## UNITED NATIONS DEVELOPMENT PROGRAMME

## PROJECT DOCUMENT ADDENDUM Lebanon



Project Title: Environmental Rehabilitation through the enhancement Of Integrated waste management - EROI

Project Award Number: 00106573 - Project Output Number: 00107249

Implementing Partner: UNDP (DIM)

**Start Date:** 01 July 2020 **End Date:** 30 April 2023

PAC Meeting date: 13 July 2020

## **Brief Description**

Given that the Bekaa region hosts a large portion of refugees and is highly affected by the increase in waste production, and given that the Municipality of Zahleh already has a functioning sanitary landfill that however needs additional support (as per detailed assessment study conducted in summer 2016), "Environmental Rehabilitation through the enhancement Of Integrated waste management – EROI" project aims at providing additional institutional support to both the Ministry of Environment (MoE), responsible for solid waste management at the national level, and to the Municipality of Zahleh to expand, better manage, and support in solid waste management in the Bekaa region.

Moreover, the updated Master Plan for the closure and rehabilitation of uncontrolled dumpsites throughout the country of Lebanon has determined the location and size of all the Municipal Solid Waste dumpsites that require immediate intervention. The Solid Waste Management project targets to close/rehabilitate dumpsites in the vicinity of the Zahleh landfill given that this facility exists as a viable alternative for open dumping. The dumpsites, proposed for closure/rehabilitation, are in proximity to one another to ensure that any treatment of the waste or transport is efficiently done.

This will have a direct impact on the Litani river and Qaraoun lake, in terms of preventing further pollution and restoring the river quality. This has been flagged as a national priority for the country, based on the MoE/UNDP 2011 Business Plan for Combating Pollution of the Qaraoun Lake, later turned into a roadmap endorsed by all stakeholders, and which a follow up committee (basin committee) was established for by virtue of the Council of Ministers' decision 32 of May 9, 2014.

UNSF Outcome involving UNDP: Outcome 3.3. Lebanon has improved environmental governance.

CPD Output 4.2.: National Environmental Management strengthened; Outcome 4.3. Number of national development plans and processes integrating: biodiversity, renewable energy, energy efficiency, sustainable consumption and production, climate change, sound chemical management, and ecosystem services values.

Indicative Outputs: 1) Legal and institutional support; 2) Technical research and policy support, and 3) Implementation to foster resilience and regional and national cross fertilization

Gender marker: GEN2

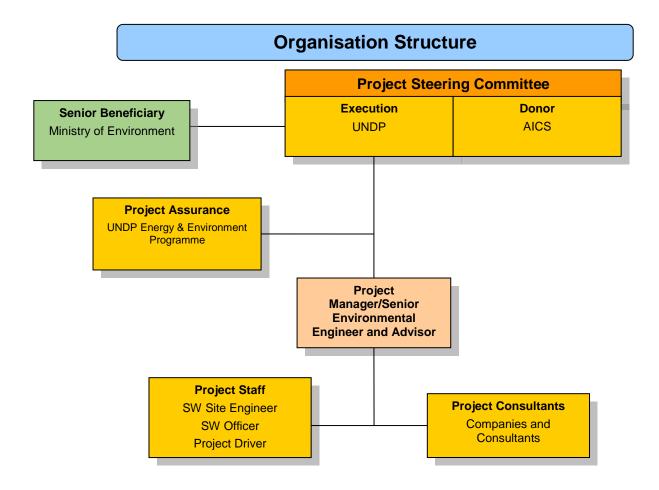
Total resources required:	(exchang	\$ 1,706,485 e rate \$ 1 = € 0.879)
Total	UNDP TRAC:	
resources	Donor:	€ 1,500,000
allocated:	Government:	
	In-Kind:	
Unfunded:		

	UNDP	
Ms. Melanie Hauenstein Resident Representative	DocuSigned by:	DS MS
Date: 08-Apr-2022	3C8E388716144A0	

The current addendum is prepared to reflect the time extension without cost implications granted by the Donor.

Below is the updated Project Board, the updated Logical Framework Matrix, and the updated budget.

