

REPUBLIC OF LEBANON
COUNCIL FOR DEVELOPMENT AND RECONSTRUCTION

Lake Qaraoun Pollution Prevention Project
Loan Agreement No. LB-8637 – Project ID IBRD P147854

Semestrial Report

Period Covered: January 2021 – June 2021

ABBREVIATIONS AND ACRONYMS

BWE	Beqaa Water Establishment
CDR	Council for Development and Reconstruction
CESMP	Construction Environmental and Social Management Plan
COM	Council of Ministers
CS	Consultancy Services
CW	Civil Works
DRD	Design Requirements Document
EIA	Environmental Impact Assessment
EMP	Environmental Management Plan
FAO	Food and Agriculture Organization of the United Nations
GAP	Good Agricultural Practices
GoL	Government of Lebanon
IBRD	International Bank for Reconstruction and Development
IC	Individual Consultant
ICB	International Competitive Bidding
IFR	Interim Financial Report
IPM	Integrated Pest Management
LRA	Litani River Authority
MoA	Ministry of Agriculture
MoE	Ministry of Environment
MoEW	Ministry of Energy and Water
MoF	Ministry of Finance
MTR	Mid Term Review
NCB	National Competitive Bidding
NGO	Nongovernmental Organization
O&M	Operations and Maintenance
PAD	Project Appraisal Document
PDO	Project Development Objective
PFS	Project Financial Statement
PMU	Project Management Unit
QCBS	Quality and Cost Based Selection
RFB	Request for Bid
SESA	Strategic Environmental and Social Assessment
SSS	Single Source Selection
TOR	Terms of Reference
WWTP	Wastewater Treatment Plant

PROJECT DATA SHEET

Project Name	Lake Qaraoun Pollution Prevention Project		
Project ID	P147854		
Implementing Agency	Council for Development and Reconstruction (CDR)		
Line Institutions	Ministry of Environment Ministry of Energy and Water Ministry of Agriculture Litani River Authority Beqaa Water Establishment		
Financing Instrument	Loan (IBRD loan number LB-8637)		
Budget	Loan	GoL Parallel Financing:	
	US\$ 55 million	US\$ 5 million	
Loan Agreement Date	September 2, 2016		
Effectiveness Date:	December 13, 2016	Closing Date	June 30, 2023
Key sectors	Environment, Wastewater, Agriculture, Solid Waste, Water		
Project Development Objectives	To reduce the quantity of untreated municipal sewage discharged into the Litani River and to improve pollution management around Lake Qaraoun.		
Project components and subcomponents	1. Improvement of Municipal Sewage Collection <ol style="list-style-type: none"> 1.1. Expansion of the sewerage network to connect to Zahle WWTP 1.2. Expansion of the sewerage network to connect to Anjar WWTP 1.3. Expansion of the sewerage network to connect to Aitanit WWTP 1.4. Design, Supervision, environment and social consultancy services 		
	2. Promotion of Good Agricultural Practice, including Integrated Pest Management <ol style="list-style-type: none"> Output 1: Assess current agricultural practices and develop GAP-IPM program Output 2: Train professionals and facilitators in GAP-IPM practices Output 3: Implement the GAP-IPM program at pilot plots Output 4: Provide strategy for sustainability of project outcomes 		
Project components and subcomponents	3. Solid Waste, Water Quality Monitoring, Capacity Building and Project Management <ol style="list-style-type: none"> 3.1. Technical studies in solid waste management (MoE) 3.2. Improvement in water quality monitoring and resources modelling (LRA) 3.3. Capacity building at the BWE 3.4. Capacity building at MoEW 3.5. Project management 		
	Intervention Area		
	Upper Litani River Basin, Beqaa, Lebanon		
	Project Modifications		
	As previously reported, there have been changes in the scope of work under the project's subcomponent. Project modifications are attached to Annex 1 for reference.		

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I. INTRODUCTION

As part of the World Bank's standard practices, the Project Management Unit should prepare a progress report every six months. This report covers the period from January 2021 to June 2021 and presents the following:

- A summary of the progress of work for each project component and sub-component
- Main challenges during the reporting period
- Project implementation status per component including key performance indicators and action plan
- Updates on financial disbursements and procurement plan
- Environmental and social safeguards report

II. SUMMARY OF PROJECT PROGRESS IN REPORTING PERIOD

Component 1: Improvement of Municipal Sewerage Collection

Subcomponent 1.1: Expansion of The Sewerage Network to Connect to Zahle WWTP

- CDR PMU was processing the termination of the contract with ASDI on the basis of violating GCC Clause 15.2b, 15.2 c (k) and sub-clause 7.6.
- CDR PMU reviewed offers for updating the design, BoQ, and tender documents for remaining works. Justification report for direct selection of design consultant, RELK, and ToR shared with WB on 03/06/2021 and a revised version was submitted on 21/06/2021.
- However, given the economic crisis, CDR High Level Management agreed to give the Contractor a chance to continue works. Thus, contract termination and rebidding processes were not continued.
- Meetings with the Engineer, and the Contractor were held on 24/06/2021 and 29/06/2021 to discuss the restart of works and available sites.
- Minimal site works executed based on an updated snag list in Taalabaya, Zahle, Hezzerta, Saadnayel until April 2021 after which no works were registered on site.
- Resolve access issues for 1,735 m of sewer lines in Qaa El Rim based on Municipal Decision No. 12 issued on 21/05/2021.
- 20 waivers were signed by landowners in Zahle to resolve access issues at sewer line ZH-A (20 km). Waivers for two lots are still pending landowner's signature. Weekly follow up with the landowner's lawyer and meeting with landowner on 28/06/2021 to explain the project and request waiver signature.
- Agreement with the lawyer of the Convent in Hazerta on 03/06/2021 to resolve access issue at sewer line HZ-L by rerouting within the Convent's property.

Component 1: Improvement of Municipal Sewerage Collection

Subcomponent 1.2: Expansion of The Sewerage Network to Connect to Anjar WWTP

- Evaluation of bids received for Lot 1 and Lot 2 on 18/02/2021.
- There were no qualified bidders for Lot 1. Decision to relaunch the bid for Lot 1 on 29/04/2021.
- Revision of bidding documents for Lot 1 rebidding to comply with new version of Standard Bidding Documents (SBD) of March 2021 based on WB request 28/05/2021.
- Only one bidder was qualified for Lot 2. Contract awarded to Danash Contracting Company based on CDR Decision No. 188/2021/A on 22/04/2021.
- Following several rounds of revisions, CDR submitted revised bid evaluation reports for Lot 1 and Lot 2 on 17/06/2021 and additional documents for Lot 2 on 24/07/2021 for WB no objection.
- WB No Objection on ESMP for El Marj Wastewater System on 07/06/2021.
- For Supervision Engineer (Lot 1 – Lot 2), proposals were received on 12/02/2021. The technical evaluation of the proposals was approved by CDR board decision No. 92/2021/A on 25/02/2021 and the WB No Objection was received on 30/03/2021. A financial opening session was held on 20/04/2021. Following a combined technical and financial evaluation, CDR decision No. 202/2021/A on 06/05/2021 awarded the bid to SU YAPI (Turkey) / KREDO (Lebanon) [as sub consultant]. The combined technical and financial evaluation report, CDR Decision, and a draft contract were sent to the WB for No Objection on 29/06/2021.

Component 1: Improvement of Municipal Sewerage Collection

Subcomponent 1.3: Expansion of The Sewerage Network to Connect to Aitanit WWTP

- Execution of 73% of sewer lines in Qaraoun and 92% of sewer lines in Baaloul.
- A variation order (VO1) was approved by CDR Decision No. 263/2021/A on 20/05/2021 and sent to WB for approval on 17/06/2021. The Contractor and Consultant will not claim any compensation or indemnities consequent to this variation order and extension of time. VO1 included:
 - Use of HDPE pipes in place of Ductile Iron (DI) pipes for pump stations pressure mains due to the shortage in supply of DI pipes within Lebanon and the difficult and time consuming import conditions caused by the financial crisis;
 - Additional Storage Capacity of the wet pit to hold the inflow for many hours (six hours) that will secure enough time for the stations' operating authorities to take action in the presence of pumping failure, thus reducing the risk of overflow;
 - Extension of time for the completion of works for 6 months until 26/11/2021 due to COVID-19 pandemic lockdowns and to the roads closure because of public demonstrations which suspended the execution of works at several intervals.

Component 2: Promotion of Good Agricultural Practice, including Integrated Pest Management

- Five additional comparative pilot plots on potato were established in Riyak, Terboul, Qabb Elias, Taalabaya, and Ferzol (Zahle Caza).
- Seven soil samples were collected in February and March 2021 from the comparative plots before planting for soil analysis at labs in LARI.
- Based on soil analysis results, fertilizer types and quantities to be used were recommended.
- A total of 684 technical support visits to 76 potato farmers in Zahle and West Bekaa were conducted to inform farmers on integrated crop management practices.
- Technical Field Guide on Integrated Potato Management was submitted for review by FAO.
- Review results framework by modifying the target of indicator “farmers adopting improved agricultural technology” from 30% to a number of 140 famers.
- No-cost extension of contract until 31/12/2022 based on revised budget and updated work plan approved by CDR board by Decision No. 293/2021 on 10/06/2021, submitted to WB for No Objection on 24/06/2021.
- Short visibility video has been produced and shared with MoA, CDR and WB.

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

Subcomponent 3.1: Technical studies in solid waste management

- ❖ Studies for Closure and Rehabilitation of Bar Elias Dumpsite
 - Waste characterization works (trial pits, boreholes, landfill gas measurements) in April 2021.
 - Submission of Assessment of Alternatives and Preliminary Design Report on 07/05/2021.
 - ESIA screening application submitted to MoE on 10/06/2021 and draft screening report on 30/06/2021.
- ❖ Studies for the Assessment of Odor Impact from SWM Facilities and Landfills
 - Draft contract signature with consultant, RELK – Odournet, on 11/03/2021.
 - Consultant was notified with official contract on 09/04/2021.
 - Kick-off meeting held between RELK – Odournet, MoE, and CDR on 29/04/2021.
 - Data collection report submitted on 09/06/2021.
 - On-going discussion between MoE and Consultant on methodology.

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

Subcomponent 3.1: Technical studies in solid waste management

- ❖ SESA Study for the National Integrated Solid Waste Strategy
 - Proposals by short-listed consultants were received on 16/02/2021.
 - Technical evaluation submitted to CDR board for approval on 04/03/2021 and a Decision No. 104/2021/A on 11/03/2021 was issued to open the Financial Offers.
 - The Financial Offers were opened on 24/03/2021.
 - The combined technical and financial report was finalized and submitted to CDR board for approval on 15/04/2021. LDK-ELARD JV was awarded by CDR Decision No. 169/2021/A dated 22/04/2021.
 - Contract signature is delayed due to the arbitration clause issue for all Consultancy and Works projects under LQPPP discussed in project challenges below.
- ❖ Solid Waste Expert at MoE
 - REOI published on 13/01/2021 and EOIs were received on 12/02/2021.
 - Evaluation and interview with candidates, and evaluation report was submitted for CDR board approval on 04/03/2021.
 - CDR board approved the evaluation report by CDR Decision No. 96/2021/A on 11/03/2021.
 - Draft contract was signed by recruited solid waste expert on 14/04/2021 and official contract notification was on 17/05/2021, following internal signatures at CDR.
- ❖ Feasibility Study for Sustainable Sludge Management in the Bekaa Region
 - Feasibility study final draft report submitted on 25/01/2021 following CDR PMU comments.
 - Presentation of the study findings on 08/03/2021.
 - Revision of the study from April till June based on MoE comments.
 - Discussion of the outcomes of the study in a meeting held on 10/06/2021 between the Consultant (Cabinet Merlin), MoE, CDR, and LRA. The study concluded that the most suitable and cost-effective treatment method for sludge is solar drying. Disposal and further use options in quarry rehabilitation were discussed with MoE and LRA.

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

Subcomponent 3.2: Improvement in Water Quality Monitoring – LRA

- ❖ Website for LRA
 - Consultant, ArabiaGIS, submitted revised DRD to CDR on 03/03/2021.
 - CDR PMU approved the DRD on 04/03/2021.
 - Consultant submitted revised concept visual design on 13/04/2021. LRA and CDR reviewed the design and discussed comments in a meeting on 23/04/2021.
 - Final homepage design submitted on 03/06/2021.

LRA requested CDR to cancel other activities under this subcomponent in a letter submitted on 05/11/2021. CDR will address these modifications in the next loan restructuring.

Subcomponent 3.3: Capacity Building at BWE

- ❖ IT support for BWE
 - REOI submission date was on 24/03/2021. Two EOIs were submitted, one after the deadline. Following evaluation, none of the EOIs qualified. Evaluation report sent to CDR board for approval on 30/06/2021.
 - RFP submitted to CDR legal division for review and approval on 21/06/2021.
- ❖ Experts at BWE
 - Contract of administrative officer at BWE ended on 31/05/2021 and was not renewed based on BWE board decision.
 - Contract of project manager – CDR ended on 30/06/2021 and was not renewed based on BWE board decision.

Subcomponent 3.4: Capacity Building at MoEW

- ❖ Updating the SESA of the updated National Water Sector Strategy (NWSS)
 - Revision of the Consultant's, ECODIT, proposal in January following WB comments.
 - ToR for updating the SESA of the NWSS submitted on STEP for WB review on 30/01/2021, and was approved by the WB on 01/03/2021 conditional to implementing the WB's remaining comments.
 - ECODIT was awarded the contract by CDR Decision No. 221/2021/A on 06/05/2021.

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

Subcomponent 3.4: Capacity Building at MoEW (continued)

- ❖ Sustainability of Wastewater Services in Aitanit, Zahle and Anjar
 - Preparation and revision of ToR:
 - MoEW submitted ToR for WB approval on 29/01/2021
 - WB comments received on 01/04/2021
 - MoEW submitted revised ToR for WB approval on 18/05/2021

Subcomponent 3.5: Project Management

- Renewal of contract for project focal point at MoEW until 31/07/2021.
- Renewal of contract of financial officer at CDR until 31/05/2022.
- Renewal of contract of procurement officer at CDR until 01/03/2022.
- Renewal of contract of project engineer at CDR until 07/08/2021.
- Contract of environmental social consultant at CDR ended on 30/04/2021.
- EOI for environmental social consultant were received on 12/02/2021 and evaluated. CDR Decision 95/2021/A on 11/03/2021 awarded the contract to the selected candidate. On 04/05/2021, the selected candidate declined to sign the contract. Evaluation of other candidates and negotiation with the WB to reducing the selection criterion from 8 years of experience to 6 in May and June 2021. Evaluation report for CDR board and WB approval was prepared.

Project Challenges

- ❖ COVID-19 lockdown from 07/01/2021 – 22/02/2021 which caused delays in:
 - Postponement of submittal deadline for the following:
 - Subcomponent 1.2 - Lot 1 and Lot 2 RFB (works services)
 - Subcomponent 1.2 – Supervision Engineer RFP
 - Subcomponent 1.3 – Proposals from shortlisted consultants for the SESA Study for the National Integrated Solid Waste Strategy
 - Procurement of landfill gas measurement equipment for waste characterization under Bar Elias dumpsite rehabilitation study (sub-component 3.1)
 - Decisions by CDR board which require physical meetings at CDR
 - Interruption of works under subcomponent 1.3
- ❖ Based on the requirements of Council of Ministers Circular No. 27/2008, CDR requested a consultation (No. 677/A on 24/03/2021) from the Legislative and Consultative Committee at the Ministry of Justice (Lebanese Government) regarding the arbitration clause in SCC 50.1 (5) in consultancy and works contracts. The committee replied (Ref: Consultation No. 344/2021) on 08/06/2021 recommending the addition of text to the arbitration clause in the SBD. The addition was sent to WB for approval on 29/06/2021. Awaiting the decision on the above, contract signature for all contracts with an international firm were delayed:
 - LDK - ELARD JV for SESA Study for the National Integrated Solid Waste Strategy
 - SU YAPI – KREDO (as sub consultant) for Supervision Engineer subcomponent 1.2
- ❖ Due to COVID-19 measures across the country, it was not possible to organize training workshops under component 2 for MoA staff during the reporting period.
- ❖ Under component 2, delay in delivery, thus distribution of fertilizers for early season of potato farmers until the end of season (July 2021) due to the COVID-19 pandemic, civil unrest, and road closures.
- ❖ The high price of fuel (diesel and gasoline) is affecting the ability of farmers to pump water for irrigation (only available source of clean irrigation water in the Bekaa), thus farmers are either not planting their lands with potato this season (late season 2021) or reducing the areas planted to the minimum. Fuel for generators and water pumps is mostly bought from the black market at a very high price which increases the cost of potato production cost making it unfeasible for some farmers. This made it challenging to select project beneficiaries, potato farmers, under component 2.

