application and other conservation practices). These practices are expected to provide increased quality of agricultural products (without reducing yields); farmers' savings (through decreased cost of production); and reduced pollution of the Litani River. The component will target about 750 farmers; the emphasis will be on large irrigated farms in the West Beqaa district, given their impact and their close proximity to Lake Qaraoun and Litani River. IPM activities will be implemented through the Farmer Field Schools (FFS) methodology, which is a proven methodology that is based on participatory approach to train and empower farmers on the use of IPM techniques and on the proper handling and disposal of pesticides. Similar participatory approaches will be used to train farmers on alternative methods and practices for sustainable fertilizer use in the project area. Baseline surveys and regular farm visits will be conducted to monitor the use of agrochemicals by targeted farmers as well as the sales of these chemicals in the project area.

Component 3. Capacity Building, Technical Studies and Project Management (US\$ 3.5 million)

This component will fund institutional technical assistance for the Ministry of Energy and Water and the Bekaa Water Establishment (BWE). It will also support the Litani River Authority (LRA) by building on activities achieved under the USAID Litani River Basin Management Support Program and continue to focus on strengthening its capacity to monitor water resources and conduct clean up campaigns along the Litani river. It will also fund necessary technical, environmental and social studies for establishing sorting and landfilling sites and closure of existing dump sites in the project area.

4. Project location and salient physical characteristics relevant to the safeguard analysis (if known)

The overall technical assistance under the project will cover the upper Litani watershed (upstream

from Qaraoun Lake), while direct investments will focus on the villages of Kaa El Reem, Hazarta, Karak in the Greater Zahlé area, villages around Anjar and Aitanit.

The Litani River is the principal artery of Lebanon, exceeding 170 km in length, and its major water structure is the Qaraoun dam, which forms the Qaraoun Lake (or reservoir), which was built to produce hydropower, and provide water for irrigation and water supply. The Upper Litani River catchment extends over an area of 1,500 km² (10% of the Lebanese territory) and comprises 99 towns/villages distributed into four administrative districts: Baalbeck, Zahlé, West Bekaa, and Rachayya.

5. Environmental and Social Safeguards Specialists

Chaogang Wang (GSURR)

Suiko Yoshijima (GENDR)

6. Safeguard Policies	Triggered?	Explanation (Optional)
Environmental Assessment OP/BP 4.01	Yes	<p>The Government has prepared an Environmental and Social Management Framework (ESMF) for the entire project, since site locations for construction of the sewage network are still unspecified and the location of the connectivity pipelines are not yet identified. The ESMF is conform to the requirements of OP4.01 as well as the Lebanese laws and/or regulations on environmental reviews and impact assessment. The draft ESMF has been cleared by the World Bank and disclosed in country and at the infoShop.</p> <p>Since the location of Investment 1 (i.e. sewage connection to Zahle WWTP) has been identified, an Environment Impact Assessment and Environment Management Plan (EIA/EMP) has been prepared by the Government, cleared by the WB and disclosed in country and at the infoShop.</p> <p>When locations of other investments are identified and their designs are finalized, EIA/EMP will be prepared for each, in accordance with their environmental risks, based on the screening tools and guidelines established in the ESMF.</p> <p>The Government has also undertaken a design review of Zahle WWTP which has been cleared by the WB and disclosed in country and at infoShop. Once confirmed, post/assessment of other WWTPs (Anjar and Aitanit) to which the project may fund sewage network will also be undertaken to determine current conditions of operations and recommendations will be made to mitigate and/or improve the existing conditions. These documents will be also reviewed, cleared and disclosed in country and at</p>

		InfoShop before construction starts.
Natural Habitats OP/BP 4.04	No	The project will be implemented within the identified villages and districts and at the 3 existing wastewater facilities which are not located in the proximity of natural habitats or protected areas.
Forests OP/BP 4.36	No	The project will be implemented within the identified villages and districts and at the 3 existing wastewater facilities that are not in forested zones and generated activities will not have any adverse impact on forests
Pest Management OP 4.09	Yes	The project does not finance procurement or use of pesticides/insecticides. However the project will provide institutional support and capacity building on IPM practices to reduce the use of fertilizers and pesticides in the project area to key stakeholders (irrigated farmers, research institutes and official/staff of MOA). The capacity building may also have indirect impacts on irrigation practices with reliance on application of fertilizers and pesticides. This policy is being triggered to ensure that these activities are well managed. The ESMF includes an annex detailing the required IPM guidelines.
Physical Cultural Resources OP/BP 4.11	No	It was confirmed in the detailed design document that the proposed sewage networks feeding into Zahle WWTP do not pass physical cultural sites. It is also unlikely that other networks to be designed during project implementation will pass any physical cultural sites and this will be avoided during detail design phase. Therefore, OP4.11 is not triggered. However, as required by Lebanese Government, the contract for construction of the networks will include chance finds procedure in case any physical cultural resources are found during excavation.
Indigenous Peoples OP/BP 4.10	No	There are no groups of indigenous people or indigenous communities in the project areas.
Involuntary Resettlement OP/BP 4.12	Yes	The project will finance the sewage networks associated to wastewater treatment plants which have been or are planned to be constructed. OP 4.12 is triggered and a Resettlement Policy Framework has been prepared by the client and cleared by the World Bank, although efforts will be made to avoid land acquisition for the construction of sewage pipelines. For the land used for wastewater treatment plants, a post assessment will be carried out and remedial actions will be taken if there are any pending issues related to land use. In addition, a land acquisition plan has been prepared for the section of the pipeline connected to the Zahle WWTP since the alignment of the section of pipeline has been determined. The RPF and

