



Republic of Lebanon

**Council for Development and Reconstruction
Lebanon Water Supply Augmentation Project**

Environmental and Social Panel (ESP)

Third Mission – Draft Final Report

(February 3-15, 2019)

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Acronyms and Abbreviations

BMLWE	Beirut Mount Lebanon Water Establishment
BP	(World) Bank Procedure
BSP	Benefit Sharing Program
CESMP	Construction Environmental and Social Management Plan
CDR	Commission for Development and Reconstruction (Lebanon)
CH	Cultural Heritage
DGA	Directorate General of Antiquities
DRB	Dam Review Board, aka Dam Safety Panel of Experts (Bisri)
DSP	Dam Safety Plan
E&S	Environmental and Social
ESIA	Environmental and Social Impact Assessment
ESMP	Environmental and Social Management Plan
ESP	Environmental and Social Panel of Experts (Bisri)
CH	Cultural Heritage
IDB	Islamic Development Bank
OP	Operational Policy (of the World Bank)
PAD	Project Appraisal Document
PCR	Physical Cultural Resources
PMU	Project Management Unit
RAP	Resettlement Action Plan
SCBR	Shouf Cedar Biosphere Reserve
SP	Safeguard Policy (of the World Bank)
ToR	Terms of Reference
WB	World Bank
WSAP	Water Supply Augmentation Project (Bisri)
WWTP	Wastewater Treatment Plant

Introduction and Overview

1. This report presents the results of the field mission undertaken February 4th through 8th, 2019 by ‘Environmental’ and Panel chair Jean-Roger Mercier (JRM) along with ‘Social scientist’ Arbi Ben Achour (ABA).
2. This report is presented by these two experts of the Environmental and Social Panel (ESP) of the Bisri Dam project.
3. This report contains, as per ESP’s Terms of Reference, mission’s findings, recommendations as well as suggested next steps.

Terms of Reference of the Environmental and Social Panel (ESP) of Experts

4. According to individual experts’ contract, their Terms of Reference consist in “...ensuring that the components of the [WSA] Project, as designed and built, comply with international standards of excellence and safety for water resources infrastructure as reflected in the World Bank Safeguard Policies and the GoL’s legislations, regulations and guidelines. The ESP’s oversight is comprehensive and extends to project siting, design, construction and operation, impact mitigation and monitoring plans and resettlement instruments.”

Recent achievements

5. The recent period has seen many developments in the progress towards dam and reservoir building as well as in the environmental and social risk management of the project. Most notably, the contractor has been selected and retained and several of the key permits have been obtained, making the start of project major works a short term perspective. The Panel understands that, under current assumptions, the construction works for the dam could commence as early as January-February 2020.
6. The Panel notes that CDR’s Project Management Unit has been losing its internal capacity on environmental themes since the last mission of the Social scientist (July 2018), particularly. The Unit’s communication capacity, on the other hand, has been augmented and a robust communication campaign has been launched.

ESP Mission’s organization

7. It should be noted that this ESP mission did not include the Cultural Heritage specialist. CDR is in the process of ensuring that future ESP missions will include a CH specialist, a must, given topic’s high priority relative to the timing and advancement of the works under the project.
8. The ESP wishes to congratulate CDR for its outreach efforts, in spite of the explicit opposition to the project expressed by several civil society organizations. The Panel has participated in the preparation of a video and in a meeting where CSOs had been invited and where CDR and the Panel had a chance to respond to a series of detailed questions expressed in a free atmosphere. The communication team hired by CDR should continue its critical contribution to the design and implementation of the project.
9. The ESP equally wishes to share the excellent impression that its members got from the visit to the Jezzine Municipality and to the Maison de la Forêt. In both cases, these are international standards organizations that have the capacity to bring a strong support to the project, and their presence in the extended project area bodes well of its future success.
10. The schedule followed by ESP mission has been as originally planned by CDR’s project team and is provided in annex 2.

Relationships with CDR and the World Bank team

11. The mission benefitted from a thorough preparation, particularly owing to the dedication of Mr. Elie Moussalli, Unit Manager, with the assistance of Ms. Elissar Eloreibi. That high degree of preparation maximized ESP’s contribution and the Panel hereby expresses its gratitude to the organizers for that optimization.
12. The combination of field visits and meetings in Beirut at CDR and World Bank premises was particularly useful.

