**ABSTRACT**

The Jordan Valley Authority (JVA) has been the pre-eminent water development agency in the Jordan Valley since its creation in the early 1950s. The growing capability and involvement of other groups and Ministries, the changing valley needs and a new law made it necessary for JVA to change its mission and the type and level of services it offers. To shape a new future for the agency, it was decided that JVA should go through a rigorous and public strategic planning process. This planning process was led by a steering committee composed of all relevant stakeholders and various working groups. Stakeholder participation was ensured through a series of information meetings and workshops to collect comments and input before completing the plan. This has resulted in a detailed and thoroughly vetted written draft strategic plan that is to be presented for Ministerial approval in November 2002 so that the recommendations of the Strategic Plan can be put into effect.

In the Jordan Valley, JVA is decreasing its role as a service provider and beginning to increase private sector involvement in providing water services. As a result of the strategic planning process, the institution will become more of a regulatory entity, performing the government functions of monitoring and control of water service providers.

**Importance of Case to IWRM**

The case illustrates how an integrated strategic planning process can create conditions under which all the actors having a stake in water development and management can become involved, present their respective positions and concerns and negotiate to achieve acceptable solutions to the proposed institutional reform. The case describes how the JVA worked to secure water supplies and overcome inequalities in water allocation to efficiently and economically meets user expectations. To do this, JVA must work with all stakeholders to determine the water requirements of different zones and users including irrigation, tourism, and municipal and industrial water users. A related challenge addressed by the JVA is to be transparent in assessment/assignment of supplies and subsequent communication on to users on availability of water quantity and quality.

**Main Tools Used**

A2.3: Reform of Existing Legislation  
B1.4: River Basin Organizations  
B1.6: Service Providers and IWRM  
B1.8: Role of the Private Sector

**MAIN TEXT**

1 **Background and problems**

Given that the country has the lowest water availability per capita in the region, securing a reliable supply of water adequate in quantity and quality is one of the most challenging issues facing Jordan. Despite an aggressive water investment program pursued by the government, the water problems in Jordan are not yet solved, as water supply is less than demand.

Moreover, water in Jordan is an increasingly expensive commodity. Most of the traditional water resources have been developed, where feasible. These resources are far from urban centers, raising conveyance and pumping costs. Because of continuing deficits, the Ministry of Water and Irrigation is reallocating more of the Jordan Valley water resources to urban users. Notably, water from the Yarmouk River is being transferred to Amman. Wadi Araba water, which used to flow into the valley, is pumped from the aquifers that discharge into Wadi Araba.
to supply the Irbid municipal system. Other resources flowing into the valley will be captured and transferred to urban areas.

Since its creation, JVA has supplied irrigation water to farms in the valley as well as providing such broad social services as roads, schools, clinics, marketing and tourism support. Its mandate is now being reconsidered because of trends in Jordan to encourage greater public sector efficiency through decentralization, private sector participation, streamlining of procedures, and financial independence. In response, JVA, with the support of the U.S. Agency for International Development (USAID), initiated a number of activities, including development of analytical tools to cost irrigation water services, design and institutionalization of a new financial accounting system, and development of a strategic plan for the Authority.

JVA’s major historic accomplishments include:
- Development and reclamation of more than 350,000 dunums of agricultural land;
- Construction of the King Abdullah Canal;
- Installation of a sophisticated, closed pressurized pipe irrigation system;
- Construction of several dams on the Jordan Valley tributaries;
- Construction of a road network;
- Construction of schools, hospitals and health care centers;
- Creation of agricultural marketing centers and tomato paste factories; and
- Construction of the North Domestic Water Supply project (Deir Alla-Amman and Irbid).

During JVA’s quarter century of operation, public investment in these and other schemes is estimated at US $1.2 billion. However, its broad mandate effectively diminished as other government agencies and local entities increasingly took over this original responsibility. JVA is providing less infrastructure and service support and the focus has been more on providing users including farmers and the Water Authority of Jordan (WAJ) with water.

Notwithstanding this diminishing mandate, JVA remains the sole implementing agency in the valley for:
- Operating and managing the irrigation system;
- Managing the valley’s water resources and monitoring water quality;
- Supplying WAJ with water for domestic purposes;
- Developing master plans and infrastructure projects, including dams, irrigation systems and agricultural roads;
- Developing infrastructure for tourism projects; and
- Land development and distribution.

**Strategic Challenges**

One of the largest strategic challenges facing JVA is its ability to secure water supplies that can efficiently meet user expectations and communicate it in a timely way. To do this, JVA must work with all stakeholders to determine the water requirements of different zones and users including irrigation, tourism, and municipal and industrial water users. A related challenge for JVA is to be transparent in assessment/assignment of supplies and subsequent communication on to users on availability of water quantity and quality.

