WaterGuide

A Framework for improving water resource management in the Jordan Valley

International River Symposium

Huw Pohlner & Amy Syvrud | 22 October 2019
At Aither, we are passionate about driving beneficial change. Through our range of services, we strive to help our clients make decisions that contribute to economic growth and sustainable development.

We primarily work in the water markets, water utilities and natural hazards and resources sectors. In these sectors, we provide strategy, policy and economics advisory services.

We are enthusiastic about our work and how we can contribute towards positive outcomes in our sectors. It is our belief that government and the private sector can each contribute to better public and private results and we have the drive, skills and networks to help influence and achieve these outcomes.
Overall Water Risk

- Low (0-1)
- Low-Medium (1-2)
- Medium-high (2-3)
- High (3-4)
- Extremely high (4-5)

Source: WRI Aqueduct Water Risk Atlas 2019

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WaterGuide

A framework for improved management and use of scarce water resources
WaterGuide framework

1. Confirm a vision for water management and the value of water
2. Understand changing water availability and demand over time
3. Ensure effective water policies and institutions
4. Allocate water between different uses
5. Develop resilient water infrastructure and services
6. Pursue increasingly efficient water management and use
Putting WaterGuide into practice

1. Appreciation of each others’ experience
2. Discussion of country level priorities
3. Identification of priority areas for collaboration and mutual learning
4. Shortlist of practical initiatives to take forward in future phases

- Investible projects that can be presented to donors or investors
- Greater efficiency and effectiveness in delivery of existing policy priorities and projects
- Improved understanding of the portfolio and sequence of policy interventions, management arrangements and infrastructure investments that are most likely to deliver desired outcomes
Jordan Waterguide Dialogue

AIPH Partners and DSTI recently conducted a mission to Jordan on the topic of managing water scarcity that resulted in the first applications of the mobile AIPH publication WaterGuide. AIPH’s WaterGuide was published in March 2017, most prominently by Dr. Poulten and IMS Regional Director of AIPH for the region of the Australian Department of Foreign Affairs and Trade, as a joint AIPH report published by the World Bank/DFG/Global Land Fund on Water.

In April 2017, the Jordanian Minister of Water and Irrigation, Mr. Nabil Al-Hmoud, approached AIPH to request Australian assistance in the field and in particular services drawing inspiration from the WaterGuide, including a country diagnostic of challenges and opportunities for reform and post-water management: identifying policy priorities and potential sustainable agriculture on water scarcity and water management. This was the first formal Waterguide-related approach to the Australian Government since the publication of the report.

A delegation of Australian visiting Jordan...
Phase 1 (July-Dec 2017): Initial policy dialogue; establishment of Jordan-Australia Water Reform Collaboration

Phase 2 (Jan-June 2018): Refinement of priorities for collaboration; preparation of bridging project scopes

Phase 3 (July-Dec 2018): Completion of bridging projects

Next phase (TBC): Completion of detailed work on priority projects
Water stress in Jordan

Current situation

Source: WRI Aqueduct Water Risk Atlas 2019
Challenges in the Jordan Valley
Water stress, inefficiency and inflexibility

- Continuous development of water resources
- Increasing demand from population growth and growth in industries
- Severe droughts and increasing variability
- High levels of evaporation and leakage
- Poor enforcement and high water theft
- Lack of storage
- Billing based on quotas rather than use
- Quotas tied to crop type
Challenges in the Jordan Valley

Need for improved water allocation and use

• Water quotas (i.e. allocations) for irrigation have been reduced multiple times over the past two decades in the Jordan Valley
• Irrigators face uncertain and inflexible water allocation and supply, limiting investment and agricultural transformation
• Agricultural produce is not easily exported from Jordan and the domestic market suffers from oversupply of some commodities
• Irrigation water tariffs have not been increased in decades and water is not valued as an input to production
Tackling the challenge in the Jordan Valley
Tariff reform and water markets

• Jordan Valley Authority interested in investigating tariff increases to support improved levels of service and encourage efficient use

• Aither and JVA have conducted an initial feasibility study on tariff design and water market development
Assessing feasibility of water markets

Market pre-conditions

- Water scarcity
- Water variability
- Connectivity
- Sufficient number of users
- Different water demands amongst users
- Increasing or changing demand

• These pre-conditions are present in the Jordan Valley

• However, while opportunities for markets exist, further work on water management fundamentals is required
Assessment of tariff structure and levels

Tariff redesign

• Tariff redesign is likely to be readily possible and beneficial, but the following is required:
  • revised objectives for water tariffs
  • alignment and consistency with changes in the approach to providing bulk versus local irrigation water services
  • staged tariffs to minimise impacts
  • welfare concerns addressed by other areas of policy

• Successful implementation requires both short- and long-term goals and a commitment to practical action
Insights from WaterGuide implementation

• The need for improved water policy and management is well recognised
• Options for improving water-related investment, management and use are available
• Challenge is in designing pragmatic ways in which to overcome constraints (information, social, political, financial, capacity)
• Structured dialogue shows promise in supporting issues diagnosis, and identification of priority actions
• Provides opportunity for engagement with diverse stakeholders, invites discussion of challenges, weaknesses and priorities in water management, and enables sharing of experiences
• In the process of implementing WaterGuide, decision makers have flagged using this approach to inform benchmarking, investment mapping, loan effectiveness evaluation, development of reform road maps, and to drive integration of efforts across projects and teams
Thank you

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