13. The mission was designed to coincide with the presence of the World Bank project supervision team, led by Ms. Amal Talbi and Sally Zgheib, co-task team leaders. That mission included Beirut-based as well as non-Beirut based WB staff and consultants. The exchanges with the team during both the field visits and the meetings were fruitful and highly welcomed by the Panel members. The full list of WB team members appears in the list of persons met at the end of the present report.

Communications between two field missions

14. Conference calls and work by remote were conducted in between ESP field visits. During 2018, in addition to the field visit by ESP's social scientist, there were many interactions between ESP, CDR, the World Bank project team, Lebanese CSOs and World Bank's Inspection Panel.
15. The Panel welcomes these interactions in between two field missions and encourages the CDR to use their knowledge of the project and its implications to continue such interaction while committing to keep the quick turnaround response to future queries.

Persons and organizations met

16. The list of persons and organizations met is attached in appendix 1.

Documents analysed

17. The list of documents received and analysed includes :
 - **CDR Project's Quarterly Progress Report 8** for the period of April, May and June 2018
 - **CDR Project's Quarterly Progress Report 9** for the period of July, August September 2018
 - The Draft **Ecological Offset Plan** commented by CDR
 - The **Final Wave III report** by CRI, the consultant responsible of the external monitoring of the RAP implementation (see ESP social scientist report).
 - **World Bank's Aide memoire** for the last mission of November 2018
 - **Draft Wastewater MasterPlan** (draft of November 2018) by LibanConsult (including terms of reference of the master plan and its environmental and social impact assessment ESIA)
18. Since most of the environmental measures that ensure project's compliance with national and World Bank safeguard policies are still at the design stage, the review of the documents programming these measures is timely and critical. In parallel, the communication efforts appropriately launched by CDR's team should aim to educate the general public about the sequencing of these environmental measures. One typical example is the implementation of the ecological offset plan, which will start once the plan has been finalized and approved. Chances are that land clearing and tree felling for the dam construction works will somehow precede the translocation and replanting/managing of new trees. The communication should help observers realize that the spectacular tree felling will later be more than compensated, in ecological value, by operations to be conducted as soon as reasonable, perhaps outside the strictly defined project area.

Mission's findings

Overall progress

19. The selection of the dam construction contractor has been made and the topographical survey team is already in place. The sites for the construction camp areas have been selected and are being surveyed. The ESP met with the site engineer and the survey engineer of the contractor on site during the mission. The ESP is keen to receive and review the Construction environmental and social management plan (CESMP) once this document is ready. The ESP will pay particular attention to the staffing of the contractor as far as environmental and social safeguards are concerned, but also to all

the environmental/social management plans that the consortium will produce. Hopefully, the selection and start of operation of project's engineering firm (underway) will also add one more useful layer of monitoring on the preparation and launching of the CESMP.

20. The ESP was pleased to meet with the representatives of the Ministry of Environment on the draft Ecological Offset and to verify that most of Ministry's comments were in line with WB's and ESP's own comments.

Document review

Ecological offset plan

21. The draft plan reviewed by the ESP forms an excellent foundation for the finalization of the plan. One key aspect that has been underplayed by the authors of the draft plan so far has been the explicit reference to WB's operational policy/bank procedure (OP/BP 4.04) which created this offset plan to begin with. Equally important is the need for the authors to be creative in terms of i) the future location of the offsets, inside or outside the project area and of ii) the mobilization of the required financial resources, which may well come partly from the benefit sharing plan. If the reference to OP/BP 4.04 is established, one of its implications is that the sustainable management of natural resources should be strongly encouraged and operationalized through the offset plan.
22. In terms of the approach, the ESP is satisfied both by the emphasis put by the authors of the draft offset plan on public consultation throughout the watershed and by the 5 months additional time given by CDR above and beyond the original 7 months to get the ecological offset plan prepared with the maximum detail and the best blueprint to implementation.

Wastewater master plan

23. This is another key document that will help ensure compliance with national and WB standards and policies. The draft master plan forms, just like in the case of the Ecological Offset Plan, an excellent foundation for the final plan. The ESP wishes that the authors, when they finalize the master plan, place more emphasis on the following aspects :
 - Final selection of the sites in consultation with the communes and communities concerned ;
 - Attention to the impacts of the future plant construction works on the environment, not just at the works sites per se but also along the transportation axes ;
 - Integration of the possibility to supply electricity to some of the isolated treatment sites using photovoltaic, a cost-effective solution that the ESP has directly observed as currently being implemented (for other facilities than wastewater treatment) in the Jezzine area;
 - Close attention to the future optimal disposal of the sludge remaining after treatment, an issue that is difficult to manage in the context, but that needs to be dealt with upfront. Spreading the sludge on some tree farming areas is a technical and economical possibility that should be further investigated.
24. Several of these aspects can be developed as part of the ESIA that Libanconsult will also prepare, with a sequencing that allows the ESMP coming out of the ESIA to be fully integrated into the feasibility stage of the wastewater treatment activities.