External effects, including land redistribution in the Jordan Valley generated through redrafting existing laws, encouragement of decentralization and increased participation from the private sector, combined with increasing resource crises have compounded negatively upon JVA. Customers have grown increasingly dissatisfied with some of the services provided by JVA due to internal imbalances in staffing structure and organization, poor delivery of public management and administrative procedures, and inadequate hardware. Despite its legal mandate for establishing broad social support in the valley, JVA’s primary services are largely water and land-related: the delivery of irrigation water to farmers, the monitoring and maintenance of water quality and quantity, and land distribution and acquisition.

The principal customers of JVA include farmers, Jordan Valley inhabitants, investors, WAJ, local municipalities, and government departments. JVA customers, particularly farmers and local residents, have complained about worsening water quality and water shortages at different...
times of the year. There is evidence of inequalities in water allocation, illegal use, and water leakage throughout the system. Water distribution is based on cropping patterns and irrigated areas, yet due to unavailability of water, delivery does not always match needs. Farmers have generally complained about a lack of communication from JVA on water quality issues. Farmers have requested JVA to be more transparent in its dealings with its customers to allow them to adapt to changing conditions as they arise. In that JVA had no clearly developed mandate or strategic plan, it had become reactive and somewhat redundant agency.

2 Decisions and actions taken

Strategic Decisions for Institutional Reform

To shape a new future for the agency, it was decided that JVA should go through a rigorous and public strategic planning process. This process was led by a steering committee and working groups and resulted in a detailed and thoroughly vetted written draft strategic plan and a series of informal meetings and workshops to collect comments and input before the plan was complete.

The first phase of the strategic plan’s development was launched in March 2000 to expose JVA to strategic planning concepts and approaches, build change management capacity, and assess the external and internal environments that affect JVA. In the second phase, USAID is working to facilitate the strategic plan’s development while building JVA’s capacity in strategic planning approaches and privatization.

A major decision borne out of the strategic planning process is to have JVA become more of a regulator and manager, and let farmers cooperatives and others in the private sector implement and handle the delivery of services. A decision was made by JVA and other stakeholders to plan and implement a program of participatory irrigation management and the privatization of bulk and retail water supply in the Jordan Valley. As a result, draft bid documents will be prepared for a contractor to manage the bulk and retail water supply in the Jordan Valley. A new law is being drafted to codify the organizational changes that come as a result of privatization. Members of JVA also traveled to France, with USAID support, to study participatory irrigation management and privatization through meetings with private or semi-private water service providers and water users associations as well as site visits to irrigation facilities.

The JVA strategic planning process illustrates the first steps in developing integrated water resource management and institutional reform for an agency whose purpose, scope and direction has changed over time in response to the supply and demand of water in the region.

Using the external and internal environment, stakeholder, and water management assessments in the first phase of the planning process JVA identified 19 key strategic issues that formed the basis of the strategic plan. These issues were selected from a much larger number but were identified as being the most critical external threats and opportunities or internal weaknesses and strengths facing JVA over the coming five years. These issues were then prioritized and grouped according to four major themes. Issues were accorded high and medium priority by JVA according to their influence on other issues, urgency for being addressed, direct impact on JVA’s future, likelihood of actually occurring, and need to be included in developing JVA’s strategic plan. The four key goals that were developed are listed below.

− **Goal One – Water Resource Management.** Meet the needs of current and future water users, by managing, developing, protecting and sustaining both existing and new water resources, and to do this in a way that takes into account both economic and environmental considerations, and involves the private sector where appropriate.

− **Goal Two – Water Distribution and Supply.** Ensure that JVA’s existing water distribution infrastructure, systems and facilities are managed and controlled in an efficient, transparent and equitable manner, and to use private sector participation where appropriate.
− **Goal Three – Land Management and Development.** Develop, manage, regulate and protect land and related resources in the Jordan Valley to maximize their economic usefulness while taking into account both environmental and commercial issues, and to use private sector participation where possible.

− **Goal Four – Organizational Improvement and Development.** Develop and reorganize JVA to enable it to better achieve its mission, and to improve its performance and effectiveness in providing quality service to its stakeholders.

Each goal has been divided into a number of objectives, which will need to be met to fulfill the goal. Each objective has been subsequently broken down into several strategies, the implementation of which will ensure that the objective is met.

The commitment and participation of JVA staff, particularly senior management, in all activities has been key to the success of the strategic planning process. Overall, the process involved a task force with 12 members, an additional 12 members on the subcommittees, and 32 working group members. JVA staff:

• Attended and participated in the frequently scheduled task force and subcommittee meetings;
• Were involved in program design and review – particularly designing and reviewing the four assessments (external and internal environment, stakeholder, and water management);
• Reviewed and contributed to program documents;
• Participated in training sessions, which were oversubscribed;
• Played an active role in the identification and refinement of strategic issues;
• Co-authored the priority strategic issues report; and
• Partnered in designing phase 2 of the program.