III. COMPONENTS IMPLEMENTATION STATUS

COMPONENT 1: IMPROVEMENT OF MUNICIPAL SEWERAGE COLLECTION (IBRD - US\$ 50.5 MILLION, GOL - US\$ 5 MILLION)

Component 1 includes the following:

- 1.1. Expansion of the sewerage network to connect to Zahle WWTP
- 1.2. Expansion of the sewerage network to connect to Anjar WWTP
- 1.3. Expansion of the sewerage network to connect to Aitanit WWTP
- 1.4. Design, Supervision, environment and social consultancy services

Subcomponent 1.4 includes design and supervision consultancies for component 1; as well as the preparation of safeguards documents for subcomponents 1.2 and 1.3 and supervision of safeguard instruments. Its implementation is closely related to the other subcomponents. Therefore, the progress under subcomponent 1.4 will be presented with the other components as applicable.

In what follows, for each subcomponent, the following is presented:

1. Project description which outlines the works to be executed, procurement information, and description of ongoing contracts
2. Works completed to date (June 2021)
3. Financial disbursement during reporting period and to date (June 2021)
4. Key performance indicators achieved to date based on the project's results framework
5. Work progress during the reporting period
6. Action plan

Note that the E&S Safeguards report attached in Annex 2 presents updates on the implementation of the E&S management and monitoring plans for all site works under Component 1 and any emerging issues. It reports on the Contractor's compliance to the measures required by the CESMP and the ESMP and presents updates on LAP implemented by CDR. It also includes detailed updates on unresolved access issues under component 1.1 (Zahle wastewater system).

1. SUB-COMPONENT 1.1: EXPANSION OF THE SEWERAGE NETWORK TO CONNECT TO THE ZAHLE WWTP (IBRD-US\$ 10.5 MILLION).

1.1. Project Description

Sub-component 1.1: Expansion of the sewage network to connect to the Zahle WWTP		
Description	Covered Areas	Greater Zahle (including Karak & Ksara), Saadnayel, part of Taalabaya, Qaa El Rim, Hazzerta, part of Ferzol
	Sewage network to be constructed (original contracted works)	107 km
	Works completed by other donors	26 km
	Remaining works to be executed	81 km
	Rehabilitation of existing network	2.8 km
	Number of new house chambers	5,100
	Beneficiary population by 2023	158,890
	Procurement Details (Contractor)	Procurement Category
Procurement Method		Request for Bids [RFB]
Procurement Process		Single Stage - One Envelope
Market Approach		Open / International
Original estimated cost		US\$ 26 million
Bid launch date		29.03.2017
Bid due date		02.06.2017
No. of offers received		12
Price range of offers received		US\$ 9.8 million and US\$ 18.7 million
Contract Award Date	03.08.2017 (CDR Decision # 600/2017/A)	
Contractor (QC1W1)	Name	ASD International for Transportation and General Contracting (ASDI)
	Date of Notice to Commence	16.04.2018
	Contract Duration	30 months
	Contract Completion Date	15.10.2020 ¹
	Original Contract Amount	US\$ 9,805,734.19
	New Contract Amount	US\$ 10,539,562.49
	Contract Addendums / Variations	One Variation for US\$ 733,828.3
	Date of Contract Addendum	11.10.2019
Procurement Details (Supervision Engineer)	Procurement Category	Consultancy Services [CS]
	Procurement Method	Quality and Cost-Based Selection- QCBS
	Market Approach	Open / International
	REOI launch date	09.12.2016
	REOI due date	12.01.2017
	RFP launch date	31.07.2017
	RFP due date	14.09.2017
	Contract Award Date	18.12.2017 (CDR Decision #1011/2017/A)
Supervision Engineer (QC1C1)	Name	JV: Dar El Handasah Taleb (Leb.) & NOVEC (Morocco)
	Date of Notice to Commence	16.04.2018
	Contract Duration	30 months
	Contract Completion Date	15.10.2020 ²
	Contract Amount	US\$ 378,622.27
	Contract Addendums / Variations	None to date

¹ No extension, since contract termination and preparation for rebidding were in process during the reporting period.

² Since negotiations for contract termination were ongoing during the reporting period, the Supervision Engineer was working in Defects Liability Period (DLP) of 12 months.

1.2. Site works completed to date

Municipality	Type of work	Original works (m)	Works completed by other donors (m)	Available works (m)	Works completed by Contractor (m)	Remaining works (m)
Zahle - El Ferzol	Compulsory Works	42,985	20,742	22,243	10,679	11,564
	Optional Works ³	23,020	0	23,020	0	23,020
Saadnayel - Taalbaya	Compulsory Works	16,233	1,824	14,409	5,467	8,942
	Optional Works	0	0	0	0	0
Qaa El Rim	Compulsory Works	8,000	1,946	6,054	0	6,054
	Optional Works	0	0	0	0	0
Hezzerta	Compulsory Works	11,771	1,353	10,418	1,933	8,485
	Optional Works	4,900	0	4,900	0	4,900
Total		106,910	25,865	81,045	18,080	62,965
		%	100%	24%	76%	17%
			24%	76%	17%	59%

1.3. Financial disbursements in US\$

Contract	Contractor/ Consultant	Committed amount	Disbursed amount (JAN – JUN 2021)	Disbursed amount (Up to JUN 2021)	%	Committed Undisbursed
Expansion of sewage network to connect to the Zahlé WWTP (QC1W1)	ASDI	10,539,562.49	-	2,850,945.10	27%	7,688,617.39
Supervision of sewage network to connect to the Zahlé WWTP (QC1C1)	DAH Taleb /Novec	378,622.27	-	250,024.48	66%	128,597.79

1.4. Key performance indicators

Key performance indicator	Target (2023) ⁴	Achieved (Up to June 2021)	%
Sewer network constructed (Km)	80	19	24%
New household sewer chambers (number)	5100	168	3%
Quantity of municipal wastewater collected under the project & treated in Zahle WWTP (m ³ /day)	29,655	10,585	36%
Direct Project Beneficiaries (number)	158,890	51,385	32%

1.5. Work progress during the reporting period

1. CDR PMU was processing the termination of the contract with ASDI on the basis of violating GCC Clause 15.2b, 15.2 c (k) and sub-clause 7.6:
 - i. Following revisions based on WB comments, the MoU for amicable settlement between CDR PMU and ASDI, and the justification and financial report were shared with WB on 04/03/2021.
 - ii. WB rejected the financial terms and conditions of the MoU of amicable settlement on 26/03/2021.

³ Works in areas with unresolved access issues were considered optional works under the contract.

⁴ Revised target (previously 107 km) because 26 km are executed by other donors.

- iii. Termination report was prepared by Supervision Engineer, Dar Taleb – NOVEC, following revisions from CDR PMU. Letter for termination was submitted to CDR board for review and approval on 20/04/2021.
 - iv. For remaining works, to update the design, BoQ, and tender documents, two options were considered: direct selection of design consultant, RELK, or addendum for Supervision Engineer, Dar Taleb – NOVEC. Offers were received by CDR PMU. Justification report for direct selection of design consultant, RELK, for remaining works and ToR shared with WB on 03/06/2021 and a revised version was submitted on 21/06/2021.
 - v. Meeting between WB procurement team and CDR to discuss termination report on 28/05/2021 Evaluation of financial claims was requested.
 - vi. Following lobbying from the Syndicate of Contractors, CDR High Level Management (HLM) agreed in June 2021 to request the Contractor to restart works since the legislation for suspending the contracts duration has not been renewed by the Lebanese Parliament, and because most site access issues have been resolved.
 - vii. As a result, after 6 months, negotiations for contract termination and preparation for bidding of remaining works were stopped.
 - viii. Meetings with Engineer, and Contractor held on 24/06/2021 and 29/06/2021 to discuss restart of work and available sites.
2. Minimal remaining construction works were executed in Taalabaya, Zahle, Hezzerta, Saadnayel till April 2021 after which no works were registered on site. Works were limited to an updated snag list, and they included:
- Cleaning manholes and repairing ladder steps
 - Plastering of Concrete Cover Manholes
 - Adjusting asphalt settlement
 - Adjusting manhole cover level to match with existing asphalt
 - Adjusting benching inside manhole, especially at the connection between manholes and pipe
 - Raising fully covered manholes
 - Removing asphalt stocked near trench and pieces of precast manholes
 - Replacing unapproved manhole covers with proper ones
 - Checking on site the as built drawings submitted by the Contractor.
 - Inspection for executed lines
3. No monthly progress reports were submitted by the Supervision Engineer during the reporting period, as there were no ongoing site works.

1.6. Action Plan

Task	Responsible	Estimated timeline
Prepare justification report and a letter to the contractor to restart work.	CDR - PMU	by 08/07/2021
Review and approval of justification report	WB	July 2021
Extension of time for contractor until end of January 2022 – CDR board approval then WB NO Objection	CDR – PMU	When WB NO on justification report
Restart of works by contractor		September 2021
Resolve remaining access issues	CDR – PMU	Before September 2021
Follow up on completion of snag list items	CDR - PMU	When works restart

2. SUB-COMPONENT 1.2: EXPANSION OF THE SEWERAGE NETWORK TO CONNECT TO ANJAR WWTP (IBRD COST-US\$ 34 MILLION)

Works under this subcomponent are divided into 3 lots. Bidding for lot 1 and lot 2 works was ongoing during the reporting period. Bidding for lot 3 in Saouiri will be decided at a later stage based on the status of the expropriation needed to execute the works, remaining budget and timeline. The Italian Government is funding the construction of Anjar WWTP to which the sewage network executed under this project will be connected.

2.1. Project Description

Sub-component 1.2: Expansion of the sewage network to connect to the Anjar WWTP		
Description	Covered Areas	Lot 1: Bouerij, Makse, Mraijet, Taanayel, Wadi Delem, Zebdol, Jlala Lot 2: Chtaura, part of Taalabaya
	Sewage network to be constructed	Total: 239 km Lot 1: 104 km Lot 2: 135 km
	Rehabilitation of existing network	Total: 55 km Lot 1: 23 km Lot 2: 31 km
	Number of new house chambers	Total: 5,820 Lot 1: 2,070 Lot 2: 3,750
	Beneficiary population by 2023	Total: 116,680
Procurement Details (Design Engineer)	Procurement Category	Consultancy Services [CS]
	Procurement Method	Direct Selection [CDS]
	Market Approach	Direct
	Justification for Direct Selection	22.03.2017
	Contract Award Date	29.05.2017 (CDR Decision # 411/2017/A)
Design Engineer (QC1C2)	Name	Bureau Technique pour le Development [BTD] / Lebanon
	Date of Notice to Commence	09.10.2017
	Contract Duration	10 months
	Contract Completion Date	08.08.2018
	Original Contract Amount	US\$ 290,500
	Contract Addendums / Variations	
	Addendum Award Date Notification Date	07.02.2019 (CDR Decision # 87/2019/A) 07.05.2019

	Revised Contract Duration	13 months ⁵
	Revised Contract Completion Date	06.08.2019
	Amount of Variation Order	US\$ 102,000
	Revised Contract Amount	US\$ 392,500
Procurement Details (Contractor)	Procurement Category	Civil Works [CW]
	Procurement Method	Request for Bids [RFB]
	Procurement Process	Single Stage - One Envelope
	Market Approach	Open / International
	Original estimated cost	Lot 1: US\$ 13 million Lot 2: US\$ 17 million
	Bid launch date	07.12.2020
	Bid due date	18.02.2021
	No. of offers received	Lot 1: 5 Lot 2: 7
	Price range of offers received	Lot 1: 5.5 to 10.5 million US\$ Lot 2: US\$ 8.9 million and US\$ 31 million
	Contract Award Date	Lot 2: 22.04.2021 (CDR Decision # 188/2021/A)
Contractor – LOT 2 (QC1W2)	Name	Danash Contracting Company
	Date of Notice to Commence	Pending contract signature
	Contract Duration	18 months
	Contract Completion Date	18 months from notice to commence
	Original Contract Amount	US\$ 6,905,853.13
Procurement Details (Supervision Engineer)	Procurement Category	Consultancy Services [CS]
	Procurement Method	Quality and Cost-Based Selection- QCBS
	Market Approach	Open / International
	REOI launch date	15.01.2020
	REOI due date	18.02.2020
	RFP launch date	04.12.2020
	RFP due date	18.02.2021
	Contract Award Date	06.05.2021 (CDR Decision # 202/2021/A)
Supervision Engineer (QC1C3)	Name	Su Yapi / KREDO
	Date of Notice to Commence	Pending contract signature of Contractor
	Contract Duration	18 Months
	Contract Completion Date	18 months from notice to commence
	Contract Amount	US\$ 366,200

2.2. Site works completed to date

Ongoing bidding process, no site works to date.

2.3. Financial disbursements in US\$

Contract	Contractor/ Consultant	Committed amount	Disbursed amount (JAN – JUN 2021)	Disbursed amount (Up to JUN 2021)	%	Committed Undisbursed
Design of sewage network to connect to the Anjar WWTP (QC1C2)	BTD	392,500.00	-	317,970.00	81%	74,530.00

2.4. Key performance indicators

Key performance indicator	Target (2023)	Achieved (Up to June 2021)	%
Sewer network constructed (Km)	239	-	-
New household sewer chambers (number)	5,820	-	-
Quantity of municipal wastewater collected under the project & treated in Anjar (El Marj) WWTP (m ³ /day)	14,613	-	-
Direct Project Beneficiaries (number)	116,680	-	-

⁵ Additional three months (on the original 10 months duration) starting 07.05.2019

2.5. Work progress during the reporting period

The main activity during the reporting period was the bidding process for Lot 1 and Lot 2 works for Contractor:

- Bids for Lot 1 and Lot 2 were received on 18/02/2021.
- Following bid evaluation, there were no qualified bidders for Lot 1, and only one bidder qualified for Lot 2.
- CDR Decision to relaunch the bid for Lot 1 was on 29/04/2021. The bidding documents had to be revised to comply with the new version of Standard Bidding Documents (SBD) of March 2021 based on WB request on 28/05/2021.
- CDR Decision to award Lot 2 bidder, Danash Contracting Company, on 29/04/2021.
- Following several rounds of revisions, CDR submitted revised bid evaluation reports for Lot 1 and Lot 2 on 17/06/2021 and additional documents for Lot 2 on 24/07/2021 for WB no objection.

For Supervision Engineer (Lot 1 – Lot 2), proposals were received on 12/02/2021. The technical evaluation of the proposals was approved by CDR board decision No. 92/2021/A on 25/02/2021 and the WB No Objection was received on 30/03/2021. A financial opening session was held on 20/04/2021. Following a combined technical and financial evaluation, CDR decision No. 202/2021/A on 06/05/2021 awarded the bid to SU YAPI (Turkey) / KREDO (Lebanon) [as sub consultant]. The combined technical and financial evaluation report, CDR Decision, and a draft contract were sent to the WB for No Objection on 29/06/2021. The challenge of the arbitration clause is delaying contract signature.

