



## Socio-Economic Impact Assessments of Groundwater Over-Abstractions in Azraq Basin,

EXPERT FACILITY ACTIVITY NO: EFS-JO-2

CONCEPT NOTE AND AGENDA FOR

“Expert Group” Meeting to present the results of the assessments

January 31, 2019

Ministry of Water and Irrigation, Amman – Jordan

### Background

Within the scope of work of the EU funded SWIM-H2020 SM, the project is undertaking an activity titled “Socio-Economic Impact Assessments of Groundwater Over-Abstractions in Azraq Basin”; Activity No. EFS-JO-2. The main objectives of the activity is to support the Ministry of Water and Irrigation (MWI) in the implementation of the “Groundwater Sustainability Policy” and the “Water Substitution and Reuse Policy” to enable reducing groundwater abstractions in the highland aquifers to sustainable levels, reserve the resource for urban supply and preserve the ability of the aquifer as a buffer against drought-induced surface water shortfalls (focusing on one of the most threatened aquifers suffering from high groundwater over-exploitation; the Azraq basin which will be used as a pilot area for further investigations). The specific objectives of this activity are to:

1. Assess the **socio-economic impact of groundwater over-exploitation scenarios in Azraq basin** (assuming both business as usual (BAU) and likely growth in all sectors (Industrial, domestic, irrigation)), with the associated lowering of water tables, dry-out of shallow aquifers deterioration of water quality, and salt-water intrusion into fresh water layers, taking also into consideration possible influx of new refugees;
2. Assess the socio-economic impact of enforcement of groundwater by-laws and the new groundwater policy (such as closing of illegal wells, reduction of water abstraction to safe-yield through restricted water usage (as per the abstraction license).
3. Conduct socio-economic analysis of the potential impacts of different measures and actions for the conservation of the aquifers in Azraq basin (including quota reduction, adjustment of water tariff, removal of subsidy on electricity used for water pumping, change in cropping pattern, etc.), on Azraq basin; and
4. Assess the socioeconomic impacts of different options to mitigate the impact of reduction in groundwater abstractions including scenarios for alternative income generating activities.

### Objectives of the meeting

The main objective of the meeting is to:

1. Present the results of the study to a panel of experts and discuss the results focusing namely on:
  - a. the socio-economic impacts of groundwater over-abstractions in Azraq basin under the two scenarios; i.e. assuming BAU scenario and plausible trends in sectorial growth together with the associated negative social and economic impacts as a result of lowering water tables, dry-out of shallow aquifers, deterioration of water quality, and



- b. the socio-economic impacts of groundwater impacts of the groundwater policy reform options/actions
2. Discuss with the expert panel the proposals made by the consultant for possible options to mitigate the impacts of groundwater policy reform to reduce groundwater over-abstractions to sustainable levels.

### Target members of the Meeting

An experts' group with relevant expertise – the group will be formed by MWI. The experts should be highly related and engaged in the subject matter of the assignment. The group is proposed to consist of groundwater specialists (from MWI and BGR project), agribusiness and environmental experts in addition to a socio-economist. A maximum of 5-8 experts are recommended.

#### **Outcome:**

The conclusions of the meeting will be documented and shared with MWI for review, and will be integrated into the assessment

#### **Location**

MWI premises. Meeting Room number to be confirmed



## Agenda

Time	Session	Speaker
9:30 – 9:45	Opening Session and Welcome	SWIM-H2020 SM Focal Point and/or MWI coordinator
9:45 -10:15	<ul style="list-style-type: none"><li>- Introduction to the study: objectives, methodology and assumptions</li><li>- Q&amp;A (10 mins)</li></ul>	Amer Jabarin, (SWIM-H2020 SM Socioeconomic Expert)
10:15 – 10:50	<ul style="list-style-type: none"><li>- Technical Assessment of the impact of groundwater over-exploitation on the depletion of groundwater resources, drying up of wells, and groundwater quality deterioration under BAU scenario; and under plausible trends in sectorial growth:</li><li>- Q&amp;A (15 mins)</li></ul>	Marwan Raggad, (SWIM-H2020 SM Groundwater Expert)
10:45-11:15	<ul style="list-style-type: none"><li>- Socioeconomic impacts of groundwater over-abstractions under BAU scenario and likely growth in all sectors</li><li>- Q&amp;A (15 mins)</li></ul>	Amer Jabarin, (SWIM-H2020 SM Socioeconomic Expert)
11:15 – 11:30	<b>Coffee Break</b>	
11:30-12:00	<ul style="list-style-type: none"><li>- Socioeconomic impacts of reform options</li><li>- Q&amp;A (15 mins)</li></ul>	Amer Jabarin, (SWIM-H2020 SM Socioeconomic Expert)
12:00 – 12:20	Presentation of possible options to mitigate the impacts of enforcement of groundwater policy reform and by-laws to reduce groundwater over-abstractions to sustainable levels.	Amer Jabarin, (SWIM-H2020 SM Socioeconomic Expert)
12:00 – 12:30	Plenary discussion and exchange of views on the proposal	All
12:30-12:12:45	<ul style="list-style-type: none"><li>- Next steps</li><li>- Wrap up and closing remarks</li></ul>	<ul style="list-style-type: none"><li>- SWIM-H2020 SM</li><li>- MWI</li></ul>
12:45-13:45	<b>Lunch</b>	