**Alternatives Considered**

“zero action” alternative was considered, and was promoted by certain quarters within the Government of Jordan. Given the dissatisfaction with service communicated by the valley’s farmers and other customers, and concerns that JVA operated under a poorly defined structure of reactive crisis management, various sectors of the Government of Jordan pushed to abolish JVA. JVA, at the same time, was largely resolute in its desire to be an autonomous service provider as it was when it was originally established, and was not initially prepared to accept a strategic shift away from external supply and delivery to an agency devoted to planning and institutional strengthening. When faced with the prospect of abolition, USAID, which has a long history of cooperation with JVA on regional development and water delivery projects, proposed that the Government of Jordan and JVA collectively develop a sustainable strategic plan to shape the future of the institution.

**3 Outcomes**

The human resources impact is the major problem associated with implementing the strategic plan. The Government of Jordan must develop a strategy to reduce over-staffing and incorrectly trained personnel. This will require the development of early retirement compensation packages or restructuring staff to fill positions within other government agencies. JVA currently employs nearly 2200 staff and must consider a reduction in staff, perhaps by as much as 50 percent.

This project can be considered a “win-win” project in many respects, as each sector (environmental, social and economic) stands to benefit from a fully developed strategic plan and agency mission for its future role. Organizational adjustments, however, will negatively affect some JVA staff as privatization and restructuring of JVA’s management objectives will render some positions redundant.

The greatest winners are, undoubtedly, the farmers and other customers in the Jordan Valley. Privatizing the bulk and retail water delivery in Jordan will almost guarantee – despite severe
environmental conditions – that recipients of water will receive improved service and have access to better information regarding resource management and allocation.

Strategic planning for JVA can be considered successful because during the implementation process the objectives and tasks are being supported by adequate actions. Involving every stakeholder in the process of re-evaluating JVA’s strategic mission and objectives improved transparency, opened JVA to training and resources once unavailable to JVA staff, and introduced the agency to sophisticated decentralization and privatization concepts.

Finally, one of the critical recommendations of the Strategic Plan is an approach to involving the private sector in more of JVA’s activities. Accordingly, JVA’s activities will shift from being a service provider to more of a planning, oversight and management function. It has been agreed that JVA will introduce the private sector in the provision of water services through the development and implementation of a management contract for the supply of bulk and retail water to the over 8000 farm plots in the valley. JVA will also include in the management contract the operation of a data acquisition and system control center, equipment maintenance workshops, and laboratories.

Work to implement the Strategic Plan is currently underway. An international request for proposals for a private operating contractor to manage the bulk and retail water supply in the valley is currently being prepared. Additionally, other aspects of the Strategic Plan are being implemented: a new law is being drafted to codify the changes in role for JVA and its reorganization, a new organizational plan is being pursued through the creation of a strengthened planning capability for JVA, reduction of staff by 30 to 50 percent is planned, and the creation of a Privatization Management Unit to oversee the activities under the management contract is underway.

4 Lessons Learned

The strategic planning process created conditions under which all the actors having a stake in water development and management could become involved, present their respective positions and concerns and negotiate to achieve acceptable solutions to the proposed institutional reform. Relevant stakeholders included other Ministries, farmers groups in the valley and existing and potential landowners.

Legislative reform was and continues to be necessary to establish JVA’s new regulatory functions. As the public entity, JVA must have the capacity and capability to monitor and regulate service delivery to ensure adequate provision at reasonable and equitable prices. Increasing private sector involvement requires adequate government regulation and an institutional framework that enables the public and private partners to achieve the common objective. Financial sustainability of JVA’s operations is of paramount importance. In this respect the relevant legislation must allow JVA to collect and manage revenues from its respective activities, for example, the sale of water and the lease or sale of lands.

The human resources impact is a major challenge associated with implementing the Strategic Plan. The Government of Jordan must develop a strategy to reduce over-staffing, but more importantly it should focus on adequately training its personnel and ensuring it has a strategy to retain the best personnel in the future. This will require the development of early retirement compensation packages as well as a comprehensive human resources strategy.

The private sector can play an important role in providing water services. The management contract and the associated bidding process must be devised to allow for adequate incentives for the private sector to take responsibility of existing assets, operations, investments and customer service. Conversely, the government’s ability to control the private sector and ultimately ensure better quality and quantity of water services delivered must not be diluted.

A successful integration and adaptation of the Strategic Plan for JVA is dependent upon continued participation from JVA policy leaders and senior-level management and active engagement from regional stakeholders, most importantly farmers in the Jordan Valley, who depend most directly upon JVA for water management and distribution.
Replicability

Effective strategic planning for public entities is often important to both the continued success of the entity or simply necessary for its survival. A detailed strategic planning process is essential for any public agency whose mandate has either changed or diminished due to environmental, political or socioeconomic conditions. JVA may become one of the first successful examples of privatized irrigation distribution and a model that could potentially be replicated in countries with similar environmental and socioeconomic conditions.

5 Links to Additional Information

References and Web Sites


Organizations and People

This case was contributed by the U.S. Agency for International Development (USAID) and authored by Cledan Mandri-Perrott.