

# ReWATER-MENA:

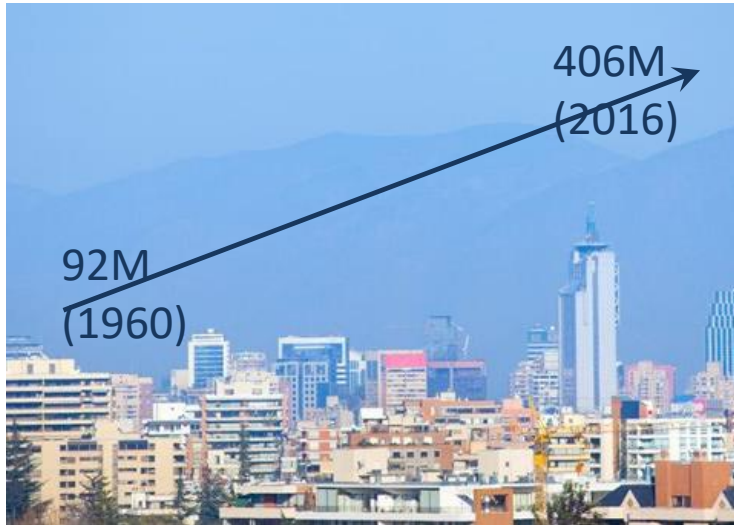
## More and safer water reuse in Middle East and North Africa



Javier Mateo-Sagasta  
Research group leader  
(Water, health and nutrition)  
IWMI

# Background

## Population growth and urbanization



## Migration



## Water scarcity



## Water pollution



# Wastewater production and treatment in the Arab World

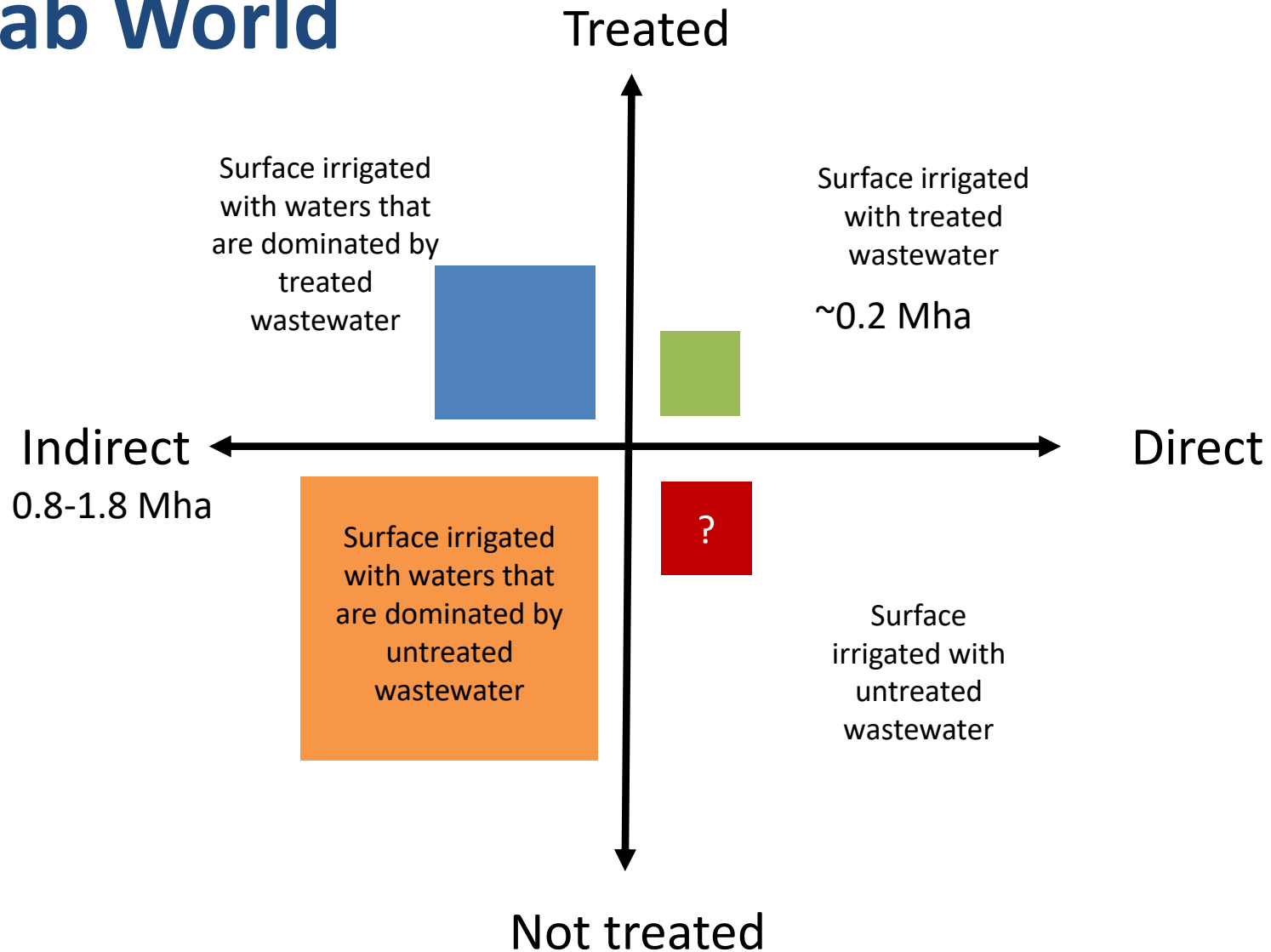
Municipal wastewater produced  
 $15 \text{ km}^3$

