



“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

Consultation Workshop with stakeholders to define indicative policy targets and a Programme of Measures in the Nahr Elkelb River Basin

14 March 2019

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, based on the assessment of water availability and demand.

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 has been facilitated via the development and simulation of a physical model of the Nahr Elkelb river basin using the WEAP21 software. A bundle of measures (water savings, increase supply) have been 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 is 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 this consultation 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, and generate a potential surplus to cover additional water needs for Beirut. 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, along with the results of the simulation of these measures in the physical-based model of the Nahr Elkelb, and an interactive discussion will take place in order to collect input and feedback on possible measures the stakeholders feel that are suitable for mitigating problems of water imbalance in the basin and/or generating a water surplus for other purposes. The overall goal is to reach a consensus and propose a set of policy-relevant targets which adequately capture specific local and national priorities, and a Programme of Measures (PoM) which is considered feasible and socially acceptable. These targets and measures will then be communicated to a higher level, with the purpose of being integrated into development and financial frameworks and action plans related to the Water Law (and other relevant sectors).

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 and donors that are in charge of funding water investments.
- End-user groups and NGOs 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)
- Municipality representatives/ local authorities involved in water management and planning in the Nahr Elkelb river basin
- Authorities and donors that are in charge of funding water investments
- End-user groups and NGOs who can convey practical problems associated with water availability and the practical implementation of the measures

The target number of participants in the workshop is around 25 persons so that a participatory discussion can be adequately managed. English-Arab interpretation will be provided.

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 simulation of various demand management measures in the Nahr Elkelb river basin WEAP model, focusing on the resulting unmet demand and/or water surplus (per sector and node) for the next 15 years.

Part 2:

- Interactive discussion on the simulated measures (costs, benefits, applicability, constraints, acceptability, legal and/or economic barriers, implementability, etc.)
- Decision on policy-relevant targets and a suggested Programme of Measures (PoM) for the Nahr Elkelb river basin.

Relevant Input Questionnaire (IQ) will be distributed and collected by the Consultant during the workshop to facilitate the participatory process of the workshop.

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 be provided.



6. Resource Persons

- Dr. Maggie Kossida, SWIM-H2020 international non-key expert on Programmes of Measures (Maggie@ldksa.gr)
- Dr. Abbas Fayad, SWIM-H2020 local non-key expert on WEAP model (abbas.fayad@gmail.com)
- Mrs. Mona Fakh, Director of Water, Ministry of Energy and Water (MoEW), SWIM Focal Point (monafakh@hotmail.com)

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 for the future 15 years, and the resulting impact of the implementation of various demand management measures (water saving and increase supply measures)
- Participants will have gained valuable knowledge on the process of designing and selecting measures and defining policy-relevant targets through a participatory approach
- A set of policy targets and a suggested Programme of Measures (PoM) mitigating unmet demand in Nahr Elkelb river basin and/or generating a water surplus 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 Consultation Workshop with stakeholders to define indicative policy targets and a Programme of Measures in the Nahr Elkelb River Basin

Wednesday, March 14th, 2019

09:00 - 09:30	Registration and Coffee
09:30 - 10:00	Welcome & Objectives of the workshop - <i>Mona Fakh, Director of Water, Ministry of Energy and Water (MoEW), SWIM Focal Point</i> - <i>Tour de Table (all participants)</i>
10:00 - 10:45	Presentation of the measures to reduce unmet demand: insight into the simulation process implemented - <i>Dr. Maggie Kossida, SWIM-H2020 non-key expert on Programmes of Measures</i>



10:45 - 11:30	Presentation of the State of water resources in the Nahr Elkelb river basin in the next 15 years, and the results on the application of various demand management measures <i>- Dr. Abbas Fayad, SWIM-H2020 local non-key expert on WEAP model</i> <i>- Dr. Maggie Kossida, SWIM-H2020 non-key expert on Programmes of Measures</i>
11:30 - 12:00	Coffee Break
12:00 - 13:00	Interactive Discussion on the simulated measures (including input questionnaires)
13:00 - 14:00	Definition of policy targets for the Nahr Elkelb
14:00 - 14:30	Drafting of the preliminary Programme of Measures (PoM)
14:30 - 15:00	Wrap-up, conclusions and next steps Workshop evaluation
15:00 - 16:00	Lunch and Networking