Towards sustainable development in the water sector: a perspective from Palestine

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Abstract The water sector in Palestine suffers from great damage and serious institutional fragmentation. The deterioration in the water services and the inadequate coverage at the different levels are two major weaknesses in the sector. Adding to that, the responsibilities are scattered among relevant institutions and unclear. Aiming at facing the challenges and obstacles, and in order to approach the achievement of sustainable development in the water sector, the Palestinian Authority (PA) had to take certain measures and actions. The elements of a “National Water Policy” have been adopted that aim at sustaining the resource. However, a set of measures and regulations in line with the policies still has to be issued and enforced. A central independent authority, the Palestinian Authority, was established in order to execute the National Water Policy. The main aims of this authority as a regulator will be represented. This fairly new approach for managing water resources in Palestine is time consuming and requires a big change in the national culture. Public awareness and stakeholder participation are vital strategies to create incentives for public commitment and involvement.

Keywords Palestinian Water Authority; policy; regulator; sustainable development; strategy

Introduction

The political security and stability in the area are the prerequisites for any sustainable development in Palestine. Water, as a scarce resource has a unique value, thus the management of this limited resource is one of the most critical challenges that faces the PA. The importance of this resource is reflected in the Palestinian/Israeli negotiation’s schedule, where water issues have been delayed to the final status negotiations, giving water the same importance as the Israeli settlements within Palestine and the ever-present Jerusalem issue.

Water sector management in Palestine will consist of a set of measures implemented by one responsible body (the regulator), with the separation of its functions from the operational functions. Accountability and independence of this body will have to be ensured. This responsibility was entrusted to the Palestinian Water Authority (PWA) by the issuance of By-law No. 2 for 1996.

The role of the regulator

The tasks of the regulator, especially in situations of acute shortages of the resources, is usually a complicated one which comprises the following functions:

• Water resources assessment: this function is associated with data collection and assessment of the naturally available resources and their natural renewability.
• Water use functions: associated with data collection on existing users of water, water rights holders and unused or unappreciated water. These functions are associated with the issuance of permits, licenses and concessions that will regulate the use of the resources whether surface or groundwater.
• Water management functions in a socio-economic–environmental context: this includes planning and allocation of the available resources in order to reach a balance between the available water quantities and the people’s needs at present and in the future.
• Resources monitoring functions: this entails the monitoring of quantity and quality of water resources to ensure compliance with allocated quantities and with adopted quality standards.
• Performance monitoring functions: include monitoring of performance at all administrative levels in the water sector including but not limited to tariffs, technical standards, compliance with licenses and permits.

• Coordination functions: the regulator will carry out the necessary intersectoral coordination to ensure that the development plans within the water-consuming sectors are compatible with the amounts of water available.

Objectives and scope
The main objective of the actions taken is to build a sustainable development of the water sector through establishing a sustainable Palestinian Water Authority which can adequately manage the water resources. In broad terms the scope of work is defined as follows:
Step 1: Adopt policies and formulate a strategy;
Step 2: Review regulatory roles and functions;
Step 3: Establish the legal basis, “rules and regulation”; 
Step 4: Assess institutional reforms requirements, “private sector participation”; 
Step 5: Embark on implementation of plans.

Actions taken, instruments used
The activities that the PWA is undertaking are a direct response to the National Water Policy, selected on the bases of the long-term role of the PWA. As stated in Law No. 2 for 1996, PWA will be the “regulator” in the water sector with no operational role. This new approach of separating the functions of regulation and control from service/delivery functions is fairly new and requires that certain tools for water management are developed. These management tools were identified after several discussions and workshops in Palestine and based on recommendations from the World Bank, Norwegian institutions/partners and local advisors.

Preparation of main projects pertaining to water management tools
Water strategy formulation
The objective of formulating a national water management strategy is to provide measures to manage this vital resource in accordance with adopted goals and policies. A strategy team of experts in legal, economic and technical fields was assigned to formulate and draft the strategy. Wide consultation with the relevant ministries, institutions and individuals was ensured. The strategy calls for securing an environmentally sound and sustainable development of the water resources through efficient and equitable water management.

Water law and regulation
These are the laws and protocols, which control water rights, principles of water allocation, water pricing, water quality etc. The PWA has embarked on the preparation of a water code that enables the fulfillment of the national water policy.

A set of all existing laws and rules from the Ottoman time up till now was compiled. The actual drafting of the law and its regulations commenced in July 1997. The final draft of the Palestinian water law will be submitted to the National Water Council, which, in turn, will review it and submit to the higher concerned parties for approval.

Water tariff system
PWA intends to introduce a tariff system in the Palestinian Territory which will promote the overall water policy and general development goals of Palestine. The existing tariffs do not encourage water conservation, and are generally inadequate to recover operation and maintenance costs, especially in the West Bank.
Technical specifications and water quality standards

Substantial activity in the water sector within Palestine is currently taking place and a major uplift in service and standards is currently being planned. Investments in the order of US$ 800 million are being planned for the next few years in various projects. A rather large number of agencies and donors are involved in the technical and financial assistance in the water sector. Needless to say, coordination and use of common standards and rules will be important in the planning process if one is to succeed in implementing an effective system for the future. Unified water quality standards for the various beneficial uses has to be adopted and compliance with these standards has to be ensured.

Water information system

The overall objective of this activity is to present reliable water resources information to decision makers and stakeholders and to ensure that the data and analysis are used effectively in both political dialogue and development activities. The immediate objectives would be: (i) compilation and characterisation of Palestine’s water resources base by groundwater basin; (ii) overlaying of socio-economic data on the aquifer framework (assessment of the monitoring network, data management and information services; (iii) diagnosis of critical gaps and water resource limitations in relation to development needs and water rights negotiations.