2.6. Action Plan

Task	Responsible	Estimated timeline
Approval on combined technical and financial evaluation for Supervision Engineer	WB	July 2021
Approval of draft contract for Supervision Engineer following addition of text under arbitration clause	WB	July 2021
Approval of SBD for Lot 1 rebidding	WB	July 2021
Approval of BER for Lot 1 and Lot 2	WB	July 2021
Relaunch of Lot 1 bids	CDR	September 2021
Contract signature – Danash Contracting Company	CDR	September 2021

3. SUB-COMPONENT 1.3: EXPANSION OF SEWERAGE NETWORK TO CONNECT TO AITANIT WWTP (IBRD-US\$ 2.5 MILLION).

3.1. Project Description

Sub-component 1.3: Expansion of the sewage network to connect to the Aitanit WWTP		
Description	Covered Areas	Baaloul, Qaraoun
	Sewage network to be constructed	22 km
	Rehabilitation of existing network	-
	Number of new house chambers	168
	Beneficiary population by 2023	9,425
Procurement Details (Consultant for preparation of Safeguards Instruments)	Procurement Category	Consultancy Services [CS]
	Procurement Method	Direct Selection [CDS]
	Market Approach	Direct
	Justification for Direct Selection	26.04.2017
	Invitation to Selected Consultant	01.05.2017
Consultant (QC1C5)	Contract Award Date	24.07.2017 (CDR Decision # 556/2017/A)
	Name	ELARD – Lebanon
	Date of Notice to Commence	29.09.2017
	Contract Duration	15 months
	Contract Completion Date	28.12.2018
Procurement Details (Design Engineer)	Contract Amount	US\$ 66,383
	Procurement Category	Consultancy Services [CS]
	Procurement Method	Direct Selection [CDS]
	Market Approach	Direct
	Justification for Direct Selection	23.01.2018
Design Engineer (QC1C4a)	Contract Award Date	12.04.2018 (CDR Decision # 298/2018/A)
	Name	Bureau Technique pour le Development [BTD] / Lebanon
	Date of Notice to Commence	07.11.2018
	Contract Duration	1 month
	Contract Completion Date	06.12.2018
Procurement Details (Contractor)	Original Contract Amount	US\$ 17,560
	Contract Addendums / Variations	None
	Procurement Category	Civil Works [CW]
	Procurement Method	Request for Bids [RFB]
	Procurement Process	Single Stage - One Envelope
	Market Approach	Open / International
	Original estimated cost	US\$ 2.5 million
	Bid launch date	04.06.2018
	Bid due date	31.07.2018
Contractor (QC1W3)	No. of offers received	10
	Price range of offers received	US\$ 1.8 million - US\$ 3.7 million
	Contract Award Date	09.12.2019
	Name	Khoury Contracting Company
	Date of Notice to Commence	27.05.2020
	Contract Duration	12 months
	Original Contract Completion Date	26.05.2021
	Original Contract Amount	US\$ 2,419,281.32
	New Contract Amount	US\$ 2,522,112.62
Procurement Details (Supervision Engineer)	New Contract Complete Date	26.11.2021
	Contract Addendums / Variations	US\$ 102,831.30
	Date of Addendum	CDR board decision No. 263/2021/A on 20/05/2021 – awaiting WB NO
	Procurement Category	Consultancy Services [CS]
Procurement Details (Supervision Engineer)	Procurement Method	Quality and Cost-Based Selection- QCBS
	Market Approach	Limited / National
	REOI launch date	Not Applicable
	REOI due date	Not Applicable

	RFP launch date	02.05.2019
	RFP due date	24.05.2019
	Contract Award Date	12.12.2019 (CDR Decision # 856/2019/A)
Supervision Engineer (QC1C4b)	Name	Bureau Technique pour le Development [BTD] / Lebanon
	Date of Notice to Commence	27.05.2020
	Contract Duration	12 months
	Contract Completion Date	26.05.2021
	Contract Amount	US\$ 63,331.34

3.2. Site works completed to date

Municipality	Original works (km)	Works completed by Contractor (km)	Remaining works (km)
Baaloul	3.2	2.9	0.3
Qaraoun	18.8	13.7	5.1
Total	22	16.7	5.3
%	100	76%	24%

3.3. Financial disbursements in US\$

Contract	Contractor/ Consultant	Committed amount	Disbursed amount (JAN – JUN 2021)	Disbursed amount (Up to JUN 2021)	%	Committed Undisbursed
ESMP/LAP Anjar and Aitanit (QC1C5)	ELARD	66,383.00	-	50,782.98	76%	15,600.02
Design of sewage network to connect to the Aitanit WWTP (QC1C4a)	BTD	17,560.00	-	15,804.00	90%	1,756.00
Expansion of sewage network to connect to the Aitanit WWTP (QC1W3)	Khoury Contracting Company	2,522,112.62	437,116.38	1,052,410.63	42%	1,469,701.99
Supervision of sewage network to connect to the Aitanit WWTP (QC1C4b)	BTD	62,832.67	26,529.98	26,628.18	42%	36,204.49

3.4. Key performance indicators

Key performance indicator	Target (2023)	Achieved (Up to June 2021)	%
Sewer network constructed (Km)	22	16.7	76
New household sewer chambers (number)	168	127	76
Quantity of municipal wastewater collected under the project & treated in Aitanit WWTP (m ³ /day)	1,837	-	-
Direct Project Beneficiaries (number)	9,425	-	-

3.5. Work progress during the reporting period

Monthly progress reports were submitted by the Supervision Engineer. During the reporting period, the Contractor, Khoury Contracting Company, was forced to stop essential works and carry on with emergency works only for around a month (from January 13th, 2021 until February 15th, 2021) due to COVID-19 lockdown measures across the country.

The following site works were executed:

- Excavation, bedding, pipe laying and backfilling works were executed for:
 - o Around 90% of sewer lines in Baaloul (2.9 km out of 3.2 km).
 - o Around 73% of sewer lines in Qaraoun (13.7 km out of 18.8 km).
- Asphaltting works
- Topographic surveys of pumping stations and asphaltting locations
- Minimal excavation works at pumping stations 1 and 2 locations (around 1% progress)

A variation order (VO1) amounting to US\$ 102,831.30 was approved by CDR Decision No. 263/2021/A on 20/05/2021 and sent to WB for approval on 17/06/2021. The Contractor and Consultant will not claim any compensation or indemnities consequent to this variation order and extension of time. VO1 included:

- Use of HDPE pipes in place of Ductile Iron (DI) pipes for pump stations pressure mains due to the shortage in supply of DI pipes within Lebanon and the difficult and time consuming import conditions caused by the financial crisis;
- Additional Storage Capacity of the wet pit to hold the inflow for many hours (six hours) that will secure enough time for the stations' operating authorities to take action in the presence of pumping failure, thus reducing the risk of overflow;
- Extension of time for the completion of works for 6 months until 26/11/2021 due to COVID-19 pandemic lockdowns and to the roads closure because of public demonstrations which suspended the execution of works at several intervals.

3.6. Action Plan

Task	Responsible	Estimated timeline
No objection on VO1 including extension of time till 26.11.2021	WB	July 2021

COMPONENT 2: PROMOTION OF GOOD AGRICULTURAL PRACTICE, INCLUDING INTEGRATED PEST MANAGEMENT, TO REDUCE AGRO-CHEMICAL POLLUTION IN THE UPPER LITANI BASIN (QC2C1 - US\$1.5 MILLION)

1. Project Description

This Component supports targeted farmers in the Upper Litani Basin to adopt Integrated Pest Management practices and Good Agricultural Practices, which would contribute to reducing the agrochemical pollution and runoff into the Litani River and Lake Qaraoun. The component has four outputs:

- i) Assessment of current agricultural practices and development of a GAP-IPM program;
- ii) Training of professionals & facilitators in GAP-IPM practices;
- iii) Implementation of the GAP-IPM program at the farm level;
- iv) Evaluation and monitoring for sustainability.

Component 2: Promotion of Good Agricultural Practices		
Description	Covered Areas	Baaloul, Qaraoun
	Sewage network to be constructed	22 km
	Rehabilitation of existing network	-
	Number of new house chambers	168
	Beneficiary population by 2023	9,425
Procurement Details	Procurement Category	Consultancy Services [CS]
	Procurement Method	UN Agencies (Direct) [UN]
	Market Approach	Direct
	Invitation to Selected Consultant	26.10.2016
	Contract Award Date	04.05.2017
Consultant	Name	Food & Agriculture Organization of the UN
	Date of Notice to Commence	09.06.2017
	Contract Duration	4 years
	Contract Completion Date	08.06.2021
	Contract Amount	US\$ 1,500,000
	Contract Addendums / Variations	Extension of time with no cost implications (CDR Decision # 293/2021 on 10/06/2021)
	New Contract Completion Date	31.12.2022 (awaiting WB NO)

2. Outputs Implementation Status

Output	Indicator	End Target	Progress to date	%
Output 1: Current agricultural practices and farmers' (men and women)	1. Number of studies and analysis carried out at the inception period of the project	1 Baseline Study	1	100%
	2. Chemical analysis of crops, soil & water for pesticide / fertilizer residues, and chemical composition analysis of soil & water in pilot plots	60 Samples	56	93%

Output	Indicator	End Target	Progress to date	%
roles and knowledge in the project area are analyzed and assessed, and good agricultural practices including IPM programmes are developed.	3. Number of farmers targeted, areas and training curricula defined	280 farmers /year + 1 map of defined areas + 1 training curricula	76 farmers ⁶ + 203 farmers ⁷ + 1 map + 1 training curricula	100%
	4. Gaps identified in the agricultural practices	One list of identified gaps	1	100%
	5. Programmes developed to address the gaps of the agricultural practices	2 ICM/GAP Programmes	2	100%
	6. Number of manuals/guidelines on good agricultural practices/ICM developed	2 field guides /manuals	1	50%
Output2: The capacity of MoA professionals /facilitators, other stakeholders and farmers developed in IPM-Good agricultural practices.	1. Number of trainings for the technical staff of the projects, farmers and other stakeholders	6 training workshops	5	83%
	2. Number of professionals trained through the project	100 trained professionals	139	139%
	3. Number of female professionals trained and involved in the project implementation	50 females out of 100 professionals	75 out of 139	150%
	4. Number of specific and awareness raising programme to farmers and trainees	30 sessions	12	40%
	4.1. Percentage of attendees report feeling satisfied with sessions provided	60%	90%	150%
	5. Number of communication, outreach material, and media programmes published / released	1 short movie + 1 leaflet + 2 field guides/manuals	1 video + 1 leaflet + 1 field guide	70%
Output 3: Good agricultural practices including IPM programmes tested and implemented.	1. Number of ICM/good practices in agriculture programmes developed for target crops	2 ICM/GAP Programmes	2	100%
	2. Lists and specifications of agricultural inputs needed for the project prepared	List and Specs of agriculture inputs prepared	1 list prepared and updated regularly	100%
	3. Number of demo plots established and maintained at the target area	5 plots/year	7 plots/year on average	140%
	4. Number of one-on-one farmer technical support visits	8 visits/farmer (280*8 = 2,240 total visits)	9 visits/farmer (76*9 = 684 in total)	30.5% (125% per farmer)
Output 4: Project progress is monitored and evaluated, and measures for sustaining the	1. Midterm review report	1. Midterm review by end of second year	1	100%
	2. Evaluation report	2. Evaluation mission and report at the end of the project		At the end of the project

⁶ 76 farmers targeted in one-on-one technical support visits

⁷ 203 farmeres participated in at least one event (training, seminar, field day) organized by the project

Output	Indicator	End Target	Progress to date	%
outcomes are well-defined	3. Final report	3. Final report and measures for sustaining the project outcomes developed and shared with GoL		At the end of the project

3. Financial disbursements in US\$

Contract	Contractor/ Consultant	Committed amount	Disbursed amount (JAN – JUN 2021)	Disbursed amount (Up to JUN 2021)	%	Committed Undisbursed
Promote the use of GAP and IPM (QC2C1)	FAO	1,500,000	-	1,500,000	100	-

4. Key performance indicators

Key performance indicator	Target (2023)	Achieved (Up to June 2021)
Number of farmers benefited from the project have improved their livelihood by adopting safe sustainable and cost effective agricultural practices	140	
% of decreased cost of production by application of Good Agricultural Practices including ICM and other practices	10%	
Extent of cultivated area covered by the project	5600 dunums	17,403 dunums
% of reduction in the use of fertilizers by the end of the project	50%	51% of the total quantity used
% of reduction in the use of pesticides sprays by the end of the project	30%	
Number of farmers trained in improved agriculture technology	280	279
Number of farmers adopting improved agricultural technology	140	

5. Work progress during the reporting period

- Five additional comparative pilot plots on potato were established in Riyak, Terboul, Qabb Elias, Taalabaya, and Ferzol (Zahle Caza).
- Seven soil samples were collected in February and March 2021 from the comparative plots before planting for soil analysis at labs in LARI.
- Based on soil analysis results, fertilizer types and quantities to be used were recommended.
- A total of 684 technical support visits to 76 potato farmers in Zahle and West Bekaa were conducted to inform farmers on integrated crop management practices.
- Weekly progress monitoring exercises to track the implementation of the comparative pilot plots by the facilitators and their fieldwork.
- Farmer's practices data was collected by the project field engineer before and after the implementation of the technical field visits to track any change in farmers' behaviour and adoption of ICM practices.
- Most of the identified 76 farmers were responsive to the provided ICM oriented technical assistance, they were convinced to reduce the amount of fertilizers and pesticides usage, especially when they noticed a substantial decrease in their cost of production and thus an increase in profit margins.

- 76 farmers, 51% reduction in the quantity of fertilizers used per dunum.
- Reduction of pesticides after implementation of one-on-one technical support visits, farmers reduced the number of pesticides sprays (1pesticide/spray equal to one spray) by 62 % (from 8.6 to 3.3 pesticide sprays on average), in some cases some farmers didn't use any pesticides at all (Zero pesticides sprays) and have not encountered any pest problems.
- Technical Field Guide on Integrated Potato Management was submitted for review by FAO.
- Fertilizer's packaging material (plastic bags of 25kg) are mostly dumped in the waterways leading to the Litani, contributing to additional pollution with solid waste. Reduction in amount of fertilizers results in the reduction in the amount of plastic packaging disposed. The total number of pesticides containers used in the project area was reduced from around 22,620 to around 8,700 containers used that is 13,920 less plastic containers used and dumped in the environment including open waterways, the litany river and its tributaries.

6. Action Plan

- Harvesting of the five comparative plots in July 2021
- Plan field days and trainings following COVID-19 safety regulations

COMPONENT 3: SOLID WASTE, WATER QUALITY MONITORING, CAPACITY BUILDING, AND PROJECT MANAGEMENT (IBRD-US\$ 3 MILLION)

This component aims at improving pollution management around Qaraoun Lake through technical assistance. It is composed of 5 sub-components focused on: studies in solid waste management, which will complement the investments made in this sector by other donors; improving water quality and resource modeling, to help the LRA in monitoring the quality of the Litani river; trash removal from Litani river bed through outreach activities with local communities; and improving the capacity of the BWE to manage water supply, and wastewater in the Beqaa.

SUB-COMPONENT 3.1: TECHNICAL STUDIES IN SOLID WASTE MANAGEMENT (US\$0.6 MILLION)

1. Studies for Closure and Rehabilitation of Bar Elias Dumpsite

1.1. Project Description

The project has the following objectives:

- Assess Bar Elias dumpsite and conduct a detailed topographic survey and provide a detailed quantification of the amount of waste, and conduct a material characterization of the waste within the dumpsite;
- Assess potential closure and rehabilitation methods in collaboration with MoE, CDR and PMU, taking into consideration social, environmental and technical factors;
- Conduct the social and environmental studies needed to implement the closure and rehabilitation of the dumpsite. Prepare an Environmental Impact Assessment report and assist the CDR in obtaining the approval of the Ministry of Environment;
- Undertake the study and the technical designs for the closure and rehabilitation of the dumpsite.

Sub-component 3.1: Technical, Environmental and Social Studies for the Closure and Rehabilitation of Bar Elias Dumpsite		
Procurement Details	Procurement Category	Consultancy Services [CS]
	Procurement Method	REOI - RFP
	REOI launch date	05.06.2019
	REOI due date	04.07.2019
	Approval of shortlisted consultants	11.10.2019
	RFP launch date	16.12.2019
	RFP due date	03.02.2021
	Contract Award Date	09.11.2020
Consultant (QC3C1a)	Name	Libanconsult AGM sal
	Contract Notification Date	03.12.2020
	Contract Duration	10 months
	Contract Completion Date	02.10.2021
	Contract Amount	US\$ 67,775.15
	Contract Addendums / Variations	None to date

1.2. Project Deliverables Status

Deliverables	Due date based on work plan	Date of submission
Topographic map	09.12.2020	21.12.2020
Waste characterization report		
Draft preparatory version	09.12.2020	21.12.2020
Including results of waste characterization and biogas investigation	03.02.2021	06.05.2021
Assessment of Closure and Rehabilitation Options Report + Preliminary Design Report	03.02.2021	06.05.2021
Environmental and Social Impact Assessment Study		
Scoping report		Delays
EIA report	03.06.2021	Delays
Draft Bidding Documents	02.09.2021	
Cost estimate report	02.10.2021	
Final Bidding Documents	02.10.2021	
Final Detailed Design Report	02.10.2021	

There has been delays in submitting the project deliverables due to the following challenges:

- COVID-19 sanitary lockdown in November 2020 postponed the project commencement date (contract notification date) one month; from 09.11.2020 to 03.12.2020 which is the date of the project's kick-off meeting
- COVID-19 sanitary lockdown from 10.01.2021 to 01.03.2021. It was not possible to procure the services for landfill gas expert. Landfill gas analyzer equipment was procured instead with delays due to the financial difficulties in wiring transfers in USD.
- Difficulty in organizing meetings with the municipality of Bar Elias to present the rehabilitation proposal and obtain approval.