		land acquisition plan have been cleared and disclosed both in country and at InfoShop prior to project appraisal.
Safety of Dams OP/BP 4.37	No	
Projects on International Waterways OP/BP 7.50	No	
Projects in Disputed Areas OP/BP 7.60	No	

II. Key Safeguard Policy Issues and Their Management

A. Summary of Key Safeguard Issues

<p>1. Describe any safeguard issues and impacts associated with the proposed project. Identify and describe any potential large scale, significant and/or irreversible impacts:</p> <p>The nature of the project is to bring significant benefits to the environment and public health by providing access to wastewater treatment facilities for those who currently have no access and are discharging untreated wastewater directly into Litani River. Therefore, the project, by its very nature, is a public good and will result in significant environmental improvements and long-term public health benefits. However, some impacts on the environment are expected especially for the activities under Component 1 as expansion of sewage networks involves construction. Mitigation measures were identified to manage risks on environment as well as health and safety risks for workers during construction. The leakage of wastewater from the broken or damaged pipes will be mitigated by continuous monitoring and regular maintenance of the pipelines.</p> <p>Efforts will be made to avoid land acquisition for the construction of sewage pipelines. However, OP 4.12 was triggered and a Resettlement Policy Framework (RPF) has been prepared, approved and disclosed. Since the connection with Zahle WWTP involves small land acquisition, a Land Acquisition Plan (LAP) has been prepared, approved and disclosed.</p> <p>Though the project will not finance the construction nor rehabilitation of the WWTP itself, it is considered as an associated facility as wastewater network will be collected and treated at the WWTP. Design review of Zahle WWTP has been conducted to ensure the compliance of WWTPs and make sure that connected WWTPs will have enough capacity to treat the increased wastewater and water quality at the final discharge is compliant. Design review has been approved and disclosed in country and through infoShop. Water quality at the discharge from WWTP and sludge disposal will be monitored by the Project.</p>
<p>2. Describe any potential indirect and/or long term impacts due to anticipated future activities in the project area:</p> <p>The long term impacts of the project are related to potential leakage of wastewater during operation. However, overall impacts on groundwater and soil are positive as the project will provide the communities with access to wastewater treatment. The construction of sewage networks will have positive impacts on environment and health for those living in these areas.</p>
<p>3. Describe any project alternatives (if relevant) considered to help avoid or minimize adverse impacts.</p> <p>The sewage networks were designed based on its minimal adverse effects on environment and the communities and mitigation measure have been identified where effects are unavoidable.</p>

<p>4. Describe measures taken by the borrower to address safeguard policy issues. Provide an assessment of borrower capacity to plan and implement the measures described.</p> <p>The Council for Development and Reconstruction (CDR) has prepared safeguards instruments and will be responsible for the implementation of the ESMF, site-specific EIAs/EMPs, RPF and LAP. CDR will provide updates on implementation of safeguards instruments to the Bank, which will be included in the bi-annual project progress report. The Ministry of Environment will monitor the environmental impacts of the project, the implementation of the safeguards instruments for the whole project components.</p> <p>The legal basis for the EIA system is established in the Environment Protection Law No. 444/2002 and Law No. 690/2005 on the reorganization of the MOE and the EIA decree No. 8633/2012 and its annexes. The features of the Lebanese EIA system are compatible with most of the World Bank EA Policy (OP 4.01) and the EC EIA regulations. MoE has experience and knowledge of the World Bank safeguards policies and will work with CDR to make sure safeguards instruments are properly implemented.</p>
<p>5. Identify the key stakeholders and describe the mechanisms for consultation and disclosure on safeguard policies, with an emphasis on potentially affected people.</p> <p>Key stakeholders include the Ministry of Environment, Council of Development and Reconstruction, Municipalities, Union of Municipalities, Bekaa Water Establishment, Zahle and Bekaa Chamber of Commerce and Industry, Ministry of Public Health, Ministry of Interior and Municipalities, and local residents.</p> <p>A consultation meeting was held on September 13, 2014 in Chtaura to discuss the findings of the ESMF; EIA/EMP for Zahle network and the RPF. Project affected people were consulted for LAP in February 2015. The CDR issued a letter to all key stakeholders at least a week ahead of the consultation inviting them to attend the consultation. The invitation letter was followed up by emails and phone calls to remind people to attend. The consultation session was divided in three parts. The first part includes a welcoming address by the organizing institutions. The second part consists of a presentation of the documents in local language (Arabic) to ensure maximum comprehension and the third part is dedicated to questions and answers. The final documents reflected concerns and issues shared at the consultation.</p>