Watershed/shoreline plans

25. The ESP understands that the call for expressions of interest (EOI) has been launched. This is an area where the recruitment of the permanent environmentalist in the project team is urgent. The ESP is looking forward to the end of the consultant selection process and into reviewing, for instance, their initiating memorandum.

Cultural Heritage

26. The ESP repeats the need to resolve the issue of having the Cultural Heritage expert complement the team during the future missions. Missions by an external specialist and by a World Bank expert have been conducted recently, but this does not substitute for the above.

Summary of Mission’s recommendations

It is presented in tabulated form to facilitate communication with CDR.

Table VVV Summary of the mission’s recommendations

Proposed actions	Responsible parties	Timing
Environmental safeguard expert		
Finalize the Ecological Offset Plan as soon as possible	Consultants to work a further 5 months and to integrate CDR, WB and ESP comments. Include a roadmap for implementation. CDR/PMU to supervise.	Aim for an offset plan ready before June 30 th , 2019
Finalize the wastewater treatment master plan as soon as possible	Consultants to finish the work and integrate CDR, WB and ESP comments. Include a roadmap for implementation. CDR/PMU to supervise.	Aim for a master plan ready before June 30 th , 2019
Panel to continue to help project’s communication team by remote.	CDR/PMU to ensure the coordination.	On a continuing basis
CDR should proceed with the recruitment of a permanent environmentalist in the project team	CDR/PMU to take action.	Environmentalist to be in place at the latest on June 30 th , 2019
Social safeguard expert		
RAP to be updated	CDR: Project management/consultant	May/June 2019
Preparation of a yearly GRM report	CDR: Legal department/PROJECT UNIT	June 2019
Recruitment of an independent expert to determine adequacy of unit prices for compensation	CDR (project management) or donors	April, 2019
Cultural Heritage Expert		
Need to include a CH specialist in the next ESP mission	CDR/PMU to finalise	CH ESP expert in place before July 31 st , 2019
Full ESP Mission		
Timing of the next mission should be discussed and dates finalised as soon as possible	CDR in consultation with donor.	Dates finalized before May 31 st , 2019

Annexes

Annex 1 – List of persons and organizations met

Person	Institution	Email	Telephone	Function
Moussalem Manal	Ministère de l'environnement/UNDP	manal.moussallem@undp.org		Expert
Abouassaly Naji Abdou	Libanconsult	naji.abouassaly@libanconsult.com	+9613320678	Head of Water and environment department
Aoum Salim	Libanconsult		+96170128600	Project engineer
El Oreibi Elissar	CDR	eoreibi@cdr.gov.lb	+9611980096	Project Engineer
Hani Nizar	Shouf Biosphere Reserve	nizar@shoufcedar.org	+9613513845	General Manager
Kandeel Mohammad	World Bank	mkandeel@worldbank.org	+20(2)25741670	Senior Environmental Specialist
Maasri Raji	Mores	raji.maasri@mores.com.lb	+9613756464	General Manager
Noushig Kaloustian	World Bank	nkaloustian@worldbank.org		Social scientist
Moussalli Elie	CDR/Bisri Project	emoussalli@cdr.gov.lb	+9611980096	Manager
Redha Hamdan	CRI	radha@crilebanon.com	+9611 867659	Econométricien
Rania Nader	CRI	rania@crilebanon.com	+9611 867659	Public administration & finance
Eid Mirna Ghantous	Khoury Contracting	mirna.eid@khourycontracting.com	+9613344667	Manager Tendering
Zein Khalil	Geoflint	kzein@geoflint.com	+9613219059	Managing Partner
Palmieri Alessandro	World Bank			Dam technical consultant
El Obeid Eric	CDR			IsDB focal point

Eid Shafik	Kherbet Bisri			Mayor
Fares Habib	Bkessine			Mayor
Talbi Amal	World Bank	atalbi@worldbank.org	+9611962900	Task Team Leader
Harfouche Khalil	Jezzine Municipality	khalil.harfouche@jezzine.un-ion.com	+9613928518	President
Bejjani Hala	Kulluna Irada	hala@kulluna-irada.org	+9613183818	Managing Director
Zgheib Sally	World Bank	szgheib@worldbank.org	+9611962900	Co-task team leader Bisri and lake project