1.3. Financial Disbursements in US\$

Contract	Contractor/ Consultant	Committed amount	Disbursed amount (JAN – JUN 2021)	Disbursed amount (Up to JUN 2021)	%	Committed Undisbursed
Study / Closure & Rehabilitation of Bar Elias Dumpsite (QC3C1a)	Libanconsult AGM sal	67,775.15	-	-	-	67,775.15

1.4. Work progress during the reporting period

- Waste characterization works on site (trial pits, boreholes, landfill gas measurements) in April 2021.
- Submission of Assessment of Alternatives and Preliminary Design Report on 07/05/2021.
- ESIA screening application submitted to MoE on 10/06/2021 and draft screening report on 30/06/2021.

2. Odor Impact Assessment from Solid Waste Management Facilities and Landfills within the Litani River Upper Basin

2.1. Project Description

The project has the following objectives:

- Assessment of odors from existing Municipal Solid Waste Landfills and Management Facilities within the Upper Litani Basin and neighboring Cazas;
- Assessment of potential odors from potential Municipal Solid Waste Landfills and Management Facilities within the Upper Litani Basin and neighboring Cazas;
- Odor dispersion modeling of odors from both municipal solid waste management facilities and Landfills;
- Provide a model/diagram showing the odor dispersion range per scale with respect to Solid Waste Management Facilities and Solid Waste Landfills;
- Assess the social and environmental impact of odors based on the results of the odor dispersion model with respect to the Solid waste facilities in Baalbeck, Zahle, Bar Elias and Jeb Janine;
- Provide practical recommendations and suggestions on improved odor management for existing and potential solid waste management facilities.

Sub-component 3.1: 2. Odor Impact Assessment from Solid Waste Management Facilities and Landfills within the Litani River Upper Basin		
Procurement Details	Procurement Category	Consultancy Services [CS]
	Procurement Method	REOI - RFP
	REOI launch date	03.06.2019
	REOI due date	02.07.2019
	Approval of shortlisted consultants	19.09.2019
	RFP launch date	16.12.2019
	RFP due date	19.02.2020
Consultant (QC3C1b)	Name	JV: Rafik El Khoury (Lebanon) & Odournet (France)
	Contract Notification Date	09.04.2021
	Contract Duration	8 months
	Contract Completion Date	08.12.2021
	Contract Amount	US\$ 72,944.54
	Contract Addendums / Variations	None to date

2.2. Project Deliverables Status

Deliverables	Due date based on work plan	Date of submission
Data report (literature review data, data collected, readings of conducted odor measurement)	09.06.2021	09.06.2021 ⁸
Odor dispersion modelling report	09.11.2021	
Assessment of social and environmental impact	09.11.2021	
Final report	09.12.2021	

⁸ The submitted report did not have readings of conducted odor measurements as none were conducted yet. Ongoing discussions between the Consultant and the MoE on the methodology.

2.3. Financial Disbursements in US\$

Contract	Contractor/ Consultant	Committed amount	Disbursed amount (JAN – JUN 2021)	Disbursed amount (Up to JUN 2021)	%	Committed Undisbursed
Study / Assessment of Odor Impact from SWM facilities (QC3C1b)	JV: Rafik El Khoury - Odournet	72,944.54	-	-	-	72,944.54

2.4. Work progress during the reporting period

- Draft contract signature with consultant, RELK – Odournet, on 11/03/2021.
- Consultant was notified with official contract on 09/04/2021.
- Kick-off meeting held between RELK – Odournet, MoE, and CDR on 29/04/2021.
- Data collection report submitted on 09/06/2021.
- On-going discussion between MoE and Consultant on methodology.

3. SESA Study for the National Integrated Solid Waste Strategy

3.1. Project Description

The project has the following objectives:

- To assess the legal, legislative and institutional framework and capacity in relation to the National Integrated Solid Waste Management Strategy (NISWMS);
- To identify the positive and negative social and environmental impacts and the risks associated with the NISWMS;
- To determine the key environmental and social constraints that should be taken into consideration during the development and implementation of the NISWMS;
- To ensure that the National Strategy meets solid waste sector growth and development targets with the least environmental and social impacts;
- To provide adequate environmental, health and social baseline information relevant to the strategy for the purpose of supporting the development of government related policy and plans;
- To identify the economic, environmental and social opportunities associated with the NISWMS implementation and propose a set of actionable recommendations to enhance environmental sustainability and social equity;
- To provide recommendations for optimizing the strategy and ensuring that environmental, social and economic concerns are accounted for and incorporated within the proposed strategy;
- To present opportunities for practical application of the SESA in Lebanon;
- To present applicability of methodological and procedural SEA approach outlined in the SEA decree (8213/2012) Lebanon.

Sub-component 3.1: SESA Study for the National Integrated Solid Waste Strategy		
Procurement Details	Procurement Category	Consultancy Services [CS]
	Procurement Method	REOI - RFP
	REOI launch date	03.2020
	REOI due date	
	Approval of shortlisted consultants	06.2020
	RFP launch date	11.12.2020
	RFP due date	16.02.2021
Consultant (QC3C1c)	Name	JV: LDK (Greece) & ELARD (Lebanon)
	Contract Notification Date	
	Contract Duration	10 months
	Contract Completion Date	10 months from contract notification date
	Contract Amount	US\$ 109,889.13
	Contract Addendums / Variations	None to date

3.2. Project Deliverables Status

Deliverables	Due date based on work plan	Date of submission
Inception report	ND + 2 months	
Scoping SESA report	ND + 5 months	
Draft SESA report	ND + 8 months	
Final SESA report	ND + 10 months	
Final SESA executive summary	ND + 10 months	

Contract signature is delayed due to the arbitration clause issue for all Consultancy and Works projects under LQPPP previously discussed in project challenges.

3.3. Financial Disbursements US\$

Contract	Contractor/ Consultant	Committed amount	Disbursed amount (JAN – JUN 2021)	Disbursed amount (Up to JUN 2021)	%	Committed Undisbursed
SESA Study for the National Integrated Solid Waste Strategy	JV: LDK - ELARD	109,889.13	-	-	-	109,889.13

3.4. Work progress during the reporting period

- Proposals by short-listed consultants were received on 16/02/2021.
- Technical evaluation submitted to CDR board for approval on 04/03/2021 and a Decision No. 104/2021/A on 11/03/2021 was issued to open the Financial Offers.
- The Financial Offers were opened on 24/03/2021.
- The combined technical and financial report was finalized and submitted to CDR board for approval on 15/04/2021. LDK-ELARD JV was awarded by CDR Decision No. 169/2021/A dated 22/04/2021.

4. Sludge Management Feasibility Study for the Upper Litani River Basin

4.1. Project Description

The objectives of the consultancy works are to prepare a feasibility study for sustainable sludge management in the Bekaa Region which falls under the administration of the BWE, and present justified and prioritized solutions for sustainable sludge management.

Sub-component 3.1: Sludge Management Feasibility Study for the Upper Litani River Basin		
Procurement Details	Procurement Category	Consultancy Services [CS]
	Procurement Method	Direct Selection
	REOI launch date	
	REOI due date	
	Approval of shortlisted consultants	
	RFP launch date	
	RFP due date	
Consultant (QC3C13)	Name	Cabinet Merlin
	Contract Notification Date	25.08.2020
	Contract Duration	5 months
	Contract Completion Date	24.01.2021
	Contract Amount	US\$ 99,000
	Contract Addendums / Variations	None to date

4.2. Project Deliverables Status

Deliverables	Due date based on work plan	Date of submission
Draft feasibility study	24.11.2020	26.11.2020
Final feasibility study	24.01.2020	25.01.2021

4.3. Financial Disbursements in US\$

Contract	Contractor/ Consultant	Committed amount	Disbursed amount (JAN – JUN 2021)	Disbursed amount (Up to JUN 2021)	%	Committed Undisbursed
Sludge Management Feasibility Study for the Upper Litani River Basin (QC3C13)	Cabinet Merlin	99,000.00	77,037.35	77,037.35	78%	21,962.65

4.4. Work progress during the reporting period

- Feasibility study final draft report submitted on 25/01/2021 following CDR PMU comments.
- Presentation of the study findings on 08/03/2021.
- Revision of the study from April till June based on MoE comments.
- Discussion of the outcomes of the study in a meeting held on 10/06/2021 between the Consultant (Cabinet Merlin), MoE, CDR, and LRA. The study concluded that the most suitable and cost-effective treatment method for sludge is solar drying. Disposal and further use options in quarry rehabilitation were discussed with MoE and LRA.

SUB-COMPONENT 3.2: IMPROVEMENT IN WATER QUALITY MODELING - LRA (IBRD-US\$0.7 MILLION)

As described in previous reports, this subcomponent has the following activities:

- LRA Water Governance Study
- Purchase of water monitoring stations
- Cleaning Parts of the Litani River in the Upper Litani River Basin
- Website for LRA

However, based on LRA letter to CDR on 05/11/2020:

- LRA requested to cancel cleanup activities, since 20 km of Litani River at Haouche El Sneid, Haouche El Rafka, Bednayel, Temnine Tahta, Bar Elias, El Marj, and Zahle were cleaned by LRA.
- LRA requested to cancel the procurement of water lab equipment as this was already procured through funding from USAID. The equipment was to be received by LRA on 31/01/2021. Training on lab testing was also done in October 2019 under a project funded by UNESCO.
- LRA requested to cancel awareness raising activities as the latter is done regularly by LRA through social media and LRA website.

CDR will address these modifications in the next loan restructuring. Reporting will therefore be on the remaining activity; website development for LRA.

1. Website for LRA

1.1. Project Description

3.2: Website for Litani River Basin (QC3C12)		
Procurement Details	Procurement Category	Consultancy Services [CS]
	Procurement Method	Quality and Cost-Based Selection [QCBS]
	Market Approach	Open / Local
	REOI launch date	Not applicable
	REOI due date	Not applicable
	RFP launch date	18.01.2019
	RFP due date	07.03.2019
	Contract Award Date	20.06.2019 (CDR Decision # 515/2019/A)
Consultant (QC3C12)	Name	Arabia GIS / Lebanon
	Date of Notice to Commence	17.10.2019
	Contract Duration	5 months + 1-yr Maintenance + 3-yr Hosting
	Contract Completion Date	16.10.2022
	Contract Amount	US\$ 63,314.5
	Contract Addendums / Variations	None to date

1.2. Project Deliverables Status

Deliverables	Due date based on work plan	Date of submission
Fully operational website		
Hosting service	3 years after website launch	
Web Coordinator/Maintainer of the website	1 year after website launch	
Training of LRA designated staff	3 months after website launch	
Final report	At the end of hosting service	

There has been delays at the project start due to October 17th, 2019 events, followed by the economic crisis and the COVID-19 pandemic. LRA, CDR and the consultant were agreeing on website design and content especially that the scope of work has changed from a website for Litani River Basin to a website for Litani River Authority that includes a page for pollution prevention projects at the Litani Basin.

1.3. Financial Disbursements in US\$

Contract	Contractor/ Consultant	Committed amount	Disbursed amount (JAN – JUN 2021)	Disbursed amount (Up to JUN 2021)	%	Committed Undisbursed
Website for Litani River (QC3C12)	Arabia GIS	63,314.50	-	-	-	63,314.50

1.4. Work progress during the reporting period

- Consultant, ArabiaGIS, submitted revised DRD to CDR on 03/03/2021.
- CDR PMU approved the DRD on 04/03/2021.
- Consultant submitted revised concept visual design on 13/04/2021. LRA and CDR reviewed the design and discussed comments in a meeting on 23/04/2021.
- Final homepage design submitted on 03/06/2021.

SUB-COMPONENT 3.3: CAPACITY BUILDING OF THE BWE

This sub-component intends to finance the recruitment of three high-level staff: a wastewater engineer, an administrator/customer relations officer, and a financial officer at BWE.

- Contract of administrative officer at BWE ended on 31/05/2021 and was not renewed based on BWE board decision.
- Contract of project manager – CDR ended on 30/06/2021 and was not renewed based on BWE board decision.

SUB-COMPONENT 3.4: CAPACITY BUILDING OF MOEW

This sub-component intends to provide support to MoEW in overseeing the wastewater sector performance, monitoring the implementation of the National Wastewater Strategy, designing/revising the tariff structure and completion of wastewater master plans in districts where

they do not exist. It includes recruiting an expert at MoEW as part of the PMU to follow up on project implementation. It also includes updating the SESA for National Water Sector Strategy (NWSS).

1. Updating the SESA of the updated National Water Sector Strategy (NWSS)

- Revision of the Consultant's, ECODIT, proposal in January following WB comments.
- ToR for updating the SESA of the NWSS submitted on STEP for WB review on 30/01/2021, and was approved by the WB on 01/03/2021 conditional to implementing the WB's remaining comments.
- ECODIT was awarded the contract by CDR Decision No. 221/2021/A on 06/05/2021.

SUB-COMPONENT 3.5: PROJECT MANAGEMENT (IBRD-US\$0.52 MILLION)

This component intends to finance the establishment of a functioning Project Management Unit (PMU) at the CDR. Funding will cover the cost of consultants, field visits, office equipment, audits, operating costs necessary for project implementation, and activity monitoring and evaluation.

IV. MONITORING AND EVALUATION

Project results framework is under review. It will be included in the next report when the indicators and methodology of measurement are finalized.

V. FINANCIAL MANAGEMENT & PROCUREMENT

Financial Disbursement in Fiscal Years (USD Million)								
Fiscal Year	Year 0	Year 1	Year 2	Year 3	Year 4		Year 5	Year 6
	2017	2018	2019	2020	Q1-Q2 2021	Q3- Q4 2021	2022	2023
Expected Annual	0	5	5	10	10		10	15
Expected Cumulative	0	5	10	20	30		40	55
Actual Annual	1.821	0.313	3.891	1.145	0.71			
Actual Cumulative	1.821	2.134	6.025	7.17	7.88			
Annual Target Achieved %			77.82%	11.45%	7.05%			
Cumulative Target Achieved %			60.25%	35.85%	26.25%			

Component	Contractor / Consult.	Committed Amount	Disbursed Amount (JAN – JUN 2021)	Disbursed Amount (Up to JUN 2021)	%	Committed Undisbursed	Remaining Uncommitted Budget
Component 1 (IBRD-US\$ 50.5 million, GoL-US\$ 5 million)		21,251,626.18	463,646.36	4,564,565.37	21%	16,687,060.81	29,248,373.82
Subcomponent 1.1: Expansion of Sewage Network to Connect to Zahle WWTP:							
QC1W1	Expansion of sewage network to connect to the Zahlé WWTP	ASDI	10,539,562.49	-	2,850,945.10	27%	7,688,617.39
Subcomponent 1.2: Expansion of Sewage Network to Connect to Anjar WWTP:							
QC1W2	Expansion of sewage network to connect to the Anjar WWTP	Danash Contracting & Trading Co.SARL	6,905,853.13	-	-	-	6,905,853.13
Subcomponent 1.3: Expansion of Sewage Network to Connect to Aitanit WWTP:							
QC1W3	Expansion of sewage network to connect to the Aitanit WWTP	Khoury Contracting	2,522,112.62	437,116.38	1,052,410.63	42%	1,469,701.99
Subcomponent 1.4: Design, Supervision, Environment and Social Consultancy Services:							
QC1C1	Supervision of sewage network to connect to the Zahlé WWTP	DAH Taleb /Novec	378,622.27	-	250,024.48	66%	128,597.79
QC1C2	Design of sewage network to connect to the Anjar WWTP	BTD	392,500.00	-	317,970.00	81%	74,530.00
QC1C3	Supervision of sewage network to connect to the Anjar WWTP	SU YAPI / KREDO	366,200.00	-	-	-	366,200.00
QC1C4a	Design of sewage network to connect to the Aitanit WWTP	BTD	17,560.00	-	15,804.00	90%	1,756.00
QC1C4b	Supervision of sewage network to connect to the Aitanit WWTP	BTD	62,832.67	26,529.98	26,628.18	42%	36,204.49
QC1C5	ESMP/LAP Anjar and Aitanit	ELARD	66,383.00	-	50,782.98	76%	15,600.02
Component 2 (IBRD-US\$ 1.5 million)		1,500,000	-	1,500,000⁹	100%	0	0
QC2C1	Promote the use of GAP and IPM	FAO	1,500,000	-	1,500,000	100%	0
Component 3 (IBRD-US\$ 3.0 million)		2,366,993.95	240,901.63	1,673,274.26	71%	693,719.69	633,006.05
Subcomponent 3.1: Technical Studies in Solid Waste Management - MoE:							
QC3C1	Lower Litani Environment and Investment Plan, MoE	ELARD	196,000	-	170,755.20	87%	25,244.80