Treatment capacity  
55%

Actual treatment  
< 25%?

Planned and  
direct use of  
treated ww

# Extent of different types of reuse in the Arab World



# Why there is no more direct and planned use of treated wastewater

What are the challenges?

- Cultural barriers and distrust
- Over-stringent regulations
- Institutional fragmentation
- Lack of cost recovery mechanisms
- ...

# Expected results

## *Impact*

Safe water reuse is substantially expanded in the MENA region by 2030 in alignment with SDG 6.3

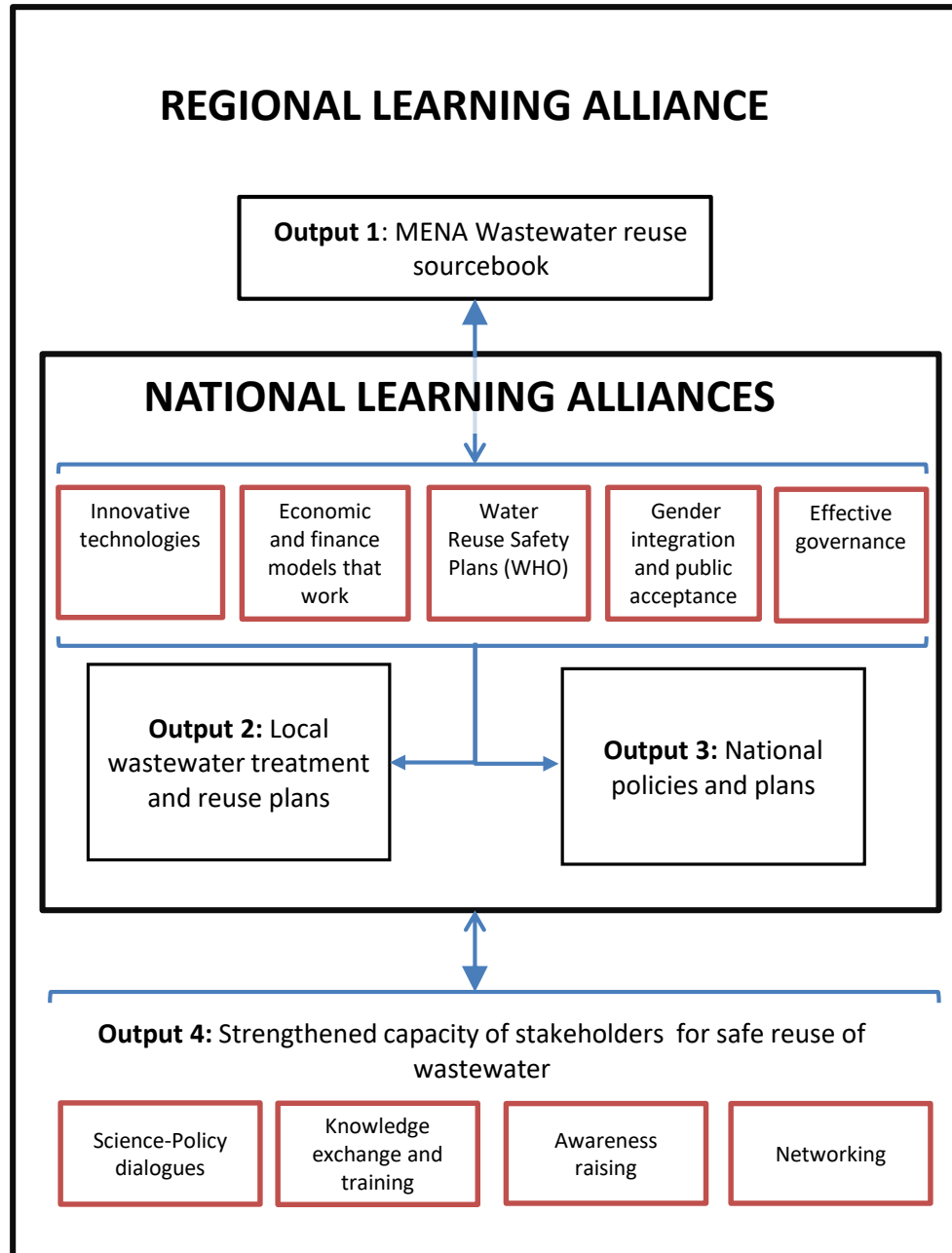
## *Outcome*

Project stakeholders are better equipped for the implementation of sustainable water reuse models across the MENA region