Annex 2 – Mission schedule

Date	Time	Subject	Location	Attendees
Monday February 4, 2019 <i>(full day)</i>	09:00 AM 10:00 AM	Meeting between CDR and ESP	CDR	CDR: Elie Moussalli, Elissar El Oreibi ESP: Jean-Roger Mercier, Arbi Ben Achour
	10:00 AM 11:30 AM	Meeting with MORES (Ecological Offset Plan Consultant)	CDR	CDR: Elie Moussalli, Elissar El Oreibi ESP: Jean-Roger Mercier, Arbi Ben Achour WB: Amal Talbi, Sally Zgheib, Mohammad Kandeel, Alessandro Palmieri, Noushig Kaloustian Others: MORES Team (Raji Maasri, Salam Nassar)
	11:30 AM 01:00 PM	Meeting with Ministry of Environment and Chouf Biosphere	CDR	CDR: Elie Moussalli, Elissar El Oreibi ESP: Jean-Roger Mercier, Arbi Ben Achour WB: Amal Talbi, Sally Zgheib, Mohammad Kandeel, Alessandro Palmieri, Noushig Kaloustian Others: MORES Team (Raji Maasri, Salam Nassar) MoE (Manal Moussallem) - Chouf Biosphere (Nizar Al Hani)
	02:30 PM 05:00 PM	Interview video	CDR	ESP: Jean-Roger Mercier Others: Fantascopie Team (Philippe Artanji, Rim Chhab, Josiane Bou-lous)
Tuesday February 5, 2019 <i>(full day)</i>	09:30 AM 11:30 AM	Meeting with CDR PMU and Expropriation department	CDR	CDR: Elie Moussalli, Ali Abd el Baki, Elissar El Oreibi ESP: Jean-Roger Mercier, Arbi Ben Achour
	11:30 AM 01:00 PM	Meeting with CRI (External Monitoring of RAP implementation) - Social	CDR	CDR: Elie Moussalli, Ali Abd el Baki, Elissar El Oreibi ESP: Jean-Roger Mercier, Arbi Ben Achour Others: CRI Team (Rania Nader, Redha Hamdan)
	02:30 PM 03:30 PM	Meeting between CDR, ESP and Bank Team	World Bank	CDR: Elie Moussalli, Elissar El Oreibi ESP: Jean-Roger Mercier, Arbi Ben Achour WB: Amal Talbi, Sally Zgheib, Mohammad Kandeel, Alessandro Palmieri, Noushig Kaloustian

	04:00 PM 05:00 PM	Meeting between ESP, Bank Team, NGO and YAG	World Bank	<p>CDR: Elie Moussalli, Elissar El Oreibi ESP: Jean-Roger Mercier, Arbi Ben Achour WB: Amal Talbi, Sally Zgheib, Mohammad Kandeel, Alessandro Palmieri, Noushig Kaloustian Others: NGO</p>
Wednesday February 6, 2019 <i>(full day)</i>	9:00 AM 4:00 PM	Field Visit to Bisri Dam - Social Part - Env. Part	Bisri Site	<p>CDR: Elie Moussalli, Elissar El Oreibi ESP: Jean-Roger Mercier, Arbi Ben Achour WB: Amal Talbi, Sally Zgheib, Mohammad Kandeel, Alessandro Palmieri, Noushig Kaloustian Others: Fantascopie and MORES teams and Ms. Mirna Ghantous Eid (Khoury contracting)</p>
Thursday February 7, 2019 <i>(1/2 day)</i>	10:00 AM 12:00 AM	Meeting with Libanconsult (Wastewater Master Plan of Bisri Catchment area)	CDR	<p>CDR: Elie Moussalli, Elissar El Oreibi ESP: Jean-Roger Mercier, Arbi Ben Achour WB: Amal Talbi, Sally Zgheib, Mohammad Kandeel, Alessandro Palmieri, Noushig Kaloustian Others: Libanconsult Team (Naji Abou Assli, Salim Aoun)</p>
	12:00 AM 02:00 PM	Meeting with Contractor of Bisri Dam Project	CDR	<p>CDR: Elie Moussalli, Elissar El Oreibi ESP: Jean-Roger Mercier, Arbi Ben Achour WB: Amal Talbi, Sally Zgheib, Mohammad Kandeel, Alessandro Palmieri, Noushig Kaloustian Others: Nurol Ozaltin Team (represented by Khoury contracting)</p>