⁹ Component 2 is disbursed to FAO through the World Bank

Component	Contractor / Consult.	Committed Amount	Disbursed Amount (JAN – JUN 2021)	Disbursed Amount (Up to JUN 2021)	%	Committed Undisbursed	Remaining Uncommitted Budget
QC3C1a	Study / Closure & Rehabilitation of Bar Elias Dumpsite	Libanconsult AGM sal	67,775.15	-	-	67,775.15	
QC3C1b	Study / Assessment of Odor Impact from SWM facilities	Rafic Khoury & Partners / Odournet - France	72,944.54	-	-	72,944.54	
QC3C1c	SESA for MoE SWM strategy	LDK for Managment Consulting LLC / ELARD	109,889.13	-	-	109,889.13	
QC3C9	Solid waste expert - MoE ¹	R. Nassif	167,200.00	-	132,000.00	79%	35,200.00
QC3C9a	Env. Solid waste expert – MoE	K. Hashash	42,900.00	-	-	-	42,900.00
QC3C13	Study / Sludge Management for Upper Litani River Basin	Cabinet Merlin	99,000.00	77,037.35	77,037.35	78%	21,962.65
Subcomponent 3.2: Improvement in Water Quality Modeling - LRA:							
QC3C2	LRA Water Governance Study	-	-	-	-	-	-
QC3C12	Website for Litani River + 1-yr Maintenance + 3-yr Hosting	Arabia GIS	63,314.50	-	-	63,314.50	
QC3G1	Purchase of water monitoring stations	-	-	-	-	-	-
QC3NC1	Cleaning Parts of the Litani River in the Upper Litani River Basin	-	-	-	-	-	-
Subcomponent 3.3: Capacity Building of the BWE:							
QC3C4	Wastewater Engineer - BWE	-	-	-	-	-	-
QC3C5a	Administration Officer - BWE	R. Yazbek	253,304.25	18,088.35	249,686.58	99%	3,617.67
QC3C5b	Assistant - BWE	W. Saleh	56,853.24	-	55,184.96	97%	1,668.28
QC3C7a	Financial Officer - BWE	M. Nahas	167,200.00	12,800.00	144,644.44	87%	22,555.56
Subcomponent 3.4: Capacity Building of the MoEW:							
QC3C6a	Focal Point, MoEW	S. Hoayek	99,000.00	28,000	83,000.00	84%	16,000.00
QC3C6b	Wastewater Consultant, MoEW	-	-	-	-	-	-
QC3C6c	SESA for Water Strategy 2020	ECODIT	99,973.00	-	-	-	99,973.00
Subcomponent 3.5: Project Management:							
QC3C10	Project Manager – CDR	C. Bechir	277,860.00	27,005.33	268,028.32	96%	9,831.68
QC3C11a	Financial Officer - CDR	M. Labban	176,662.64	17,446.22	149,294.28	85%	27,368.36
QC3C11b	Procurement Officer - CDR	P. Abi Akl	172,260.00	20,520.00	144,720.00	84%	27,540.00

¹ Resigned. Resignation letter⁴ submitted to CDR on 04/09/2020 and work stopped on 05/10/2020. An amicable settlement was reached with CDR on 20/05/2021.

Component	Contractor / Consult.	Committed Amount	Disbursed Amount (JAN – JUN 2021)	Disbursed Amount (Up to JUN 2021)	%	Committed Undisbursed	Remaining Uncommitted Budget
QC3C11c	Environment/Social Officer - CDR M. Khoury	111,840.00	15,840.00	110,040.00	98%	1,800.00	
QC3C11f	Environment/Social Officer - CDR To be recruited	32,450.00	-	-	-	32,450.00	
QC3C11d	Project Engineer - CDR R. Jamal	79,200.00	19,040.00	72,640.00	92%	6,560.00	
QC3C11e	Rockwise PMIS Software Maintenance - CDR Dynamesh	20,497.50	5,124.38	15,373.13	75%	5,124.37	
	Translation of the complete guidelines for preserving riparian ecosystem Sleem Translation & Services	870.00	-	870.00	100%	0	
Front End Fee		137,500		137,500		0	
Overall Total		25,256,120.13	704,547.99	7,875,339.63	31%	17,380,780.50	29,881,379.87

VI. ANNEXES

The table below summarizes the project modifications since December 2016:

Component 1: Improvement of Municipal Sewage Collection	
Subcomponent 1.1: Expansion of the sewerage network to connect to the Zahle WWTP	
Change:	Removal of 26 km out of the original scope of 107 km of sewage networks (new total is 81 km)
Reason:	26 km sewer lines were executed by local authorities and financed by other donors
Change:	Emergency sewer works executed in Zahle and Hazzerta
Reason:	Request of Zahle municipality on 26/09/2018 and Hazzerta municipality on 08/10/2018
Change:	Connection of Taalabaya sewer to the Zahle WWTP existing lift station in Fayda
Reason:	The existing sewer is discharging into the Berdawni River (tributary of Litani River) an estimated raw wastewater flow of 5,000 m ³ /d. The change was based on CDR's request on 13/11/2018.
Change:	Addition of an overflow pipe for an existing lift station in Fayda area, upstream of Zahle WWTP.
Reason:	To prevent pollution in case of overflow. The change was based on CDR's request in October 2018
Subcomponent 1.2: Expansion of sewerage network to connect to Anjar WWTP	
Change:	Increase the designed sewer networks from 135 km to 360 km (addition of 185 km)
Reason:	After completing the topographical survey by the design consultant, it was noticed that the proposed sewer lines routes in the 11 villages exceeds the estimated length in the contract; furthermore, two villages (Qab Elias and Saouiri) were added to the initial scope in the PAD
Subcomponent 1.3: Expansion of sewerage network to connect to Aitanit WWTP	
Change:	Increase the designed sewer networks from 13 km to 22 km (addition of 9 km)
Reason:	During site investigation, it was noticed that some areas in the two villages were not included in the design implemented by MoEW. The expansion of the sewage network to connect to the Aitanit WWTP will include two villages (Baaloul and Qaraoun) instead of four, since the sewer networks in the other two villages were implemented by UNICEF under the directives of MoEW.
Component 2: Promotion of Good Agricultural Practice, including Integrated Pest Management, to reduce agro-chemical pollution in the upper Litani basin	
Change:	FAO's contract extended up to December 2022 at no additional cost (initial contract with FAO was up to June 2021).
Reason:	The MoA requested FAO for project extension until end of Dec 2022.

Component 3: Solid Waste, Water Quality Monitoring, Capacity Building, and Project Management	
Subcomponent 3.1: Technical Studies in Solid Waste Management (MoE)	
Change:	The below activities and studies were added: <ol style="list-style-type: none"> Business Plan for Combatting Pollution of the Lower Litani River Basin (Completed in 2019) Odor Impact Assessment from Solid Waste Management Facilities and Landfills within the Litani River Upper Basin (Contract awarded to Rafic Khoury and Odornet JV. WB approved the submitted waiver for international arbitration on Dec. 9th, 2020. Contract signature was postponed due to COVID-19 lockdown). Strategic Environmental and Social Assessment study for the National Solid Waste Management Strategy (CDR Tendering Department launched the RFP to the shortlisted consultants on Dec. 14th 2020 and submission date is Jan. 12th 2021). Sludge Management study for the Upper Litani River Basin (Draft report submitted by the Consultant on Dec. 11th, 2021).
Reason:	The establishment of a sorting facility in Rashia was canceled due to public opposition. The above listed alternative activities/studies were requested by MoE.
Subcomponent 3.3: Capacity building of the BWE	
Change 1:	Request IT services development
Reason 1:	BWE is facing operational and reporting issues in the implemented ERP which requiring IT intervention to solve the issues
Subcomponent 3.4: Capacity Building of the MoEW	
Change 1:	Recruitment of an individual consultant for a role of Focal Point at MoEW (<i>Direct Selection of IC, October 2019</i>)
Reason 1:	Based on the request of the MoEW
Change 2:	Request the following studies: <ul style="list-style-type: none"> - SESA for the updated National Wastewater Strategy - Sustainability Study of Zahleh Anjar & Aitanit Systems
Reason 2:	MoEW requested to recruit an individual consultant for the wastewater sector. (Evaluation of applicants was done in Feb 2020 and none complied with MoEW requirements). Then MoEW requested to replace the individual consultant by activities that support the implementation of the updated National Wastewater Strategy. Since the strategy was updated in 2020, the SESA from 2015 also requires updating. Also MoEW proposed a study to tackle the challenges and to ensure the sustainability of the Zahle, Anjar, and Aitanit wastewater systems.
Subcomponent 3.5: Project Management	
Change:	Recruitment of a Project Engineer to assist the Project Manager in the administrative works. (Awarded in October 2019)

Reason:	The Project Manager was assumed the responsibilities of the wastewater engineer allocated for BWE in addition to his responsibilities
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REPUBLIC OF LEBANON
COUNCIL FOR DEVELOPMENT AND RECONSTRUCTION

Lake Qaraoun Pollution Prevention Project
Loan Agreement No. LB-8637 – Project ID IBRD P147854

Environmental and Social Safeguards Report

Period Covered: January 1, 2021 – September 30, 2021

Revision	Date	Prepared by
0	October 1 st , 2021	Environmental and Social Consultant – CDR PMU
1	October 13 th , 2021	Environmental and Social Consultant – CDR PMU

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ABBREVIATIONS AND ACRONYMS

CDR – Council for Development and Reconstruction

CESMP – Construction Environmental and Social Management Plan

ESMP – Environmental and Social Management Plan

E&S – Environmental and Social

GRM – Grievance Redress Mechanism

LAP – Land Acquisition Plan

LQPP – Lake Qaraoun Pollution Prevention Project

MoE – Ministry of Environment

PMU – Project Management Unit

WB – World Bank

WWTP – Waste Water Treatment Plant

1. Introduction

The objective of the E&S safeguards quarterly report is to present updates on the implementation of the E&S management and monitoring plans for all site works under Component 1, improvement of municipal sewage collection, of LQPP. It reports on the Contractor's compliance to the measures required by the CESMP and the ESMP. It also presents updates on LAP implemented by CDR.

The previous E&S safeguards quarterly report was submitted to the WB in March 2021. The reporting period was between July 2020 and December 2020. Since then, there has been a delay in reporting. The E&S Consultant at PMU resigned in April 2020, and the Project Coordinator was following up on E&S aspects. As of September 3rd, 2021, a new E&S Consultant joined the PMU. Therefore, this report *exceptionally* covers the period between January 2021 and September 2021 based on monthly progress reports submitted by the Supervision Engineer and one field visit to Baaloul and Qaraoun by E&S Consultant conducted on September 20th, 2021.

It is worth noting that since June 2021, the country was facing a fuel crisis. This impacted the ease of transportation of CDR PMU to conduct field visits. It also impacted construction works since the Contractor was finding difficulty in securing fuel for his equipment.

2. Component 1.1: Expansion of the sewerage network to connect to Zahle WWTP

Total length of sewer lines (contract): 107 km

Total length of sewer lines executed by the municipality from other financing sources: 26 km

Total length of sewer lines (revised): 81 km

Total length of sewer lines executed: 19 km

Total length of remaining sewer lines works: 62 km

2.1. E&S Instruments

Table 1: List of E&S documents approved by the WB

Document Title	Date of Approval	Link
Environmental and Social Management Framework (ESMF)	12/02/2015	https://www.cdr.gov.lb/CDR/media/CDR/StudiesandReports/Litani/2015-01-29-Qaraoun-ESMF_issued-for-distribution.pdf
Resettlement Policy Framework (RPF)	12/02/2015	https://www.cdr.gov.lb/CDR/media/CDR/StudiesandReports/Litani/2015-01-29-Qaraoun-RPF_issued-for-distribution.pdf
Initial Environmental Examination & Environmental Management Plan – Expansion of Zahle Sewer Network	12/02/2015	https://www.cdr.gov.lb/CDR/media/CDR/StudiesandReports/Litani/2015-01-29-Zahle-networks_IEE-EMP_issued-for-distribution.pdf

Land Acquisition Plan	11/03/2015	https://www.cdr.gov.lb/CDR/media/CDR/StudiesandReports/Litani/LAP-Report_issued-final_20150220.pdf
Construction Environmental, Social and Safety Management Plan (CESMP)	11/02/2019	Not disclosed

2.2. Project Activities

During the aforementioned reporting period, minimal remaining construction works were executed under Component 1.1. Works were limited to an updated snag list, and were executed in Taalabaya, Zahle, Hezzerta, Saadnayel till April 2021 after which no works were registered on site. They included;

- Cleaning manholes and repairing ladder steps
- Plastering of Concrete Cover Manholes
- Adjusting asphalt settlement
- Adjusting manhole cover level to match with existing asphalt
- Adjusting benching inside manhole, especially at the connection between manholes and pipe
- Raising fully covered manholes
- Removing asphalt stocked near trench and pieces of precast manholes
- Replacing unapproved manhole covers with proper ones
- Checking on site the as built drawings submitted by the Contractor.
- Inspection for executed lines



Figure 1: (Left): Raising manhole in Hazerta on agricultural dirt road; (Right): Adjusting manhole cover level to match existing asphalt in Zahle.

CDR was in the process of terminating the contract with the Contractor, ASDI, and initiating a rebidding for the remaining works in the first two quarters of 2021. The Contractor was not able to continue the works due to the financial crisis in the country and difficulty in procuring materials.

CDR PMU

However, in June 2021, CDR and WB procurement unit decided to opt for an interim extension of time for the Contractor to complete the remaining works. Since then, the required justification report was being prepared and reviewed for WB's approval. The Contractor would be able to continue the work since after the approval of due payments and price adjustment, he would have a working capital to remobilize and perform his duties. Moreover, as presented in this report, some access issues are resolved, thus sites would be available for the Contractor.

2.3. Environmental and Social Monitoring Plan

Given the minimal works on site described above, no monthly reports nor GRM record log were submitted by the Supervision Engineer. Except for what is presented below, no incidents were reported.

2.3.1. Community GRM

The project GRM was posted on CDR's website as presented in the previous E&S Safeguards Report. A letter from Saadnayel municipality was submitted on March 24th, 2021, stating that 22 manhole covers previously installed by the Contractor were found missing in Saadnayel since October 10th, 2019. Even though the incident occurred two years ago, it was reported in March of 2021. The Contractor will replace the stolen manhole covers when works resume. The snag list was updated accordingly. The letter from Saadnayel municipality is attached to Annex 1.

2.4. Land Acquisition Plan

2.4.1. Collection of Expropriation Compensation

The status of completion is still at 30%. As of September 2021, there are 16 out of 25 plots whose owners still did not collect compensation fees under Expropriation Decree No. 683 dated 12/05/2017. All legal procedures were completed by CDR expropriation department. Landowners who could be reached in person were notified via a letter. For those that could not be reached, the dispatcher inquired about their phone number at the Mukhtar and a notification was posted in two newspapers, as stipulated by law. There could be several reasons why landowners did not collect their compensation fees, such as;

- Landowners still did not obtain all required legal documents to collect the compensation;
- Incomplete legacy transmission of plot ownership among several heirs;
- Unpaid fees to issue property records;
- Landowners might consider the compensation amount low relative to the effort and fees needed to obtain the required documents, especially with the current devaluation of the Lebanese Pounds.

The table below lists the plots whose owners are yet to collect compensation fees. The remaining compensation amount to be collected is 261,315,000 LBP out of 376,755,000 LBP. CDR PMU will follow up on the issue as per the actions described below.