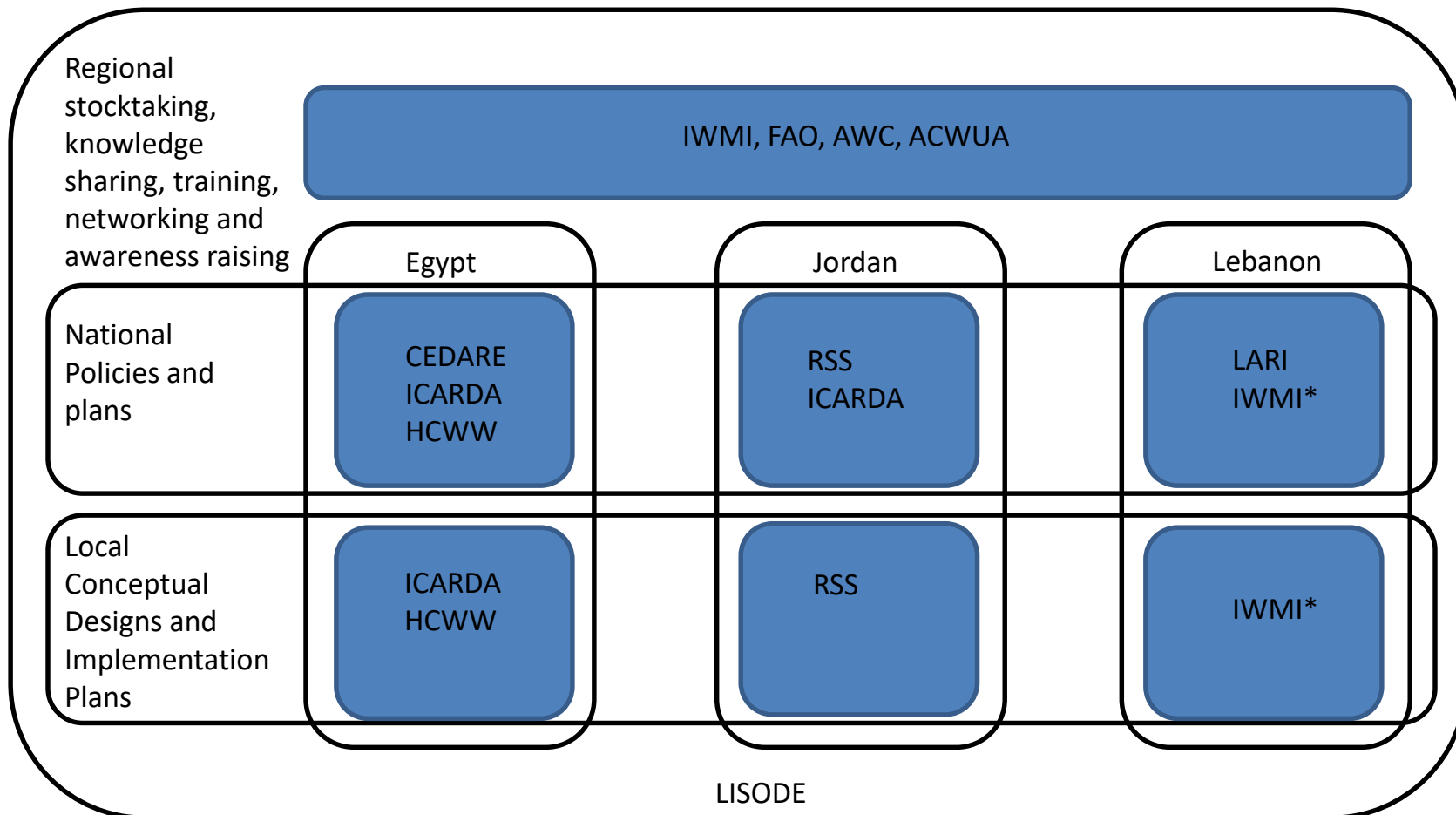
## *Outputs*

1. **A MENA water reuse sourcebook** to document lessons from existing innovations, validated and promising reuse models, and past management challenges in and beyond the region.
2. **Local water reuse plans** for six sites in Egypt, Jordan, and Lebanon. These will include conceptual designs and associated implementation plans for feasible water reuse solutions at the selected sites.
3. **National strategies** for more and safer water reuse in Egypt, Jordan, and Lebanon. Building on current national policies, the project will help countries make the next policy step based on stakeholder demand.
