



## Lake Qaraoun Pollution Prevention Project (P147854)

MIDDLE EAST AND NORTH AFRICA | Lebanon | Environment, Natural Resources & the Blue Economy Global Practice | IBRD/IDA | Investment Project Financing | FY 2017 | Seq No: 9 | ARCHIVED on 28-Sep-2021 | ISR47842 |

Implementing Agencies: Council for Development and Reconstruction, Lebanese Republic, Ministry of Finance

### Key Dates

#### Key Project Dates

Bank Approval Date: 14-Jul-2016

Effectiveness Date: 13-Dec-2016

Planned Mid Term Review Date: 10-Dec-2019

Actual Mid-Term Review Date: 02-Mar-2020

Original Closing Date: 30-Jun-2023

Revised Closing Date: 30-Jun-2023

### Project Development Objectives

Project Development Objective (from Project Appraisal Document)

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.

Has the Project Development Objective been changed since Board Approval of the Project Objective?

No

### Components Table

Name

Component 1: Improvement of Municipal Sewage Collection:(Cost \$50.50 M)

Component 2. Promotion of Good Agricultural Practices (Including Integrated Pest Management):(Cost \$1.50 M)

Component 3. Solid Waste Management, Water Quality Monitoring, Capacity Building and Project Management:(Cost \$3.00 M)

### Overall Ratings

Name	Previous Rating	Current Rating
Progress towards achievement of PDO	<input type="checkbox"/> Moderately Satisfactory	<input type="checkbox"/> Moderately Satisfactory
Overall Implementation Progress (IP)	<input type="checkbox"/> Moderately Satisfactory	<input type="checkbox"/> Moderately Satisfactory
Overall Risk Rating	<input type="checkbox"/> Substantial	<input type="checkbox"/> Substantial

### Implementation Status and Key Decisions

The project continues to show slow progress. To date the project has awarded contracts for Zahle, Aitanit and Lot 2 of the Anjar Sewer Network and re-bidding process for Lot 1 of the Anjar Sewer Network is underway. Activities on Good Agricultural Practices are progressing well with FAO support. Since the last mission this component has (i) established an additional 5 comparative plots which sums up to a total 30 comparative plots completed to date; (ii) conducted series of technical support field visits, targeting 76 farmers on a basis of three visits/months, (iii) developed a booklet compiling recommendation for Integrated Pest Management (IPM) for potato cultivation and a video. The studies related to (i) assessment of odor impact from solid waste facilities and landfills and (ii) closure and rehabilitation of Bar Elias dumpsite are currently under preparation. The project is also evaluating options for the final disposal of sludge generated from the wastewater treatment plants and analyzing the financial sustainability of Water Establishments in Lebanon.



## Risks

### Systematic Operations Risk-rating Tool

Risk Category	Rating at Approval	Previous Rating	Current Rating
Political and Governance	High	High	High
Macroeconomic	Moderate	High	High
Sector Strategies and Policies	Moderate	Moderate	Moderate
Technical Design of Project or Program	Substantial	Substantial	Moderate
Institutional Capacity for Implementation and Sustainability	Substantial	Substantial	Substantial
Fiduciary	Moderate	Substantial	Substantial
Environment and Social	Moderate	Moderate	Moderate
Stakeholders	Moderate	Substantial	Substantial
Other	--	--	--
Overall	Substantial	Substantial	Substantial

## Results

### PDO Indicators by Objectives / Outcomes

To improve pollution management around Qaraoun Lake				
▶ Number of locations monitored monthly for water quality (Number, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	10.00	10.00	10.00	20.00
Date	01-Jun-2016	30-Nov-2020	17-Sep-2021	30-Jun-2023
Comments:	Litani River Authority (LRA) has reported that it has increased the locations and and frequency of water quality monitoring. The agency has also reported that it has augmented the laboratory infrastructure to analyze the water quality samples, with grant support from other donors. No information however has been shared by the agency with regard to the exact number of locations, monitoring protocols and the results of water quality testing. The status of the indicator hence is being reported same as at the base line level.			
▶ Nutrient load reduction (Nitrogen(N)) achieved under the project (Tones/year, Custom)				