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Table 2: Plots pending collection of compensation fees as of 30/09/2021 (Expropriation Decree No. 683)

Cadastral Zone	Plot No.	No. of Owners	Total Plot Area (m2)	Expropriated Area (m2)	Compensation Amount (LBP)	Notification	Clarification / Action To be Taken
Haoush El Oumara	489	1	571,297	2,185	65,550,000	2 Newspapers on 4/9/2018	Landowner is deceased. Follow up with his wife.
	490	1	49,517	1,316	39,480,000	2 Newspapers on 4/9/2018	Landowner could not be reached. Might not be residing in Lebanon.
	507	1	274,400	907	27,210,000	2 Newspapers on 4/9/2018	Landowner is deceased. Follow up with his wife.
Maalaqa	1152	3	7,676	140	9,333,334	2 Newspapers on 8/6/2018	Landowner could not be reached. No contact info available. Request support from municipality.
					9,333,333	2 Newspapers on 8/6/2018	
					9,333,333	2 Newspapers on 8/6/2018	
	1154	2	2,912	58	1,942,856	2 Newspapers on 8/6/2018	Landowner could not be reached. No contact info available. Request support from municipality.
					11,657,144	Dispatcher on 16/5/2018	Contact information of landowner is available. CDR PMU will follow up.
	1158	2	1,798	65	6,500,000	2 Newspapers on 8/6/2018	Landowner could not be reached. No contact info available. Request support from municipality.
					6,500,000	2 Newspapers on 8/6/2018	
	1166	6	3,622	16	257,143	2 Newspapers on 8/6/2018	Landowner could not be reached. No contact info available. Request support from municipality.
					457,143	2 Newspapers on 8/6/2018	
					457,143	2 Newspapers on 8/6/2018	
457,143					2 Newspapers on 8/6/2018		

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					257,142	2 Newspapers on 8/6/2018	
					514,286	2 Newspapers on 8/6/2018	
Hazerta	321	3	4,975	222	6,938	2 Newspapers on 8/6/2018	Contact information of landowner is available. CDR PMU will follow up.
					5,546,531	Dispatcher on 1/6/2018	
					5,546,531	Dispatcher on 1/6/2018	
	345	2	175,786	251	5,020,000	Dispatcher on 16/5/2018	Contact information of landowner is available. CDR PMU will follow up.
					5,020,000	Dispatcher on 16/5/2018	
	905	2	1,692	82	3,690,000	Dispatcher on 21/5/2018	Contact information of landowner is available. CDR PMU will follow up.
					3,690,000	Dispatcher on 23/5/2018	
	932	1	17,984	62	3,720,000	2 Newspapers on 8/6/2018	Landowner could not be reached. No contact info available. Request support from municipality.
	988	1	4,625	142	8,520,000	Dispatcher on 31/5/2018	Landowner is Hazerta municipality. CDR PMU will follow up.
	1076	1	4,936	214	10,700,000	Dispatcher on 18/5/2018	Landowner is deceased. Contact information of landowner's son is available. CDR PMU will follow up.
1232	1	*	105	11,875,000	2 Newspapers on 8/6/2018	Landownership is not legally determined yet.	
1321	1	3,149	90	4,500,000	Dispatcher on 31/5/2018	Landowner could not be reached. No contact info available. Request support from municipality.	
Qaa Rim	2143	2	359	106	1,766,667	2 Newspapers on 8/6/2018	

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					2,473,333	2 Newspapers on 8/6/2018	Based on a letter from Qaa Rim Mukhtar, landowners are not residing in town. No contact information available.
	16 plot	30 owners	1,124,728 m²	5,961 m²	261,315,000 LBP		

2.4.2. Resolution of Access Issues

- Zahle: Two main issues are still pending in Zahle:
 - Sewer lines passing in de facto roads: A municipal decision approving the passage of sewer lines in de facto roads was requested from Zahle municipality on September 14th, 2021.
 - Pending waivers for line ZH-A: The map attached to Annex 2 shows the plots impacted by Zahle municipal expropriation decree no. 1020/2007 which has not been implemented yet. It highlights the areas to be expropriated as follows:
 - In yellow: Areas belong to public land, hence no action is needed.
 - In green: Areas belong to private land, and a waiver was signed by landowner.
 - In red: Areas that belong to private land, and a waiver is pending.

Two plots 477 and 489 are the only remaining plots requiring a waiver. They both belong to Ms. Miriam Skaff. CDR PMU has met with Ms. Skaff on June 15th, 2021 to explain the objectives of the project and clarify that the project is funded by the World Bank and implemented by CDR and not the municipality. The map was also presented to Ms. Skaff to show the impact of her cooperation on the project, especially that adjacent landowners have already signed waivers. Since then, CDR PMU has been following up with Ms. Skaff's lawyer to resolve the issue. Mrs. Skaff's still did not sign the waiver for personal reasons potentially related to political tensions with the current mayor of Zahle. Therefore, the reason is not related to the waiver itself, or to the compensation amount set under the expropriation decree.

A sample of the waiver is attached in Annex 3 in Arabic and in English.

- Saadnayel-Taalbaya: Rerouting designs and coordination with the municipality regarding encroachment on public domain at line SD-T are still pending. CDR PMU will follow up on the matter.
- Hazerta: All issues of de facto roads have been resolved based on Hazerta's municipality council decision No. 100 on 24/12/2020 that approved the passage of sewer lines in the plots listed in the table below. For HZ-L passing along 500 m through the Convent's private property, CDR met with the Convent lawyer and General Secretary on June 4th, 2021, and agreed to re-align the sewer lines. A waiver from the convent will resolve the issue of HZ-L line and the lines connected to it. The updated design for this section was reviewed by CDR. It will be shared with the Convent for final approval in November 2021, after which the waiver would be signed.
- Qaa El Rim: 1,735 m of line sections that previously had issues in Qaa El Rim were resolved based on the municipal council decision on May 21st, 2021. The decision was received by CDR PMU on July 12th, 2021. It clarifies the status of the plots where the lines will pass, as explained in the table below, and approves project implementation accordingly. The letter still requires a signature from the Governor of Bekaa. CDR PMU has been following up since May 2021.

The table below presents in details the pending lines with access issues and the actions required.

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Table 3: Overview of Pending Lines with Access Issues

Cadastral Area	Line ID	Total Length of Pending Lines (m)	Line Sections with No Issues (m)	Line Sections with Issues (m)	Updates	Actions / Status
Zahle - El Ferzol (Total network 36,046 m)	ZH-A1	944	-	944	Connected to ZH-A	Once ZH-A is resolved, no additional action
	ZH-A2	522	-	522		
	ZH-A4	2,980	-	2,980		
	ZH-A6	878	-	878		
	ZH-A7	618	-	618	Needs implementation of Municipal Decree 1020/2007 or waivers or legal equivalent for plots: 2000-2004-2005-2006-1995-1996-1997-1998-1999-2046-1987-1986-1985. The decree would take a longer time to implement.	Waivers required for 13 plots.
	ZH-A	6,815	-	6,815	2,000 m needs implementation of Municipal Decree 1020/2007 or waivers or legal equivalent. Waivers obtained except for 2 plots. 3,315 m Connected to the implementation of the 2000 m. + 1,500 m already redesigned, but connected to the implementation of the 2000 m.	Waivers for plots 477 & 489 owned by Miriam Skaff are still pending signature.
	ZH-B3	375	-	375	Not Connected to WWTP until execution of ZH-A	Once ZH-A is resolved, no additional action
	ZH-C	1,200	-	1,200	Not Connected to WWTP until execution of ZH-A	Once ZH-A is resolved, no additional action
	ZH-D	396	-	396	De facto road - Plots 564-66.	Municipal decision for de facto roads requested in September 2021. Pending.
	ZH-M	2,128	1,403	725	De facto road. Plot 1062 is subdivided legally and line can pass within that road.	Resolved.
ZH-P	675	-	675	Connected to SD-T	Once SD-T is resolved, no additional action	

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Cadastral Area	Line ID	Total Length of Pending Lines (m)	Line Sections with No Issues (m)	Line Sections with Issues (m)	Updates	Actions / Status
	ZH-Q	2,568	-	2,568	Water Course	Needs design verification
	ZH-Q1	204	-	204	Not Connected to WWTP until execution of ZH-Q. Once ZH-Q is executed, no additional action.	
	ZH-Q2	252	-	252	22 m of the line passes in private land (Plots 978 - 976), but there is a municipal expropriation decree. Part of it depends of execution of ZH-Q.	Obtain copy of decree.
	ZH-T	1,247	726	521	Existing municipal decree (plots 599-601-600-611-610-111-110-108-107-108-106-30-34-795-796-806)	Obtain copy of decree.
	ZH-T2	1,806	-	1,806	Water Course	May need design verification
	ZH-U1	657	-	657	Connected to ZH-A	Once ZH-A is resolved, no additional action
	ZH-U2	357	-	357		
	ZH-U3	114	-	114		
	ZH-U4	156	-	156		
	ZH-U5	164	-	164		
	ZH-U6	644	-	644	Connected to ZH-A + De facto road: Plots 1473-1474-1475-1476-1480-1481-1483-1484-1485-1497. Municipality proposed to cancel the line.	Review with the consultant.
	ZH-U8	292	-	292	Connected to ZH-A	Once ZH-A is resolved, no additional action
	ZH-W2	90	-	90	De facto road. Plot 648. Line may be shifted to public domain adjacent to de facto road.	Resolved.
	ZH-W3	463	291	172	De facto road. Plots 749-745-743-741. Line will be relocated to public domain.	Resolved. Supervision Consultant needs

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Cadastral Area	Line ID	Total Length of Pending Lines (m)	Line Sections with No Issues (m)	Line Sections with Issues (m)	Updates	Actions / Status
						updated shop drawings to confirm.
	FZ-A	1,372	-	1,372	Connected to ZH-A	Once ZH-A is resolved, no additional action
	FZ-B	494	-	494		
	FZ-C	228	-	228		
	FZ-D	186	-	186		
	FZ-E	1,688	-	1,688		
	Total Zahle & Ferzol	30,513	2,420	28,093		
Saadnayel – Taalbaya (Total network 7,926 m)	TB-A	500	-	500	Connected to SD-T	Once SD-T is resolved, no additional action
	TB-B	225	-	225	The line is cancelled. A letter is needed from the municipality approving cancellation.	Follow up with municipality.
	TB-C1	261	-	261	Connected to SD-T	Once SD-T is resolved, no additional action
	TB-C2	328	-	328	Railway property	Requires rerouting. Design Consultant is coordinating with the related authority.
	TB-C3	120	-	120	Connected to SD-T	Once SD-T is resolved, no additional action
	TB-C4	162	-	162		
	TB-C5	72	-	72		
	TB-C6	244	-	244	Railway property	Requires rerouting. Design Consultant is coordinating with the related authority.
	LINES TO BE CHANGED (Replacement)	331	-	331	Connected to SD-T	Once SD-T is resolved, no additional action

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Cadastral Area	Line ID	Total Length of Pending Lines (m)	Line Sections with No Issues (m)	Line Sections with Issues (m)	Updates	Actions / Status
	TB-VR1	1,068	1,068	-	Line is already executed by another entity. To check as built drawings.	-
	TB-VR2 (Overflow)	551	-	551	Narrow road with existing infrastructure.	Survey existing infrastructure to be surveyed and check if line was executed by others
	SD-G	1,290	1,290	-	(Note: already redesigned)	-
	SD-H	206	-	206	Connected to SD-T	Once SD-T is resolved, no additional action
	SD-T	904	-	904	Encroachment on narrow public domain / water canal + design constraint (wastewater line under water canal)	Coordinate with municipality
	SD-VR1	1,374	1,374	-	(Note: already redesigned)	-
	SD-DE	85	85	-	(Note: already redesigned)	-
	Total Saadnayel & Taalbaya	7,721	2,358	3,904		
Hazerta (Total network 11,843 m)	HZ-LJ	126	-	126	Connected to HZ-L	Once HZ-L is resolved, no additional action
	HZ-LI	495	-	495		
	HZ-LK	72	-	72		
	HZ-LH	132	-	132		
	HZ-LG	268	-	268		
	HZ-LF	360	-	360		
	HZ-LE	287	-	287		
	HZ-LD	132	-	132		
	HZ-LL	186	-	186		
	HZ-LC	276	-	276		
	HZ-LM	228	-	228		
	HZ-LN	72	-	72		

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Cadastral Area	Line ID	Total Length of Pending Lines (m)	Line Sections with No Issues (m)	Line Sections with Issues (m)	Updates	Actions / Status
	HZ-LA	306	-	306		
	HZ-LB	334	-	334		
	HZ-LO	108	-	108		
	HZ-LQ	204	-	204		
	HZ-LP	335	-	335		
	HZ-L	1,395	-	1,395	500 m of the line passes through private Convent property	Updated design was reviewed by CDR. Awaits waiver from convent.
	HZ-N	438	193	245	De facto road. Waivers for Plots 604-605-632 obtained based on Hazerta municipality council decision. Letter dated 24/12/2020.	Resolved.
	HZ-O	1,303	833	470	De facto road. Waivers for plots 866-865-877-872-881-726-725-868-867-1305-870-871 obtained.	Resolved.
	HZ-P	1,405	675	730	Waivers for Plots 48-649-650-80-77-170-268-281-313 obtained.	Resolved.
	HZ-Q	666	-	666	Connected to HZ-P	Resolved; since HZ-P is resolved.
	HZ-Q1	285	-	285		
	HZ-Q2	65	-	65		
	HZ-R	174	-	174		
	HZ-T	382	44	338	De facto road. Waivers for Plots 707-325-706-638 obtained.	Resolved.
	Total Hezzerta	10,034	1,745	8,289		
Qaa El Rim (Total network 5,899 m)	QR-R	1,176	889	287	Plots 8-9-1527-32-1528-1531 are public domain (Decree 13374 – 14/9/1956)	Resolved.
	QR-U	76	53	23	Plot 1320. No waivers needed, works to be done in adjacent public domain.	Resolved.
	QR-T	250	223	27	Plots 1314-1315. No waivers needed, works to be done in adjacent public domain.	Resolved.

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Cadastral Area	Line ID	Total Length of Pending Lines (m)	Line Sections with No Issues (m)	Line Sections with Issues (m)	Updates	Actions / Status
	QR-RA	453	298	155	Plot 1535, waiver available under No. 2580/1013 on 2/8/1969. Plot 121 waiver already signed. Plot 1263, no waivers needed, works to be done in adjacent public domain.	Resolved.
	QR-G	279	208	71	Plots 1599-1600 waivers already signed. Plots 1199, no waivers needed, works to be done in adjacent public domain.	Resolved.
	QR-F	595	424	171	Plot 194 waived under waiver No. 2439/71 on 7/8/1971. Plot 198 waived under waiver No. 2436/1281 on 7/8/1971. Plots 1212-193-195, no waivers needed, works to be done in adjacent public domain.	Resolved.
	QR-H	708	531	177	Plots 576 – 603 – 604 - 607, no waivers needed, works to be done in adjacent public domain. Plots 573-574-569 waivers already signed.	Resolved.
	QR-I	300	273	27	Plot 606, no waivers needed, works to be done in adjacent public domain.	Resolved.
	QR-A	414	379	35	Plot 245-284, no waivers needed, works to be done in adjacent public domain.	Resolved.
	QR-B	748	508	240	Plots 530-529-528-548 waivers already signed.	Resolved.
	QR-C	308	2	306	Plots 556-554-552-553-539 waivers already signed.	Resolved.
	QR-M	343	127	216	Plots 513-507-506, no waivers needed, works to be done in adjacent public domain.	Resolved.
	Total Qaa El Rim	5,650	3,915	1,735		
TOTAL		53,918	10,438	42,021		

2.5. Next Steps

- Follow up to resolve remaining access issues based on the actions in Table 3 above, highlighted in bold.
- Following the approval of extension of contract time, the Contractor is expected to resume works on site in November 2021.
- When works resume, ensure the completion of snag list items including replacing stolen manholes in Saadnayel municipality.

3. Component 1.2: Expansion of the sewerage network to connect to Anjar WWTP

Total length of sewer lines in Lot 1: 94.51 km and 23.48 km to be rehabilitated

Total length of sewer lines in Lot 2: 128.74 km and 31.16 km to be rehabilitated

Total length of sewer lines in Lot 3: 85.01 km

3.1. E&S Instruments

Table 4: List of E&S documents approved by the WB

Document Title	Date of Approval	Link
Environmental and Social Management Framework (ESMF)	12/02/2015	https://www.cdr.gov.lb/CDR/media/CDR/StudiesandReports/Litani/2015-01-29-Qaraoun-ESMF_issued-for-distribution.pdf
Resettlement Policy Framework (RFP)	12/02/2015	https://www.cdr.gov.lb/CDR/media/CDR/StudiesandReports/Litani/2015-01-29-Qaraoun-RPF_issued-for-distribution.pdf
El Marj Wastewater System Land Acquisition Plan	12/05/2020	Not disclosed yet
El Marj Wastewater System – Addendum No. 2 to the Environmental and Social Management Plan	07/06/2021	Not disclosed. Awaiting MoE clearance.