4. **Stakeholders' capacity for safe water reuse** will be strengthened. Reuse stakeholders will be sensitized, trained, and linked with a network of water reuse stakeholders in MENA to speed up the adoption and replication of reuse solutions.

# Theory of change



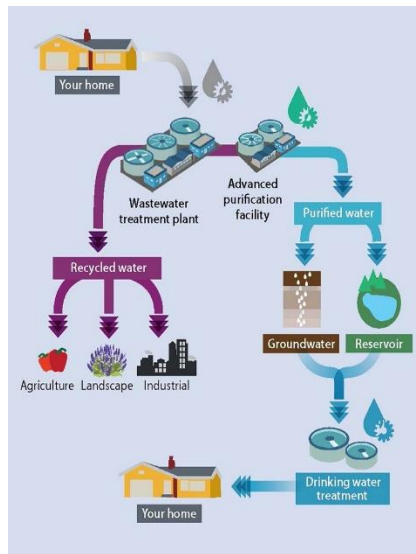
# Implementing Partners



# Output 1: Regional source book

## VOLUME ONE

### EVOLUTION, STATE AND PROSPECTS FOR WATER REUSE IN MENA



## VOLUME TWO

### CATALOGUE OF FEATURED CASE STUDIES

- Recycled water for crops
- Recycled water for trees
- Recycled water for fish
- Recycled water for parks
- Water reuse and exchange between sectors

## VOLUME THREE

### GUIDELINES

- Innovative and appropriate technologies
- Economic and finance models that work
- Water reuse safety planning
- Stakeholder engagement, gender integration and public acceptance
- Effective governance