Re-planning and re-structuring program of water and wastewater services sector

The institutional reforms within the water sector has adopted the principles of the water policy, and two important principles are:

- the water sector should be regulated by one responsible body, with the separation of the institutional responsibility for policy and regulatory functions from those of service delivery;
- it is intended to establish three regional utilities in the West Bank and one in Gaza; and
- encourage involvement of the private sector in the funding and implementation of projects.

In response to these principles, the overall institutional framework of the water sector is as follows:

**INSTITUTIONAL FRAMEWORK WATER SECTOR**

<table>
<thead>
<tr>
<th>Chairman of the Cabinet of Ministers</th>
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<tr>
<td>National Water Council</td>
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<td>Palestinian Water Authority</td>
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<td>Bulk Water Supply Authority</td>
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<td>Regional Water Utilities</td>
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- Gaza, West Bank (Hebron, Bethlehem, Northern, Central)
The National Water Council is chaired by the President of the Palestinian National Authority and consists of five ministers and a Palestinian universities’ representative. The composition of the council will be amended to include representatives from PWA, NGOs, Ministry of Health, Farmers’ Union, and the private sector. The mandate of the National Water Council is to review and approve national water policies, reconsider the issue of private ownership of water, examine the central water projects and approve their implementation, and enhance regional and international co-operation in water.

The Palestinian Water Authority (PWA) is, by its by-laws, a governmental institution with independent status and its own budget. It has a commissioner who is appointed by the President of the National Palestinian Authority. The PWA is responsible for the management of the most scarce and vital sources for sustaining life, for promoting development, and for maintaining the environment in Palestine. Water is of concern to the public and the media.

PWA is assigned to have a considerable independent character with its own budgetary responsibility. However, in order to establish PWA as an independent and efficient water resources management authority it is necessary to secure a sufficient and sustainable funding arrangement.

Problems encountered

Political constraints
These have been stated to be the main prerequisite for any sustainable development in Palestine. Any progress or delay in the final peace negotiations will have direct implications on the development in the water sector. The closure imposed between the West Bank and Gaza is one major obstacle in ensuring that efforts and projects are fully coordinated. The continuous postponement of the implementation of agreements in force will hinder the progress of any development.

Cultural acceptance
The historical “private ownership” for water is a major issue that the PWA had and still has to handle. The adoption of certain policies such as the consideration of water as a public property is a fairly new approach. This requires a change in the culture and traditions of people especially those directly affected by the decisions taken in the sector. It is the responsibility of PWA to carry out several awareness campaigns targeted towards the community at the different levels in order to advocate the importance of such policies for the public benefit. However, this procedure is time consuming and gradual. In order gain credibility in the sector PWA should continuously organize public hearings and involve the community in the decisions taken at the national level.

Legal status and enforcement
The enforcement of water legislation and policies depends on the relevance of the regulations. So far the sector has been regulated by the old rules dating back to the Ottoman, British Jordanian and Israeli rules. The existing rules lack the administrative machinery required to ensure compliance. The political separation between the different regions in Palestine is also a major obstacle to enforcing the laws. In addition to enforcement, due consideration must be given to alternative measures such as pollution permits and incentives for compliance.

Policy dialogue with stakeholders
The structural reforms in the water sector are very essential and serious processes that will affect different authorities and utilities. The introduction of new tariff and pricing systems,
the issuance of new rules and regulations in the area will require a strong political will to change and the ability to take the proper decisions for the benefit of the public. This is a very crucial issue and the political leaders need to develop this through intensive policy dialogue with all relevant stakeholders in the water sector.

Results and impacts of the actions

The PWA objectives are partly fulfilled, however, there is still much to be done in order to develop the water management tools and start their implementation. The different challenges and obstacles listed previously in this paper have slowed down the progress on many occasions. The efficiency of performance has been dramatically increasing throughout the course of the work.

The PWA is almost fully staffed with 100 employees in the West Bank and Gaza Strip. This institution is currently carrying out the responsibilities as stipulated in the law. Any beneficial use of water is subject now to a permit, license or concession. All illegal activities in the water sector are also controlled in the areas under the Palestinian Jurisdiction. However, it is important to keep in mind the political and institutional constraints with which PWA operates. Authority of land and resources are some of the core outstanding issues in the negotiations.

The key achievements that PWA has to make are listed below:

• Arriving at cost recovery at the production and distribution levels.
• Institutional reform has to take place at the operational and consumer levels. PWA already have taken major steps in this regard but more still has to be done.
• A tariff system has to be developed and implemented in Palestine.
• Water rules and legislation to be approved and enacted. The water law should handle the two most important issues in this context:
  – Licensing systems and procedures are in place and enforceable.
  – Water ownership issue is resolved.

Conclusions

• Political implications in the case of Palestine have considerable influence on the process of achieving sustainable development in the water sector. Agreements current in force have a great impact on water availability and demand forecasts.
• The water sector was damaged throughout the 30 years of occupation. This necessitated the need for immediate remedial measures by PWA.
• It is urgent to finalize the formulation of the water management strategies that will identify the key activities to be undertaken within the boundaries of PWA's jurisdiction.
• Lack of comprehensive water legislation contributes significantly to inefficiency and mismanagement of water.
• Integrated development and management of the water resources is conditional on the actuation of an effective legislative framework and sound institutional directives to ensure that formulated policies are put into effect.
• Enactment of enforcement mechanisms and promoting the merging of fragmented institutions into one responsible and authoritative institution.
• Special attention should still be given to the regulation regarding the monitoring of use, pollution and management.
• Inter-sectoral approach is needed to achieve sustainability in the development of the water sector.
References

(1) Palestinian Water Authority, Elements of the National Water Policy, January 1996.