	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	496.00	470.00	470.00	248.00
Date	01-Jun-2016	30-Nov-2020	17-Sep-2021	30-Jun-2023
Comments:	The project has achieved an average of 5.25% reduction in Nitrogen. This, when extrapolated based on 496 tons baseline will equal to $5.25 \times 496 / 100 = 26$ tons. Thus $496 - 26 = 470$ tons. Based on discussions during the MTR mission, the team is discussing with FAO to include a measurable indicators such as (i) percentage of reduction in the use of fertilizers by the end of the project (target: 50% reduction of the excess quantity of fertilizers used); and (ii) percentage of reduction in the use of pesticides sprays by the end of the project (target: 30% reduction in the number of pesticides sprays). The methodological approach for these indicators is being finalized by the PMU and formally will be included in the upcoming restructuring of the project.			
<b>► Quantity of municipal wastewater collected and treated under the project (daily flow in m3) (Cubic Meter(m3), Custom)</b>				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	10,585.00	10,585.00	30,000.00
Date	01-Jun-2016	30-Nov-2020	17-Sep-2021	30-Jun-2023
Comments:	so far the project has constructed 20 Km of sewer network and 168 house hold are connected to the network. As a result, the quantity of municipal wastewater collected as a result of the project and treated in the Zahle WWTP is 10,585 m3/day			
<b>► Direct project beneficiaries (Number, Custom)</b>				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	51,385.00	51,385.00	344,000.00
Date	01-Jun-2016	30-Nov-2020	17-Sep-2021	30-Jun-2023
<b>□ Female beneficiaries (Percentage, Custom Supplement)</b>				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	30.00	30.00	49.00

### Intermediate Results Indicators by Components

Component 1: Improvement of Municipal Sewage Collection				
<b>► New household sewer connections constructed under the project (Number, Custom)</b>				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	168.00	168.00	7,300.00



Date	01-Jun-2016	30-Nov-2020	17-Sep-2021	30-Jun-2023
Comments:				
<b>►sewer network constructed in the project area (km) (Kilometers, Custom)</b>				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	28.00	28.00	200.00
Date	14-Jun-2016	30-Nov-2020	17-Sep-2021	14-Jun-2023
Comments:	A total of 18 km in Zahle and 10 km in Aitanit have been constructed so far.			

### Component 3. Solid Waste Management, Water Quality Monitoring, Capacity Building and Project Management

#### ►Quantity of trash removed from Litani river banks (through clean up campaigns) (Cubic Meter(m3), Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	1,250.00
Date	01-Jun-2016	30-Nov-2020	17-Sep-2021	30-Jun-2023
Comments:	The cleanup campaigns are yet to be initiated. .			

### Component 2. Promotion of Good Agricultural Practices

#### ►Participants in consultation activities during project implementation (Number, Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	50.00	184.00	184.00	100.00
Date	08-Jun-2016	30-Nov-2020	17-Sep-2021	14-Jun-2023
Comments:	This indicator includes participants in training workshops offered through the project.			

## Performance-Based Conditions

### Data on Financial Performance

#### Disbursements (by loan)

Project	Loan/Credit/TF	Status	Currency	Original	Revised	Cancelled	Disbursed	Undisbursed	% Disbursed
---------	----------------	--------	----------	----------	---------	-----------	-----------	-------------	-------------