## 1- **Updated Project Board:**



2- Updated Results Matrix:

Expected results	Description	Verification and objective indicators	Means of verification	Assumptions	Progress
General objective	Enhance environmental rehabilitation and sustainable management of natural resources at the local and national level.	Improved the management of Solid Waste  Ministry of Environment's capacity increased to awareness related to the Solid Waste sector	Technical studies and reports from Ministry of Environment  CoM's decisions in the Solid Waste Sector  Lebanese legislation	The Government of Lebanon remains committed to its strategic targets  The changes/rotations in the personnel of the Ministry of Environment do not affect project implementation	An assessment of the Facility has been conducted.  PMU team is working in close coordination with local authorities and focal point at MoE
Specific objective	The project will specifically assess the current situation of Zahle Facility and upgrade it.	Improved solid waste management in Zahle and surrounding.	Project reports	Political commitments from the MoE	An assessment report of the solid waste facility has been prepared (dated February 2021), and an assessment study of the leachate infrastructures and upgrades have been prepared (Completed including tender documents during the first week of July 2021).
Output 1:  Ministry of Environment and the Municipality of Zahle capacitated and supported in Integrated Solid Waste Management (ISWM).	Assessment of the Zahle Facility  Training Program for the Facility Operators on O&M				Facility assessment report dated February 2021 completed.  One set is due in the first half of 2022, while the second set is due after completing the construction of the new leachate treatment plant

Output 2:	Provision of technical support	Technical study and	Existing studies at the MoE	Leachate assessment
Technical assessment for the improvement of Zahle Solid Waste Management Facility	and analysis to assessment Zahle Facility current status and design an appropriate leachate management system for the	assessment reflecting the current situation at Zahle Facility	Database collected related to the project	studies and preparation of tender documents have been completed Tender documents for
racinty	Zahle Municipality.  Implementation of Appropriate Leachate Management System	Detailed design of the leachate management system Environmental impact assessment for Zahle facility	Initial assessment report	the upgrades and the new leachate treatment plant was launched on 10September 2021. (additional upgrades
	Any necessary environmental assessments studies and MoE Approval for both Leachate and	Leachate collection network for the proposed expansion of the landfill, vertical leachate		related to landfill capping may be launched after contract award)
	Sludge Treatment	recirculation wells, leachate recirculation network, and recirculation pump, (b) leachate treatment. A specialized engineering company will be contracted to		Implementation of works should be launched in December 2021/January 2022.
		undertake the study and then a tender will be launched for the implementation of the works		Environmental study will be launched once the Leachate upgrades are completed
Output 3:  Selection of dumpsites in  Zahle vicinity to be closed and rehabilitated	Rapid assessment of existing dumpsites in the area  Necessary Study for the Closure/Rehabilitation of One or	Number of critical dumpsites in the area based on the updated Master Plan for the closure and rehabilitation of uncontrolled dumpsites (MoE/UNDP study 2016-2017)	Updated Master Plan for the closure and rehabilitation of uncontrolled dumpsites (MoE/UNDP study 2016- 2017)	Internal assessment of existing dumpsites was conducted and Hazzerta dumpsite was selected.
	More Open Dump	Number of awareness raising activities in the area	Another existing MoE studies related to the assessment of dumpsites	Bid for rehabilitation of Hazzerta dumpsite was launched in May 2021.
		Number of capacity building activities/workshops at the	Hazzerta Provision of Services for the Preparation of Necessary Studies for the	Contract was awarded in September 2021

		national level	Closure and Rehabilitation of Hezzerta Dumpsite  Assessment of the current situation in the area based on LCRP studies and selection of dumpsites  UNDP assessment in the area nearby Litani River	Training should be implemented upon completion of the rehabilitation works (tentatively March 2022)
Activities in relation to Output 1	<ul> <li>Setting up a PMU at MoE</li> <li>Assessment of the Zahlé         Facility</li> <li>Training Program for the         Facility Operators on O&amp;M</li> </ul>			<ul> <li>Solid Waste Expert hired</li> <li>Facility assessment report dated February 2021 completed.</li> <li>One set is due in the first half of 2022, while the second set is due after completing the construction of the new leachate treatment plant</li> </ul>
Activities in relation to Output 2	<ul> <li>Technical Studies and Designs of an Appropriate Leachate Management System</li> <li>Implementation of Appropriate Leachate Management System</li> <li>Technical Study for Sludge Treatment Options</li> <li>EIA Studies and MoE Approval for Both Leachate</li> </ul>			<ul> <li>Leachate assessment studies and preparation of tender documents completed</li> <li>Tender documents for the upgrades and the new leachate treatment plant was launched on 10 September 2021.</li> </ul>