3.2. Project Activities

- Lot 1 works: Rebidding documents have been revised and approved by CDR. Rebidding is expected to be launched during the week of October 4th, 2021.
- Lot 2 works: The Supervision Engineer has signed the draft contract on September 29th, 2021, and will be notified to receive the official contract within two weeks of the said date. The performance security to be submitted by the Contractor needs to be approved. A notice to commence and site possession will then be issued to the Contractor. The contractor must obtain no objection on CESMP prior to starting any works on site.

- ESMP for Anjar works:
 - o A conditional approval from MoE was received on the ESMP for El-Marj (Anjar) Wastewater System in March 2019. A new committee was formed at MoE to review the study which led to another round comments and replies.
 - o On May 6th, 2021, MoE comments on El-Marj (Anjar) Wastewater System ESMP were issued. The main request was to combine the two projects, Anjar WWTP funded by the Italians and Anjar wastewater system funded by the WB, in one study, so MoE can evaluate it.
 - o On June 7th, 2021, the ESMP for El-Marj (Anjar) Wastewater System received the WB's No Objection.
 - o Following the request of MoE, the Consultant combined information on the two projects into one document. The addendum was submitted to MoE on September 16th, 2021. In principle, there are no major changes in the content of the report. All MoE and WB comments were addressed.
 - o The ESMP awaits an official approval from MoE.

4. Component 1.3: Expansion of the sewerage network to connect to Aitanit WWTP

Total length of sewer lines in Baaloul: 3.2 km

Total length of sewer lines executed in Baaloul: 2.87 km

Total length of sewer lines in Qaraoun: 18.8 km

Total length of sewer lines executed in Qaraoun: 15.22 km

4.1. E&S Instruments

Table 5: List of E&S documents approved by the WB

Document Title	Date of Approval	Link
Environmental and Social Management Framework (ESMF)	12/02/2015	https://www.cdr.gov.lb/CDR/media/CDR/StudiesandReports/Litani/2015-01-29-Qaraoun-ESMF_issued-for-distribution.pdf
Resettlement Policy Framework (RPF)	12/02/2015	https://www.cdr.gov.lb/CDR/media/CDR/StudiesandReports/Litani/2015-01-29-Qaraoun-RPF_issued-for-distribution.pdf
Aitanit Wastewater System – Land Acquisition Plan (LAP)	06/02/2018	Not disclosed yet.
Aitanit Wastewater System – Environmental and Social Management Plan (ESMP)	07/05/2018	Not disclosed yet.
Construction Environmental and Social Management Plan (CESMP)	Updated version on shared folder since April 2021	Not disclosed. Awaiting WB feedback.

4.2. Project Activities

During the aforementioned reporting period, the Contractor, Khoury Contracting Company, was forced to stop essential works and carry on with emergency works only for around a month (from January 13th, 2021 until February 15th, 2021) due to COVID-19 lockdown measures across the country. The following site works were executed:

- Excavation, bedding, pipe laying and backfilling works were executed for:
 - o Around 90% of sewer lines in Baaloul (2.87 km out of 3.2 km). The remaining works are for pumping lines connected to the pumping stations.
 - o Around 81% of sewer lines in Qaraoun (15.22 km out of 18.8 km). The remaining works are for pumping lines connected to the pumping stations.
- Topographic surveys of pumping stations and asphaltting locations
- Minimal excavation works at pumping stations 1 and 2 locations.
- For asphalt works, the executed areas are at 58% in Qaraoun, and at 54% in Baaloul. The status of asphaltting works is presented in the table below for each sewer line.

Table 6: Status of asphalt paving works (end of September 2021)

Asphalt paving works within Qaraoun Cadastral Limits as of end of September 2021						
Sewer Line	Village	Description of area	Executed Length (lm)	Executed Area (m²)	Remaining Length (lm)	Remaining Area (m²)
Q1	Qaraoun	Main road + agricultural	1,230	3,645	617	2,468
Q2	Qaraoun	Local road + residential	463	1,585	250	425
Q3	Qaraoun	Main road + residential	880	1,760	600	2,100
Q4	Qaraoun	Main road + residential	1,000	2,000	-	-
Q5	Qaraoun	Main road + residential	140	210	-	-
Q6	Qaraoun	Main road + residential	540	1080	-	-
Q7	Qaraoun	Main road + residential	1,000	2,000	-	-
Q8	Qaraoun	Main road + residential	600	900	-	-
Q9	Qaraoun	Main road + residential	85	127	-	-
Q10	Qaraoun	Main road + residential	878	1,317	122	550
Q11	Qaraoun	Main road + residential	140	280	-	-
Q12	Qaraoun	Main road + residential	80	160	-	-

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Q15	Qaraoun	Main road+ residential	1,002	-	1,002	4,509
Q18	Qaraoun	Residential+ residential	383	575	266	1,197
Q19	Qaraoun	Main road+ residential	469	-	469	2,345
Q21	Qaraoun	Main road+ residential	570	1,140	-	-
QA	Baaloul	Local road	230	460	-	-
QB	Baaloul	Local road	365	730	-	-
QC	Baaloul	Main road	342	684	-	-
Total			10,397	18,653	3,326	13,594
Asphalt paving works within Baaloul Cadastral Limits as of end of September 2021						
Sewer Line	Village	Description of area	Executed Length (lm)	Executed Area (m2)	Remaining Length (lm)	Remaining Area (m²)
B3	Baaloul	Local road	125	200	617	2,468
B8	Baaloul	Local road	690	2,070	250	425
BA	Baaloul	Local road	260	520	100	100
BB	Baaloul	Local road	150	450	-	-
A1	Baaloul	Local road	160	240	-	-
Total			1,385	3,480	967	2,993

Asphalting works are still pending for some roads. The sub-base and base coarse layers have been laid; however, the top black asphalt layer is not executed. The main reason is that the asphalt quantities in the BOQ are not enough. The design Engineer did not take into consideration the poor condition of narrow roads (width of 4 m) which would be damaged during construction works. As per the contract, the Contractor is required to reinstate along the width of the trench only.

However, asphalting the road only along the trench is dangerous to traffic safety as rainwater can easily infiltrate the paved section through the remainder of the existing road and erode the new asphalt. Moreover, Qaraoun and Baaloul municipalities sent letters to CDR requesting the complete reinstatement of narrow roads as needed. A variation order for the quantities of required asphalt is under preparation. Upon approval, it is expected that the issue would be resolved in November 2021.



Figure 2: Site pictures from upper left to right (Surveying, Compaction of the bedding material, Preparing bedding material and surfaces before asphalt laying, Sampling for compaction test, Testing the temperature of the asphalt delivered to site, Asphalt compaction).

4.3. Environmental and Social Monitoring Plan

CDR E&S Consultant held a meeting with the Supervision Engineer of Component 1.3, Bureau Technique pour le Développement, on September 10th, 2021 at CDR in order to provide comments on the Monthly Progress Report. Comments for each section of the report were communicated by email for the Engineer's reference. The Monthly Progress Report of August 2021 was revised accordingly. The main comments given concern the following:

- A more detailed explanation and location of site activities executed during the reporting month is needed based on the schedule of works.
- The progress summary report of the works executed per sewer line to be presented in table format with the length of each line and the works done. A table on the status of road reinstatement at each line was also requested.
- Updates on environmental, health, and safety measures shall be in accordance to ESMP and CESMP per site.
- A sample GRM complaints log was shared with the Consultant for future reporting
- General modifications in the outline and format of the report.

On September 20th, 2021, CDR E&S Consultant did a field visit to Qaraoun and Baaloul along with the Supervision Engineer. The visit included the following:

- Meeting with the mayor of Baaloul Municipality to inquire about complaints received by the municipality, any challenges or recommendations, and to check the availability of GRM contact information at the municipality.
- Meeting with the mayor of Qaraoun Municipality to inquire about complaints received by the municipality, any challenges or recommendations, and to check the availability of GRM contact information at the municipality.
- Meeting with a grievant who submitted a complaint regarding road reinstatement, as described in Section 4.3.3.
- Inspection of reinstated roads and narrow roads still pending reinstatement.
- Inspection of the location of pumping stations and the safety measures implemented.

The sections below describe the applicable E&S measures implemented by the Contractor as per the ESMP and CESMP. No tree removal activities or cultural heritage chance finds were reported.

4.3.1. Health and Safety of Workers, Training, Internal GRM

- Awareness training sessions for workers and staff are held on a regular basis (mid of each month) by the Contractor and under the supervision of the Engineer. They cover COVID-19 safety measures, general safety measures on construction site, and allow workers and staff to express any complaints.
- Temperature checks were done for all workers on a daily basis. No COVID-19 cases were reported.

- No complaints were raised by workers regarding working conditions.
- No workers were staying on site after working hours.
- There are no female workers on site.



Figure 3: Temperature checks (Left); Awareness session on safety and use of PPEs (right)

4.3.2. Traffic Safety and Management

- Adequate safety measures were implemented during construction works.
- GRM contact information was added on mobile posts.
- No accidents or complaints were reported.





Figure 4: Traffic safety measures

4.3.3. Community GRM

- GRM contact information (handouts and poster) were not present at the municipalities of Qaraoun and Baaloul.
- Since the work is in villages, residents directly contact the mayors or municipal council members to express their complaints.
- The Contractor was not presenting detailed log records of the GRM; however, general complaints were reported during monthly reports. They include:
 - o Demands from residents to backfill trenches entirely with base course material. The Engineer would explain the design specifications as per CDR contracts.
 - o Complaints regarding damages to existing water networks. Some public water networks exist at a shallow depth, thus at times they were damaged during excavation, or asphalt sawing, or even asphalt paving activities. The Contractor was immediately fixing any damages at his own expense.
 - o Requests from residents to connect to the new network. The Engineer explained to concerned residents that the new network lines are connected to pumping station which are not yet executed. They would be able to discharge their wastewater in the network when it is functional.
 - o Asphaltting of narrow roads that were damaged during construction works. On August 25th, 2021, a complaint was received via email by the WB from Ms. Layla Jomaa regarding reinstating the road leading to her house with the top asphalt layer. The content of the complaint was shared with CDR PMU on September 13th, 2021. The Contractor completed asphaltting works for the concerned road section on September 28th, 2021. The total length of the asphalted road section is around 340 m with an average width of 3 to 3.5 m. The Contractor asphalted an additional area of around 655 m² compared to what is specified in his contract. However, this was necessary to resolve the complaint before the rainy season. It was also not feasible to wait for the approval of the variation order request for additional asphalt works. The issue was resolved

within 15 days of receiving the complaint by CDR PMU (September 13th, 2021 – September 28th, 2021). Further details are presented in Annex 4.

- Another two complaints regarding reinstatement works were received by the WB via email. They have not been shared with CDR PMU yet.
- No complaints were received via the project's GRM email.

4.3.4. Waste Management Plan

- Volumes of total, reused, and disposed excavation material was reported on a monthly basis. Around 60% of excavation material was reused in Qaraoun and Baaloul. The material was disposed in a landfill following a verbal agreement with the municipalities.
- At the location of pumping station 1, a poorly maintained septic tank is constructed on public land by adjacent homeowners. The Contractor was asked to install a plastic wastewater tank to hold wastewater discharged from the house. It is his responsibility to empty the tank as needed and transport the wastewater to the nearest WWTP (Joub Jennine) until the house is connected to a functional sewer network.

4.3.5. Air and Noise Pollution Mitigation Measures

The equipment used during construction works included 2 excavators, 2 jack hammers, 1 bulldozer, 2 bobcats, 2 pickups, 1 truck, 1 asphalt cutter, 2 plate compactors, 2 roller compactors, 2 compressors, 1 JCB and 2 generators. The equipment was regularly maintained, and used only during working hours. There were no registered complaints from the community. No specific measures, such as water spraying the roads to reduce dust, were reported in Monthly Progress Reports.

4.4. Emerging Issues

- There is an encroachment on public land at the location of pumping station 3 in Qaraoun. It consists of a goat farm and a concrete room where a family of 7 Syrians, who work for the farm owner, reside, as shown in the picture below. The structures were built in 2019. There was a verbal agreement between the mayor of Qaraoun and the owner of the farm that the latter will remove all establishments with no compensation when the project is implemented. The Engineer was requested to get an official letter from the municipality explaining the date of the encroachment, and the details of the verbal agreement.



Figure 5: Encroachment on public land at the location of pumping station 3

- The fuel crisis in the country has impacted the project since August 2021. At times, employees were not able to reach the site due to fuel shortages. There were some delays in material procurement from suppliers. It was also difficult to find fuel for the Contractor's equipment.

4.5. Next Steps

The below actions were communicated to the Supervision Engineer for their timely implementation by the week of October 4th, 2021. The E&S Consultant is following up with the Consultant on a weekly, at times daily basis, on all pending actions.

- Improve GRM implementation by adding contact information on project signboards in Baaloul and Qaraoun and posting the project's GRM handout at the municipalities.
- Install a plastic wastewater tank at the location of pumping station 1 to replace existing septic tank.
- Obtain letter from Qaraoun municipality on encroachment pumping station 3 location.

5. Annexes

Annex 1 – Letter from Saadnayel Municipality on Stolen Manholes

Annex 2 – Map: Pending Expropriation Issues in Zahle

Annex 3 – Sample of Waiver Document in English and Arabic

Annex 4 – Complaint Report

Annex 1

Letter from Saadnayel Municipality on Stolen Manholes

بلدية سعدنايل

رقم التسجيل ٥/٢٢

تاريخ ٢٠٢٤/٣/٢٤

لمن يهمه الامر

. الموضوع : فقدان اغطية المجاري الفونت بتاريخ ٢٠١٩/١٠/١٠

عندما تبين لنا فقدان ٢٢ غطا من اغطية المجاري الفونت في نطاق بلدية سعدنايل في حي لويس وبعد أن تبين لنا فقدان هذه الأغطية و المنفذة من قبل مؤسسة أي اس دي العالمية , تقدمنا بشكوى شفوية لمخفر شتورا وقد وعدنا المخفر بالقيام بالتحقيق في الامر ولغاية تاريخه لم نتبلغ جوابا على شكوانا.

بناءا لطلب مؤسسة أي اس دي أعطيت هذه الإفادة

رئيس بلدية سعدنايل
حسين محمود شويبا صبي



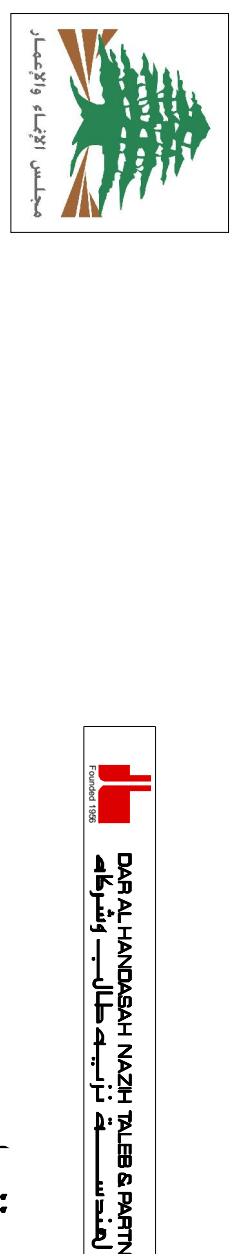
في ٢٤/٣/٢٠٢١

Annex 2

Map: Pending Expropriation Issues in Zahle

مشروع

تعمير شبكات مجاري الصرف الصحي في رحلة - قاع الريم -
جزرنا - كرك وسعدنايل التي تغذي محطة معالجة الصرف
الصحي في رحلة
مقياس ١/١٠٠٠



مصطلحات

- تخطيط مصدق مطلوب استهلاك والحاصل على اذن مرور
- تخطيط مصدق مطلوب استهلاك مطلوب الاستعمال على اذن مرور
- املاك عامة
- مجاري مياه

جدول بأرقام العقارات المصانة بالتخطيط والحاصل على اذن مرور

المنطقة العقارية	حو تش	الاصراء	أراضي	العقارية
رقم العقار	٣٠١	٣١٥	٣١٧	٣١١
	٦٠٨	٣٧٩	٤٧٥	٤٧٧
	٤٧٨	٤٨١	٤٨٧	٤٨٤

جدول بأرقام العقارات المصانة بالتخطيط والغير حاصلة على اذن مرور

المنطقة العقارية	حو تش	الاصراء	أراضي	العقارية
رقم العقار	٤٧٧	٤٨٩		



Annex 3
Sample of Waiver Document



Waiver and Acknowledgment

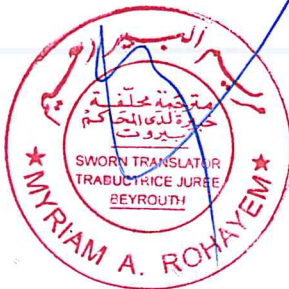
I the undersigned, Elias Joseph EL SKAFF, the owner of the real estate number /477/ of Haouch El Oumara real estate region do willingly and voluntarily declare what follows:

I acknowledge by virtue of this document that, and until the completion of the procedures of appropriation which are legally stipulated under the decree number 1020/2007, I finally and irrevocably allow the Lebanese State and the Council for Development and Reconstruction (CDR) or whoever it may legally delegate as regards an area of 3161 square meters of the real estate number /477/ of Haouch El Oumara real estate region, in particular the contractor of "Lake Qaraoun Pollution Prevention" Project, to execute the works related to this project within the section of this real estate determined by the letters /a-b-c-d/ and shown in red on the map attached to this undertaking; I also allow the said parties or whoever they may legally delegate to enter the section required to be appropriated from the real estate to execute the works related to the said project and to carry out the periodical activities of maintenance and inspection; provided, this undertaking shall include not to confront the parties who benefit from the same about using it in all the aspects they deem appropriate.