B. Disclosure Requirements

Environmental Assessment/Audit/Management Plan/Other	
Date of receipt by the Bank	10-Feb-2015
Date of submission to InfoShop	12-Feb-2015
For category A projects, date of distributing the Executive Summary of the EA to the Executive Directors	////
"In country" Disclosure	
Lebanon	11-Feb-2015
<i>Comments:</i> In addition, design review of Zahle WWTP has been disclosed in country on March 13, 2015 and at infoShop.	
Resettlement Action Plan/Framework/Policy Process	
Date of receipt by the Bank	10-Feb-2015
Date of submission to InfoShop	12-Feb-2015

"In country" Disclosure	
Lebanon	11-Feb-2015
<i>Comments:</i> In addition, LAP has been disclosed in country on March 13, 2015 and at infoShop.	
Pest Management Plan	
Was the document disclosed prior to appraisal?	Yes
Date of receipt by the Bank	10-Feb-2015
Date of submission to InfoShop	12-Feb-2015
"In country" Disclosure	
Lebanon	11-Feb-2015
<i>Comments:</i>	
If the project triggers the Pest Management and/or Physical Cultural Resources policies, the respective issues are to be addressed and disclosed as part of the Environmental Assessment/Audit/or EMP.	
If in-country disclosure of any of the above documents is not expected, please explain why:	

C. Compliance Monitoring Indicators at the Corporate Level

OP/BP/GP 4.01 - Environment Assessment	
Does the project require a stand-alone EA (including EMP) report?	Yes [<input checked="" type="checkbox"/>] No [<input type="checkbox"/>] NA [<input type="checkbox"/>]
If yes, then did the Regional Environment Unit or Practice Manager (PM) review and approve the EA report?	Yes [<input checked="" type="checkbox"/>] No [<input type="checkbox"/>] NA [<input type="checkbox"/>]
Are the cost and the accountabilities for the EMP incorporated in the credit/loan?	Yes [<input checked="" type="checkbox"/>] No [<input type="checkbox"/>] NA [<input type="checkbox"/>]
OP 4.09 - Pest Management	
Does the EA adequately address the pest management issues?	Yes [<input checked="" type="checkbox"/>] No [<input type="checkbox"/>] NA [<input type="checkbox"/>]
Is a separate PMP required?	Yes [<input type="checkbox"/>] No [<input checked="" type="checkbox"/>] NA [<input type="checkbox"/>]
If yes, has the PMP been reviewed and approved by a safeguards specialist or PM? Are PMP requirements included in project design? If yes, does the project team include a Pest Management Specialist?	Yes [<input type="checkbox"/>] No [<input type="checkbox"/>] NA [<input checked="" type="checkbox"/>]
OP/BP 4.12 - Involuntary Resettlement	
Has a resettlement plan/abbreviated plan/policy framework/process framework (as appropriate) been prepared?	Yes [<input checked="" type="checkbox"/>] No [<input type="checkbox"/>] NA [<input type="checkbox"/>]
If yes, then did the Regional unit responsible for safeguards or Practice Manager review the plan?	Yes [<input checked="" type="checkbox"/>] No [<input type="checkbox"/>] NA [<input type="checkbox"/>]
The World Bank Policy on Disclosure of Information	
Have relevant safeguard policies documents been sent to the World Bank's InfoShop?	Yes [<input checked="" type="checkbox"/>] No [<input type="checkbox"/>] NA [<input type="checkbox"/>]
Have relevant documents been disclosed in-country in a public place in a form and language that are understandable and accessible to project-affected groups and local NGOs?	Yes [<input checked="" type="checkbox"/>] No [<input type="checkbox"/>] NA [<input type="checkbox"/>]
All Safeguard Policies	

Have satisfactory calendar, budget and clear institutional responsibilities been prepared for the implementation of measures related to safeguard policies?	Yes [<input checked="" type="checkbox"/>] No [<input type="checkbox"/>] NA [<input type="checkbox"/>]
Have costs related to safeguard policy measures been included in the project cost?	Yes [<input checked="" type="checkbox"/>] No [<input type="checkbox"/>] NA [<input type="checkbox"/>]
Does the Monitoring and Evaluation system of the project include the monitoring of safeguard impacts and measures related to safeguard policies?	Yes [<input checked="" type="checkbox"/>] No [<input type="checkbox"/>] NA [<input type="checkbox"/>]
Have satisfactory implementation arrangements been agreed with the borrower and the same been adequately reflected in the project legal documents?	Yes [<input checked="" type="checkbox"/>] No [<input type="checkbox"/>] NA [<input type="checkbox"/>]

III. APPROVALS

Task Team Leader(s):	Name: Maria Sarraf	
<i>Approved By</i>		
Safeguards Advisor:	Name:	Date:
Practice Manager/ Manager:	Name:	Date: