



Harmonious governance frameworks for water reuse

Guidelines for planners, investors, project designers and operators

Main issues

Harmonizing a range of decision-making processes and activities within a water reuse project is inherently complex: stakeholders represent an array of jobs, goals, and interests.

Managing and planning a water reuse system requires a variety of stakeholders to collaborate across disciplines and scales, as shown in Figure 1. Administrative entities, regulations, and coordination mechanisms need to be established and can

Key points

- A wide variety of stakeholders are required to collaborate to successfully deliver water reuse projects
- A stepped approach outlined in this brief supports effective governance frameworks
- Multi-stakeholder platforms support consensus building and conflict resolution
- By ensuring access to information, participation from stakeholders is meaningful

generate additional cost and disrupt access to resources. Creating structures for how roles and responsibilities of stakeholders are distributed, organized, and implemented, and how they are coordinated are known as governance frameworks.

In the Middle East and North Africa (MENA) region, institutional frameworks can overlook informal actors such as community and private stakeholders and tend to instead focus on state administrators. These actors represent local knowledge, and institutional and socioeconomic arrangements that are often invisible to centralized institutions.

Preparing governance frameworks that enable and empower stakeholders to collaborate are critical to the success of water reuse projects, for which this guide has been developed. This brief provides guidance to public authorities in the MENA region willing to develop and improve governance frameworks related to water reuse in agriculture.

Context

Demand for freshwater resources is increasing due to population growth, urbanization, and agricultural expansion and intensification. The MENA region is one of the most arid regions on Earth and is characterized by low water availability. Agriculture is the dominant water user in most countries in the region and a key driver of economic development. The gap between water supply and demand is widening every year.

Governments in the MENA region are urgently seeking interventions to increase water security, including efforts to optimize water management, narrow the supply-demand gap and prevent water quality degradation. One promising solution is the smart use of water that has already been used. Water can be used in cities and reused in agriculture or for other beneficial purposes, with benefits for all. Water reuse has great potential to help overcome some of the challenges posed by the increasing pressure on already stressed water resources.

















Operating in harmony



Figure 1. The large array of stakeholders involved in irrigation water reuse governance.

1: Agree on clear objectives and ensure political buy-in by key players

Initiating policy or institutional change in the water reuse sector inevitably comes with resistance and opposition through adding new responsibilities for administrators or losing existing competencies, implying gains for some and losses for others. Authorities leading a reuse project should begin by agreeing on common goals which will imply that stakeholders are able to discuss, negotiate, and build consensus. Initiatives addressing governance frameworks should follow a consensus-based approach to maintain strong political support.

Dialogue facilitation by the Royal Scientific Society improves data monitoring and sharing on the quality of treated water in the northern Jordan Valley

In the northern Jordan Valley, the Royal Scientific Society, a local nongovernmental research organization, facilitated a dialogue between the Ministry of Water and Irrigation, and farmers to improve farmers' acceptability of the water treatment and distribution as irrigation water. As an outcome of the facilitation process, it was agreed that the Ministry will publish on a regular basis water quality tests on a digital platform accessible to farmers.

2: Map the formal and informal stakeholders involved in water management

To improve governance frameworks, a thorough analysis of the institutional and decision-making landscapes should be completed. This will identify new stakeholders, formal and informal, responsible for various aspects of water reuse. In the MENA region, institutional frameworks can overlook informal actors, such as community and private stakeholders, and tend to instead focus on state administrators. These actors represent local knowledge, and institutional and socioeconomic arrangements that are often invisible to centralized institutions.

3: Establish a multi-stakeholder platform

Multi-stakeholder platforms encourage consensus building, support conflict resolution, and guide the design of effective governance frameworks. A multi-stakeholder platform assembles stakeholders who are willing to collectively deliver new rules, policies, and institutions. Through a participatory process, water reuse projects using multi-stakeholder platforms increase the effectiveness of a project to enact social change, and democratize and legitimize decisions.

4: Analyze gaps and overlaps in stakeholder roles and responsibilities

A stakeholder analysis begins by understanding the relationships between the various representatives in the water reuse organigram, and where their administrative boundaries start and end. There are many methods and tools to support stakeholder analysis. However, a recent analytical tool was developed specifically for water reuse. Divided into two main parts, the framework defines decision-making activities, and implementation and management activities. The tools help



identify gaps and overlaps between structures at the same scale and across institutions at different scales.

5: Analyze stakeholder influence and interest

Institutional mandates and practices in water reuse can sometimes be entrenched in larger, sociopolitical structures that are not readily receptive to change. Understanding this helps to identify realistic targets to effect lasting change. To anticipate resistance or opposition, knowing who will be the 'winners' or 'losers' from intended governance design and their relationships can support strategies to overcome challenges.

6: Define roles and responsibilities as clearly as possible

A recent review of policies on water reuse in five Mediterranean countries found that the cause of project failure was the lack of clear lines of responsibility and accountability. A duplication in prerogatives offered stakeholders an outlet to pin blame on others and avoid responsibility. For a governance framework to be successful, clear roles and responsibilities of each stakeholder must be defined. In this way, projects will avoid the 'fuzziness in institutional prerogatives'.

7: Allow for flexibility in institutional arrangements

Having a clear and agreed statement of responsibilities ensures accountability. However, it does not mean that the governance framework should be rigid. Allowing enough flexibility when assigning roles to institutions can encourage greater acceptance of new arrangements. In the MENA region, by law, the management of facilities is centralized and assigned to water authorities. However, in practice, various other stakeholders take the lead in operating utilities, securing funds, and implementing infrastructure. Acknowledging their roles and empowering them has the potential to lead to more adaptive and sustainable management systems.

ReWater MENA project

In Lebanon, the dispersion of rights related to the issuing of official reuse standards. Recently, the Lebanese Standards in coordination with relevant public authorities. With the help of the ReWater MENA project, a multi-stakeholder platform was formed, grouping national, regional, and local administration, as well as laboratories, universities, nongovernmental organizations, and private sector representatives.

8: Empower stakeholders with existing know-how and political leverage

Planning the governance framework of a water reuse system should build on existing practices and functions. This includes technical know-how, local leadership, and collective action on water reuse. Consider institutions with political leverage and build on historical expertise. In this way, additional responsibilities can be assigned to stakeholders depending on their past roles and expertise. Beware, however, of not falling into the 'local trap' that assumes local institutions will naturally lead to social and ecological outcomes. Analyze local leadership and choose to empower leaders with care.

9: Develop and implement appropriate coordination mechanisms

A lack of institutional coordination has been identified as a major hurdle to assess the potential of and plan for water reuse projects in several MENA countries. This also affects the management of water treatment and reuse facilities that regulate and monitor water quality. Different institutional tools can be established, depending on objectives, to design the right coordination mechanisms. Implementation is one of the most important prerequisites to enhancing integrated planning, ensuring information flow, and bridging the gap between activities.

10: Clarify and renegotiate water rights

Following the establishment of a new water treatment plant, project leaders must establish water allocation arrangements on the new water source. New water sources can disrupt existing arrangements and water rights, which can trigger conflict. Many cases in the MENA region reference old water



rights that do not correspond to the ways in which water use has evolved, such as the use of pumps, and do not consider new beneficiaries.

11: Develop the capacity of public administrations and provide adequate funding

Implementing an effective governance framework assumes that governmental authorities are financially and institutionally empowered. The private sector can play an important role at different levels, through public-private partnerships, for example. However, only governmental authorities have the legitimacy to monitor and regulate the private actors. In several cases in the MENA region, private sector-led implementation did not lead to adequate water treatment due to lack of monitoring.

12: Create a climate of trust and collaboration

Coordination is based on trust and is only meaningful if stakeholders regularly work together and communicate. Successful water reuse projects in the MENA region show that in day-to-day operations, more informal means of collaboration increases trust between stakeholders, which builds inter-stakeholder relationships.

13: Ensure access to information and data sharing between stakeholders

Engagement and participation from all stakeholders can only be meaningful if access to information is open and fair. The Manual on the Human Rights to Safe Drinking Water and Sanitation for Practitioners recommends sharing all relevant technical details of water and sanitation services, not only related to health and water quality, but also to costs, budget, and operation of treatment facilities. Details and procedures of data sharing should also be incorporated into regulatory frameworks and contractual agreements between authorities and service providers, including the rights and responsibilities of individuals and institutions.

Key source and further reading: Nassif, M-H.; Tawfik, M. 2022. Toward a more harmonious planning and governance of agricultural water reuse: Guidelines, practices and obstacles. In: Mateo-Sagasta, J.; Al-Hamdi, M.; AbuZeid, K. (eds.). *Water reuse in the Middle East and North Africa: A sourcebook*. Colombo, Sri Lanka: International Water Management Institute (IWMI). pp.156-171. https://hdl.handle.net/10568/129128

For more information, visit: https://rewater-mena.iwmi.org/

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International Water Management Institute



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