	and Sludge Treatment		<ul> <li>Implementation of works should be launched in December 2021/January 2022.</li> <li>Sludge assessment study RFP launched in July 2021; contract award in September 2021; Implementation of works expected to start in September/October 2021</li> <li>Environmental Study will be launched</li> </ul>
Activities in relation to Output 3	Necessary Study for the Closure/Rehabilitation of One or More Open Dump     Concerned Municipality Capacitated to Use the Zahle SWM Facility     Closure/Rehabilitation of One or More Open Dump		during the second half of 2022.  Bid for rehabilitation of Hazzerta dumpsite was launched in May 2021.  Contract expected to be awarded in August/September 2021  Training should be implemented upon completion of the rehabilitation works (tentatively March 2022)

3- Updated Budget:

Plann	ed activities	Planned budget											
Results	Sub-activities	Explanation for activities	Initial cost (USD)	Total cost as per initial Agreement (EUR)	Exp 2020 (USD)	Planned 2021 (USD)	Planned 2022 (USD)	Planned 2023 (4months)	New Proposed Cost (USD)	New total Cost (EUR)	Variation from initial Budget (USD)	% variation	Justification of item budget modification
		ISWM expert/Project Manager Site Engineer	103,494.88 77,180.89	90,972	120.00	47,000.00	124,965.00	42,502.00	214,587.00	188,622	111,092.12	107.34% - 100.00%	Budget needed for the Solid Waste Management Officer to serve
N	Project Management/Staff costs	Driver	33,911.26	29,808	-	-	-	-	-	-	(33,911.26)	100.00%	for the whole duration of the project including the extension period
		DPC	9,358.36	8,226	1,610.55	4,629.81	3,118.00	-	9,358.36	8,226	-	0.00%	No Variation
Result 1: Improvement of institutional capacity on	Goods and Equipment	Equipment, office furniture	14,334.47	12,600	2,750.00	-	3,250.00	-	6,000.00	5,274	(8,334.47)	-58.14%	Both goods/Equipment and Running cost originally sum up to 30,716.72\$, the value has
ISWM	Running costs	Operation of the project (petrol, office supplies, etc.)	16,382.25	14,400	- 2,300.00	2,300.00	2,022	(14,082.25)	-85.96%	been decreased by 22,416.72\$ due to COVID-19 and implementation of working from home modality, which reduced office furniture and running cost. Reduced amount to be re-allocated to Result 2			

	Audit	Internal UNDP audit	5,688.28	5,000	-	-	5,688.28	-	5,688.28	5,000	(0.00)	0.00%	No Variation
	Capacity Building		68,306.03	60,041	-	-	7,311.57	-	7,311.57	6,427	(60,994.46)	-89.30%	Originally 68,306\$ reduced to 7,311.57\$ due to covid-19 and oline services. Remaining 60,994.46 reallocated to Result 2
	Subtotal A1		328,656.43	288,889	4,480.55	51,629.81	146,632.85	42,502.15	245,245.21	215,571	(83,411.22)	-25.38%	
Result 2: Improvement of Zahleh Facility	Leachate management Subtotal A2		1,023,890.78 1,023,890.78	900,000	-	174,010.00 174,010.00	733,292.00 <b>733,292.00</b>	200,000.00	1,107,302.00	973,318 <b>973,318</b>	83,411.22 <b>83,411.22</b>	8.15% 8.15%	Originally 1,023,890.78\$ increased to 1,107,302\$ by reallocation of 83,411.18\$ from Result 1.
Result 3: Rehabilitation	Subcontracting		227,531.29	200,000	-	179,948.00	47,583.29	-	227,531.29	200,000	0.00	0.00%	No Variation
of dumpsite	Subtotal A3		227,531.29	200,000	_	179,948.00	47,583.29	-	227,531.29	200,000	0.00	0.00%	
	TOTAL		1,580,078.50	1,388,889	4,480.55	405,587.81	927,508.14	242,502.15	1,580,078.50	1,388,889	0.00	0.00%	
	UNDP management fees for headquarters (8%)		126,406.14	111,111	358.44	32,447.00	74,200.55	19,400.15	126,406.14	111,111	0.00	0.00%	No Variation
	TOTAL		1,706,484.64	1,500,000	4,838.99	438,034.81	1,001,708.69	261,902.30	1,706,484.64	1,500,000	0.00	0.00%	No Variation