



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: 13 | ARCHIVED on 09-Feb-2024 | ISR59638 |

Implementing Agencies: Council for Development and Reconstruction, Lebanese Republic

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: 31-Dec-2024

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 \$49.10 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 \$4.40 M)

Overall Ratings

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

Implementation Status and Key Decisions

The project made significant progress in the past one year and cumulatively has completed about 157 km sewer network to connect to the treatment plants in Zahle, Aitanit and Anjar. This enables collection and treatment of about 12000 cubic meters of wastewater and improvement in the quality Litani River Water.

The project has also successfully completed the activities aimed at demonstration of good agricultural practices and has achieved reduction in the nutrient load, about 66 percent reduction in the use of excess fertilisers and 63 percent reduction in pesticide sprays among the targeted 280 farmers. These results support in reducing the nutrient and pesticide load reduction in Litani River in the long run.

All project activities are expected to be completed by the closing date of December 31, 2024.



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	Moderate	Moderate
Institutional Capacity for Implementation and Sustainability	Substantial	Substantial	Moderate
Fiduciary	Moderate	Substantial	Substantial
Environment and Social	Moderate	Moderate	Moderate
Stakeholders	Moderate	Substantial	Moderate
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	25-May-2023	31-Jan-2024	31-Dec-2024
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.			
▶ Nutrient load reduction (Nitrogen(N)) achieved under the project (Tons/year, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	496.00	470.00	169.88	248.00



Date	01-Jun-2016	25-May-2023	25-May-2023	30-Jun-2023
Comments:	The project has achieved an average of 65.75% reduction in Nitrogen. This, when extrapolated based on 496 tons baseline will equal to $65.75 \times 496 / 100 = 326.12$ tons. Thus $496 - 326.12 = 169.88$ tons. Activities under this component were completed in December 2022 and results were reported in 2023.			
► Quantity of municipal wastewater collected and treated under the project (daily flow in m3) (Cubic Meter(m3), Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	10,585.00	11,873.00	30,000.00
Date	01-Jun-2016	25-May-2023	31-Jan-2024	31-Dec-2024
Comments:	The project has constructed 157 Km of sewer network and 1200 households 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 11,870 m3/day.			
► Direct project beneficiaries (Number, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	51,385.00	57,624.00	344,000.00
Date	01-Jun-2016	25-May-2023	31-Jan-2024	31-Jan-2024
□ Female beneficiaries (Percentage, Custom Supplement)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	30.00	49.00	49.00
► Reduction in the excess fertilizers used (Percentage, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	65.75	65.75	50.00
Date	31-Mar-2020	25-May-2023	25-May-2023	30-Jun-2023
Comments:	Activities were completed by December 2022 and results were reported in 2023			
► Reduction in pesticides sprays (Percentage, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	63.00	63.00	30.00
Date	31-Mar-2020	25-May-2023	25-May-2023	30-Jun-2023
Comments:	Activities were completed by December 2022 and the results were reported in 2023			



Overall Comments

The activities and results related to indicators #2,5 and 6 were achieved by May 2023 and hence actual and end target dates are shown in 2023.

Intermediate Results Indicators by Components

Component 1: Improvement of Municipal Sewage Collection				
► New household sewer connections constructed under the project (Number, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	168.00	1,200.00	7,300.00
Date	01-Jun-2016	25-May-2023	31-Jan-2024	31-Dec-2024
► Sewer network constructed in the project area (km) (Kilometers, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	28.00	157.00	200.00
Date	14-Jun-2016	25-May-2023	31-Jan-2024	31-Dec-2024
Comments:	A total of 19 km in Zahle and 22 km in Aitanit, 55 km in Anjar Lot 1 and 45 km in Anjar Lot 2 have been constructed to-date.			

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	25-May-2023	31-Jan-2024	31-Dec-2024
Comments:	The cleanup campaigns are yet to be initiated. .			
► o SESA of National Solid Waste Strategy and SESA of National Water Strategy prepared following a consultative approach and approved by the MoE (Yes/No, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	No	No	No	Yes
Date	31-Mar-2020	25-May-2023	31-Jan-2024	31-Dec-2024
Comments:	SESA studies are in the final stages of preparation			



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	25-May-2023	25-May-2023	14-Jun-2023
Comments:	This indicator includes participants in training workshops offered through the project. Activities were completed by December 2022 and results were reported in 2023			
► Farmers trained on Integrated Pest Management (IPM) practices (Number, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	249.00	203.00	203.00	280.00
Date	13-Dec-2016	25-May-2023	25-May-2023	30-Jun-2023
Comments:	Activities were completed by December 2022 and results were reported in 2023			

Overall Comments

The activities and results related to Component 2 indicators were achieved by May 2023 and hence actual and end target dates are shown in 2023.