# Output 2: Local conceptual designs and plans

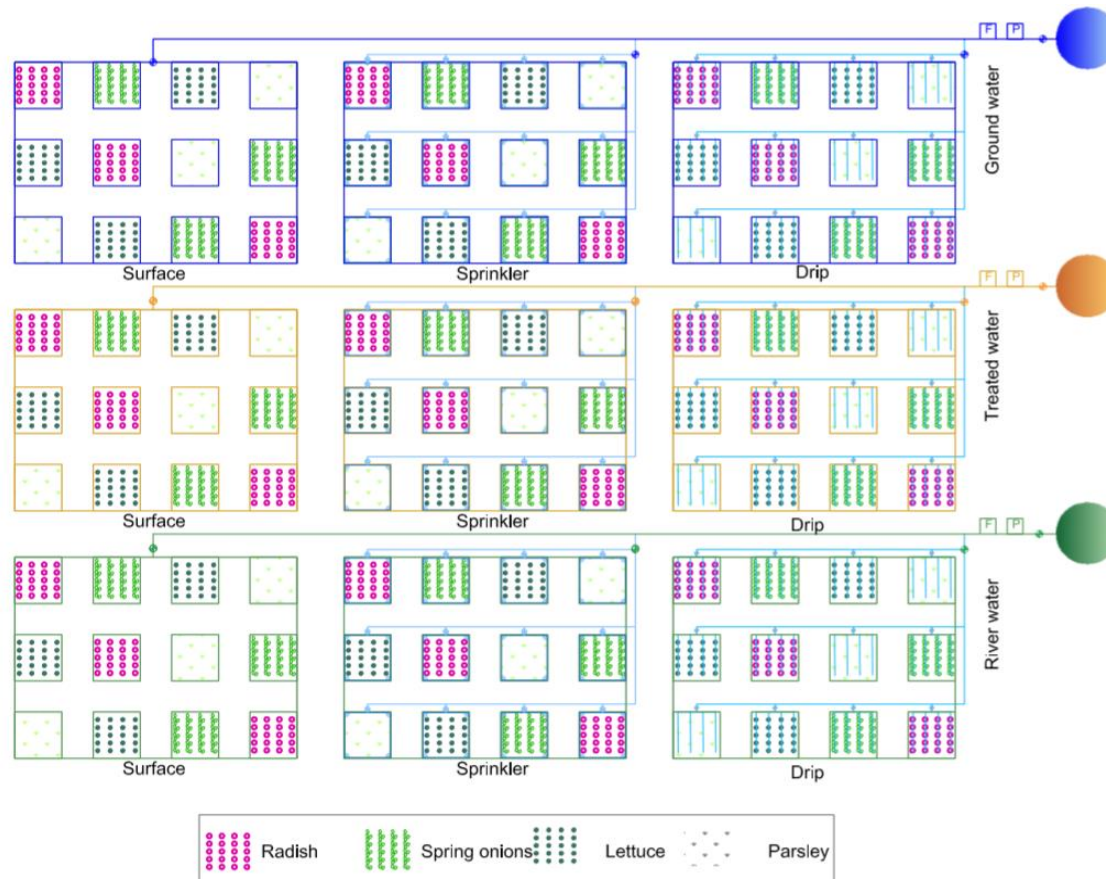
- Selection of two sites per country by 2018
- Participatory baseline assessment by 2019
- Feasibility studies and conceptual designs for wastewater treatment and reuse systems in 6 settlements available by 2020
- Implementation plans for recommended designs available by 2021

# Output 3: National plans and policies

- Participatory baseline assessments for Egypt, Jordan and Lebanon prepared by 2019
- Shared national vision for each of the 3 countries developed by 2020
- Roadmaps to achieve the national visions prepared by 2021

