



“IWRM at the river basin scale, with a focus on capacity building and implementation aspects”

Expert Facility Activity No: EFS-LB-1

WORKSHOP CONCEPT NOTE AND PROGRAM

Participatory Workshop with stakeholders to discuss measures to reduce the unmet demand in Nahr Elkelb River Basin

06 July 2018

Beirut - Lebanon

1. Context

Within the scope of the EFS-LB-1: “IWRM at the river basin scale, with a focus on capacity building and implementation aspects”, the EU-funded project “Sustainable Water Integrated Management & Horizon 2020 - Support Mechanism (SWIM-H2020 SM)”, in cooperation with the Ministry of Energy and Water (MoEW) is conducting a half-day participatory workshop with stakeholders to discuss measures to reduce the unmet demand in Nahr Elkelb River Basin

2. Introduction

The SWIM-H2020 SM specific activity EFS-LB-1: “IWRM at the river basin scale, with a focus on capacity building and implementation aspects” aims to develop a bottom-up approach for designing and implementing Programmes of Measures (PoMs) at the River Basin scale.

The Nahr Elkelb river basin has been selected as a pilot for that purpose. Policy relevant targets for water conservation, water reuse, etc. will be developed on the basis of a physical-based semi distributed assessment of water resources (looking at both water demand sectors and supply sources) at the river basin scale. The assessment of water resources is facilitated via the development and simulation of a physical model of the Nahr Elkelb river basin using the WEAP software. A bundle of measures (technical and/or institutional) will be designed and tested (via model simulation) with the purpose of selecting the most cost-effective ones, and subsequently defining relevant policy targets (on the basis of specific criteria). These policy targets will be then communicated upstream to the central decision-making level (i.e. the Ministry) with the purpose of being integrated into development frameworks and action plans related to the Water Law (and other sectors). The overall process will be complemented with stakeholders’ involvement, training and capacity building of the river basin organizations. This bottom-up process in developing PoMs in Nahr Elkelb River Basin will act as a pilot application, to be replicated in other River Basins, so that



systematic information on needs and remedies is communicated from the local level to the central level, and this information can be adopted and updated in view of future changing conditions (socio-economic, climatic, etc.) to better inform the national water policy.

3. Scope and Objectives

The general objective of the workshop is to bring together stakeholders who are involved in water allocation, management and planning and in the Nahr Elkelb river basin and interactively discuss on potential measures which can reduce the problem of unmet demand in the basin. Unmet demand is the result of the imbalance between water demand and water availability, when demand exceeds the availability of water resources. To mitigate this problem a variety of measures (technical, institutional, economic, etc.) can be implemented, opting to either reduce demand (i.e. water saving measures), or increase supply (i.e. wastewater reuse, rainwater harvesting, etc.), and/or both, each one having relevant costs and benefits. A bundle of such measures will be presented to the workshop participants and an interactive discussion will take place in order to collect input and feedback on possible measures they feel that are suitable for mitigating the problem of water imbalance in Nahr Elkelb river basin. The overall goal is to reach a consensus and propose a preliminary list of measures which adequately capture specific local and national priorities, and are considered feasible and socially acceptable. These measures will then be simulated and evaluated in the WEAP model to assess their cost-effectiveness.

The draft Agenda is provided below.

4. Target Audience

The following audience is targeted:

- Authorities involved in the water allocation, water distribution/ supply and water management of the Nahr Elkelb river basin.
- Authorities involved in the decision-making and planning of measures at the local and central level.
- Authorities that are in charge of funding water investments.
- End-user groups who can convey practical problems associated with water availability and the practical implementation of the measures.

Based on the above, the following participants are suggested by the SWIM National Focal Point:

- Ministry of Energy and Water/General Directorate of Hydraulic and Electrical Resources (MoEW/ GDHER), Head of services of: Planning, Groundwater, Irrigation, Environment.
- Ministry of Energy and Water/General Directorate of Exploitation (MoEW/GDEx)
- Beirut Mount-Lebanon Water Establishment (EEBML)
- Ministry of Agriculture (MoA)



The target number of participants in the workshop is up to 20 persons so that a participatory discussion can be adequately managed.

5. Methodology and Structure of the Workshop

The workshop is intended to be participatory and interactive, making use of the knowledge and expertise of the participants including: knowledge infusion (presentations), structured discussion, interactive question & answer, and facilitated experience sharing allowing the exchange of local and national perspectives.

The workshop is structured in two parts:

Part 1:

- Presentation of the results of the Nahr Elkelb river basin WEAP model, focusing on the water demand per sector and the resulting unmet demand per sector and node.
- Presentation of different measures targeting to reduce unmet demand

Part 2:

- Interactive discussion on the suggested measures (costs, benefits, applicability, constraints, acceptability, legal and/or economic barriers, implementability, etc.)
- Decision of the preliminary list of measures to be tested in WEAP

Collection of input from the stakeholders prior to the workshop: A relevant Input Questionnaire (IQ) will be drafted by the Consultant and distributed by the MoEW to the stakeholders together with a brief memo on the state of water resources in the Nahr Elkelb river basin (focusing on the water balance and unmet demand per sector). The MoEW will be responsible for collecting the feedback from the stakeholders, and sending the collected info to the Consultant by 01/07/2018.

Electronic copies of the presentations will be prepared by LDK and provided to all participants.

The language of the training course will be English. Interpretation in Arabic will not be provided.

6. Resource Persons

- Dr. Maggie Kossida, SWIM-H2020 international non-key expert on Programmes of Measures
- Abbas Fayad, SWIM-H2020 local non-key expert on WEAP model

7. Outcomes of the Workshop

- Participants will have an understanding of the state of water resources and water balance in the Nahr Elkelb river basin



- Participants will have an understanding of the measures suggested for the Nahr Elkelb river basin (technical aspects, economic aspects, etc.)
- Participants will have gained valuable knowledge on the process of designing and selecting measures through a participatory approach
- A preliminary list of measures mitigating unmet demand in Nahr Elkelb river basin will be developed, as transparently agreed through a consultation with the stakeholders.

8. Workshop Agenda

The draft workshop program outline is given below.

Agenda: SWIM-H2020 SM Participatory Workshop with stakeholders to discuss measures to reduce the unmet demand in Nahr Elkelb River Basin

Friday, July 6th, 2018

09:00 - 09:15	Welcome & Objectives of the workshop - <i>Mona Fakh, Director of Water, Ministry of Energy and Water (MoEW), SWIM Focal Point</i>
09:15 - 09:35	Presentation of the State of water resources in the Nahr Elkelb river basin, with a focus on unmet demand per sector - <i>Abbas Fayad, SWIM-H2020 local non-key expert on WEAP model</i>
09:35 - 10:00	Presentation of measures to reduce unmet demand - <i>Dr. Maggie Kossida, SWIM-H2020 non-key expert on Programmes of Measures</i>
10:00 - 11:30	Interactive Discussion on measures
11:30 - 11:45	Coffee Break
11:45 - 13:15	Interactive Discussion on measures (<i>cont.</i>)
13:15 - 13:45	Drafting of the preliminary list of measures
13:45 - 14:00	Wrap-up, conclusions and next steps