Performance-Based Conditions

Data on Financial Performance

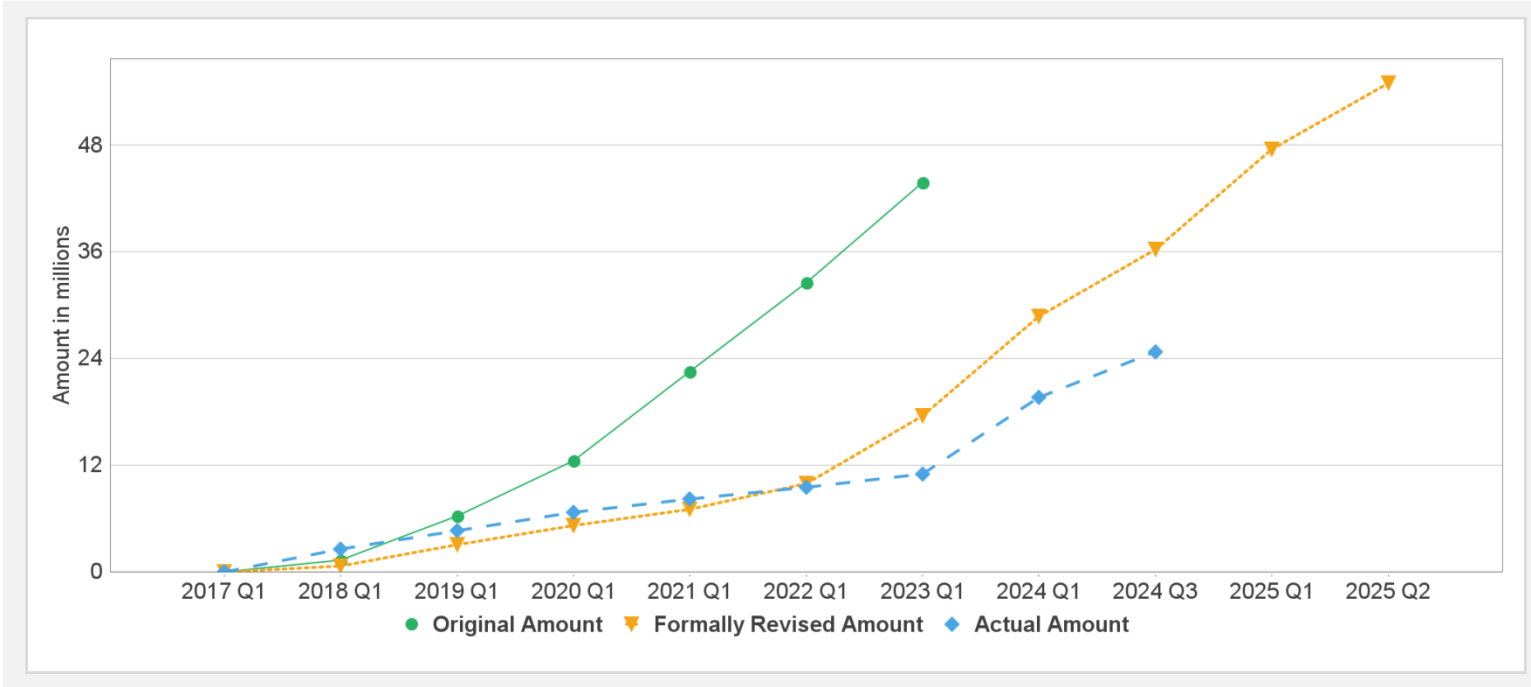
Disbursements (by loan)

Project	Loan/Credit/TF	Status	Currency	Original	Revised	Cancelled	Disbursed	Undisbursed	% Disbursed
P147854	IBRD-86370	Effective	USD	55.00	55.00	0.00	24.83	30.17	45%

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	31-Dec-2024

Cumulative Disbursements



Restructuring History

Level 2 Approved on 04-Mar-2022 ,Level 2 Approved on 19-Jun-2023 ,Level 2 Approved on 20-Dec-2023

Related Project(s)

There are no related projects.