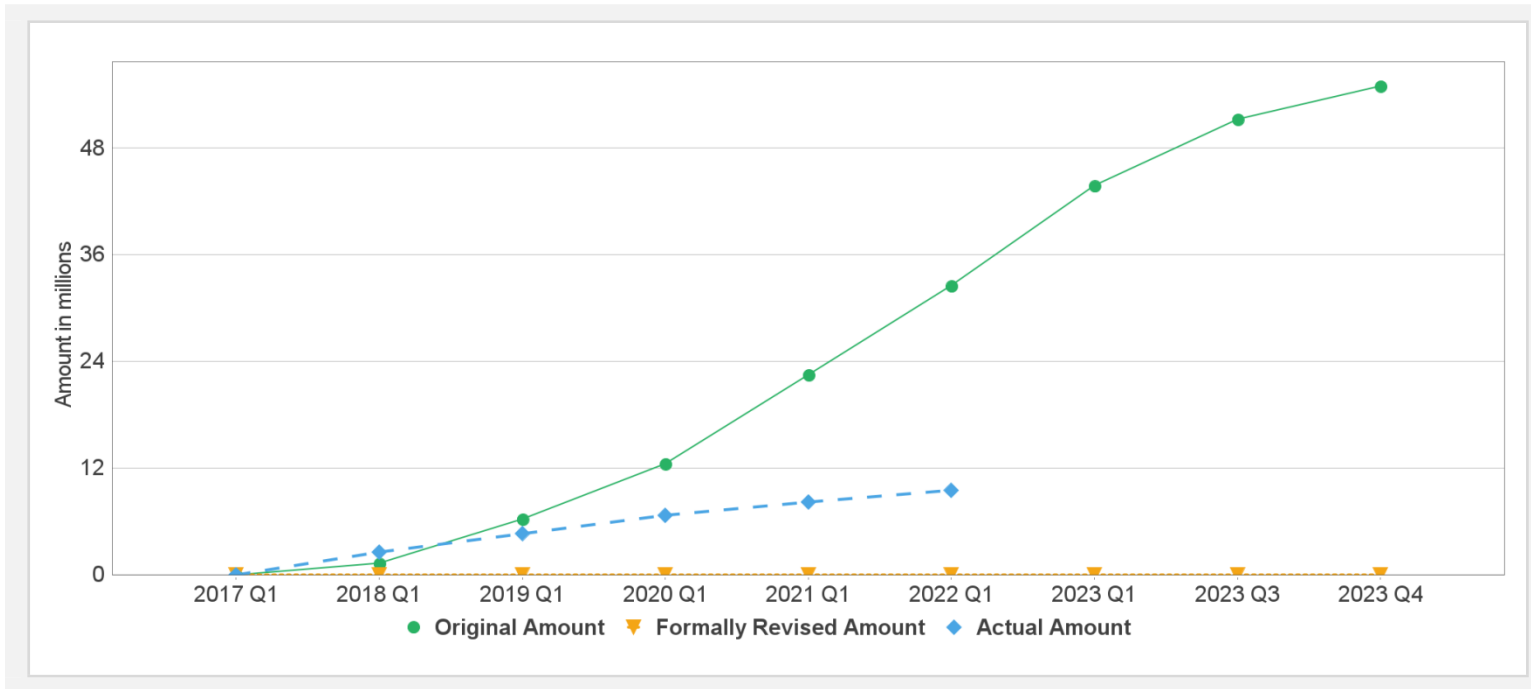


P147854	IBRD-86370	Effective	USD	55.00	55.00	0.00	9.60	45.40	<div style="width: 17%; height: 10px; background-color: #28a745;"></div>	17%
---------	------------	-----------	-----	-------	-------	------	------	-------	--	-----

**Key Dates (by loan)**

Project	Loan/Credit/TF	Status	Approval Date	Signing Date	Effectiveness Date	Orig. Closing Date	Rev. Closing Date
P147854	IBRD-86370	Effective	14-Jul-2016	02-Sep-2016	13-Dec-2016	30-Jun-2023	30-Jun-2023

**Cumulative Disbursements**



**PBC Disbursement**

PBC ID	PBC Type	Description	Coc	PBC Amount	Achievement Status	Disbursed amount in Coc	Disbursement % for PBC

**Restructuring History**

There has been no restructuring to date.

**Related Project(s)**

There are no related projects.