I waive my right, at present and in the future, to claim for any indemnities from any party as a result of this document, except for what is related to the indemnities for appropriation that will be later determined by the competent Committee of Appropriation. I undertake not to bring any lawsuit or challenge or revision before any judicial or administrative authority as regards this subject matter and I acquit the Council for Development and Reconstruction (CDR) and the Lebanese State as regards each right or claim in this respect by comprehensive, final and irrevocable quitclaim for whatever reason.

I also undertake to declare this document before all the official authorities and departments and to register its motion at the competent Secretariat of the Real Estate Register on the in kind cadaster related to the aforementioned real estate.

Signature

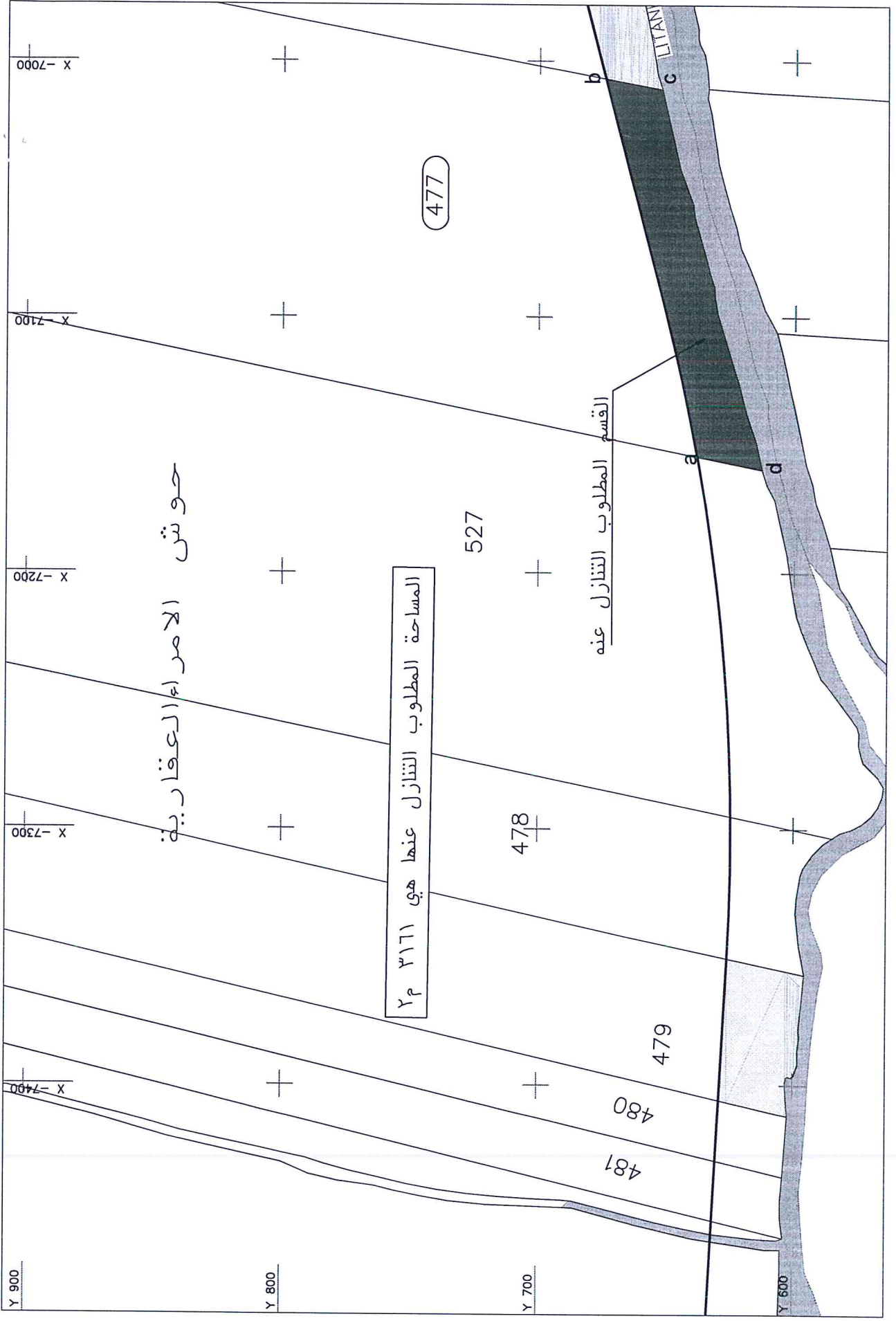


Real Estate Waiver Map

Haouch El Oumara Real Estate Region
The area required to be waived is 3161 m².
The section required to be waived.
Scale 2000/1



خريطة تنازل للعقار ٤٧٧



Annex 4
Complaint Report

This annex describes in details the complaint received by Ms. Layla Jomaa which mainly concerns road asphaltting. It also outlines the steps taken by CDR PMU to resolve the case.

- On September 13th, 2021, CDR PMU received a complaint submitted to the World Bank by email on August 25th, 2021. The complaint concerns the works under Component 1.3, expansion of sewer network to Aitanit WWTP. The grievant is Ms. Layla Jomaa who resides in Baaloul. Her complaint included the following issues:
 - o The street leading to Ms. Jomaa's house was unpaved for almost a year. This resulted in disturbances during the winter season of 2020, mainly dirt or mud from the unpaved road, unspecified damages to the cars, and difficulties in reaching the house by car.
 - o The phone cable was damaged on two occasions. She claimed that no action was taken by the Contractor or Supervision Engineer. She claimed that she had to fix the cable through her own means.
 - o No clear date on when the road will be paved was provided to Ms. Jomaa when she inquired. She is concerned that the road will not be paved before the coming rainy season.
 - o She stated that other streets, where works started at a later stage, have already been paved.

On September 6th, 2021, the grievant sent another email to the World Bank with pictures showing how other roads have been asphalted in the last few days, while the road in front of her house is still unpaved.

- On September 14th, 2021, CDR E&S Consultant sent an email to Ms. Jomaa asking for her phone number to communicate directly with her. On the same date, the Contractor also asphalted a section of the road leading to Ms. Jomaa's house. The total length of asphalted section was 90 m with an average width of 3.5 m totaling an area of 315 m². As per the contract, the original quantity is 135 m² which is equivalent to asphaltting only along the excavated trench for an average width of 1.5 m.
- On September 15th, 2021, CDR PMU called Ms. Jomaa. CDR ESC introduced herself stating the reason for the call which is to follow up on the complaint submitted to the World Bank by email. Permission to record the call was obtained. The main points discussed were as follows:
 - o Ms. Jomaa explained her grievance issue. She noted that following her email to the World Bank, only a section of the road leading to her house was asphalted. She was told that the Contractor is waiting for an approval to asphalt along the entire width of the road. She wanted to know when exactly the approval will be granted and how much longer will they have to wait.
 - o When asked, Ms. Jomaa was not sure about the name or position of the person she initially addressed the complaint to. She has also previously talked to the municipality, the mayor and some council members, and they gave her the same answer. She expressed her concern on whether the approval will be granted before the rainy season.
 - o Ms. Jomaa was asked when and how she raised her complaint. She explained that at first (time not specified) she addressed the municipality and waited long enough, but

- no actions were taken. Her father has also spoken to the Engineer. Then she decided to send an email to the World Bank.
- CDR ESC thanked Ms. Jomaa for the details provided and explained the following:
 - CDR will be following up on the complaint until it is resolved before the rainy season.
 - The main problem is that the quantity of asphalt originally estimated is not enough. Therefore, the Contractor has asphalted sloped roads first due to safety risks and potential of erosion of base coarse.
 - When asked about the damage of the phone cable, Ms. Jomaa did not recall the date of the incident. She explained that they had to call Ogero on two occasions, until it was fixed. When asked about available receipts, she said she will ask her father if they are available. When asked if the issue was raised to the Supervision Engineer before contacting Ogero, she was not aware of the exact details. She remembers that the phone cable was cut for a couple of days. Ms. Jomaa was asked to give us more details on the issue, if possible.
 - Ms. Jomaa shared a video of the road leading to her house with CDR ESC via phone.
- On September 20th, 2021, CDR ESC did a field visit to Baaloul. After calling Ms. Jomaa, CDR ESC accompanied by the Supervision Engineer went to her house in Baaloul and met her mother. The same concerns were expressed. The mother of Ms. Jomaa also noted that her husband had to pay 50,000 LBP twice to fix the phone cable. The cable was cut twice in August 2020 and has since been functioning properly. No receipts were available. CDR ESC informed her that she will be notified in 10 days with an exact date for asphaltting works.
- On September 28th, 2021, since the variation order was not finalized yet, and given the 10-day period promised to the grievant, the Contractor completed asphalt works at the road leading to Ms. Jomaa’s house (at sewer line Q2). The total length of the asphalted section is 250 m with an average width of 3 to 3.5 m. As per the original quantities which did not consider the poor road conditions in the area, the Contractor is required to asphalt along the trench only, thus along an average width of 1.5m.

Table 1:Quantities of asphalt executed on September 28th, 2021

Line name	Total length (l.m.)	Average width (l.m.)	Total asphalt quantity used (m ²)	Original quantity per contract (m ²)
Q2	200	3.5	700	300
	50	3	150	75
Total	250		850	375

- On September 30th, CDR ESC called Ms. Jomaa to inquire if the asphaltting works were satisfactory. She and her family are satisfied with the work. She thanked us for the efforts and the follow up. She was planning on reaching out and sending pictures, and she will send an

email to CDR PMU stating the satisfactory resolution of the complaint. CDR ESC explained that if the approval is granted, the remaining 1 to 1.5 m of the road’s width would also be paved.

In summary, the complaint was resolved within 15 days by CDR PMU. The pictures below present the condition of the road before and after the complaint was resolved. It is worth noting that the Contractor, contrary to the claims raised by the grievant, fixed the phone cable on the two occasions. A receipt was presented as shown below. The phone cable damage incident occurred a year ago; therefore, it was difficult to properly assess the validity of the presented claims. However, the issue has long been resolved and no further complaints were raised by the grievant.

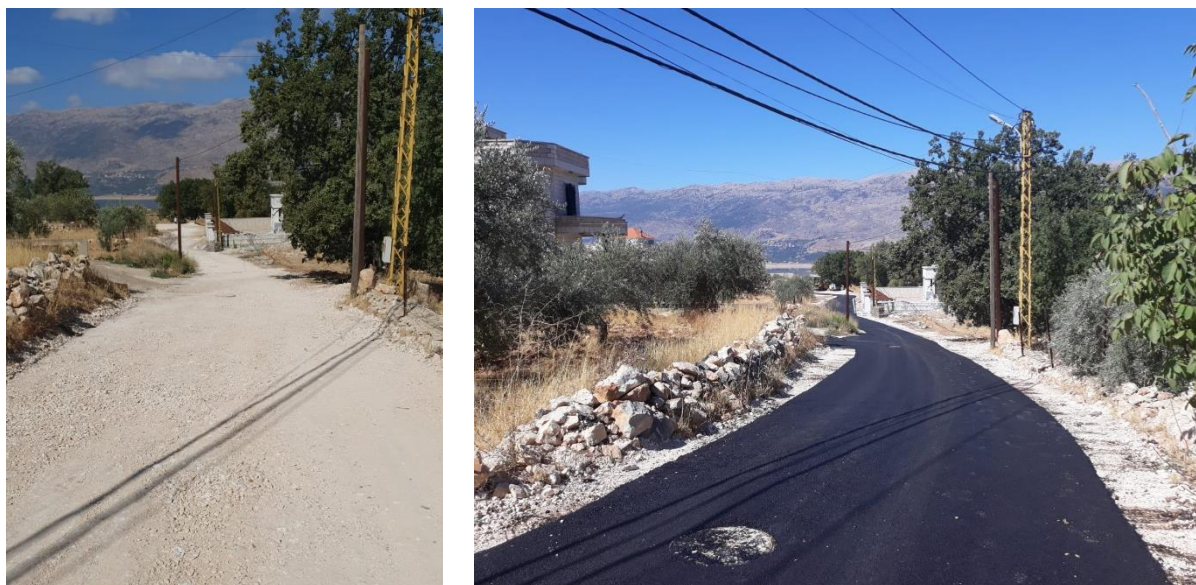


Figure 1: Road at line Q2 before and after asphaltting works



Figure 2: Asphaltting works at line Q2



Figure 3: Current road condition facing Ms. Jomaa's house in Baaloul

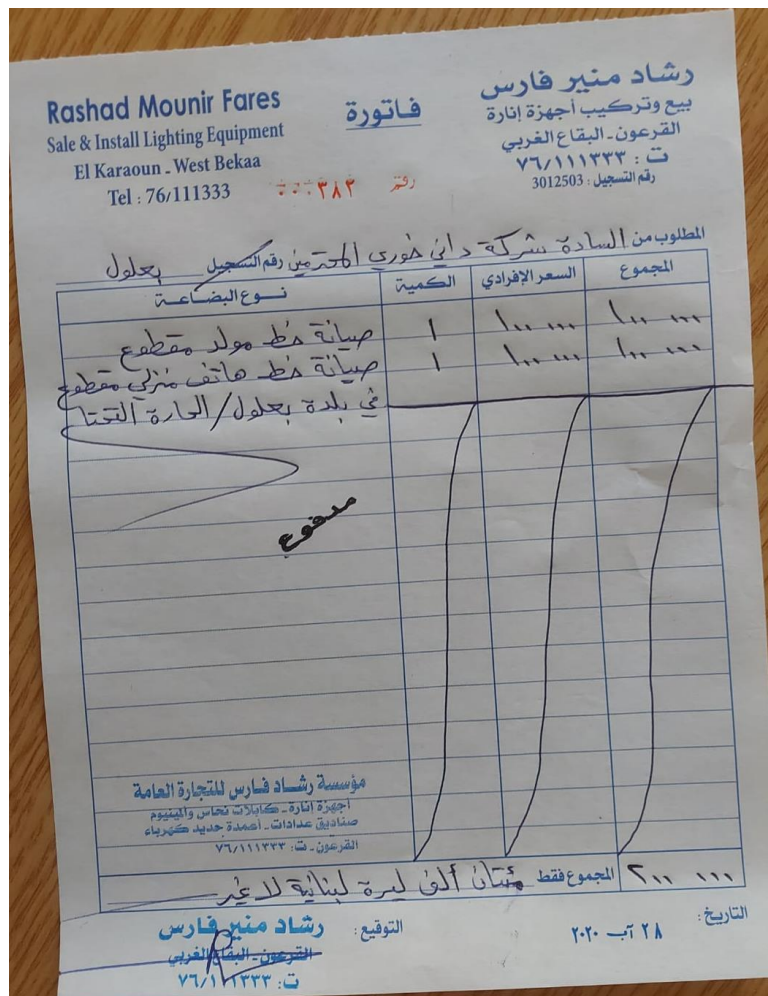


Figure 4: Picture of receipt presented by Contractor for fixing phone cable on two occasions in August 2020