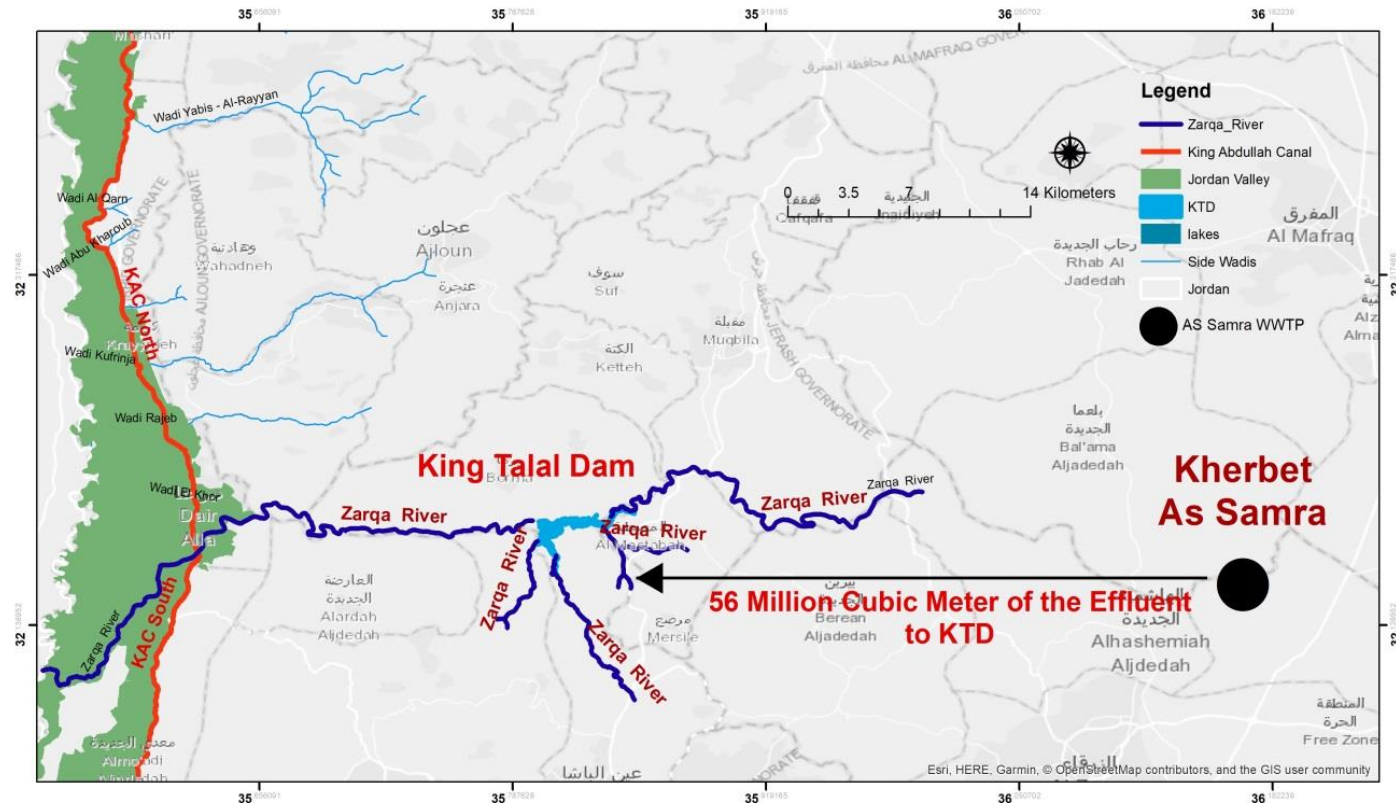
# Lebanon

Support a dialogue about the Draft Lebanese Reuse Standards



# Jordan

# Assessment of long-term effects of wastewater reuse in the Jordan valley and strategy for risk mitigation



# Output 4: Regional knowledge

- Communication strategy by 2018
- Media campaigns coordinated with national authorities in 2019-2021
- Training workshops held for a minimum of 75 wastewater reuse specialists in MENA
- Two high level science-policy dialogues
- On-line courses conducted for a larger audiences (>300)
- Technical study tours for 20 specialists completed by 2019

# Partners engagement



# Thank you!



Javier Mateo-Sagasta  
Research group leader (water, health and nutrition)  
IWMI  
[J.mateo-sagasta@cgiar.org](mailto:J.mateo-sagasta@cgiar.org)