

# Water Governance in Palestine

SECTOR REFORM

TO INCLUDE PRIVATE SECTOR PARTICIPATION

NATIONAL REPORT 2015

## Governance & Financing for the **Mediterranean** **Water** Sector



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## ACRONYMS

AFD	Agence Française de Développement
CWMU	Coastal Water Management Utility
DG	Director General
EQA	Environmental Quality Authority
EWASH	Emergency Water, Sanitation and Hygiene Group
FCR	Full Cost Recovery
GEF	Global Environment Fund
GEF UNEP/MAP MedPartnership	GEF UNEP/ MAP Mediterranean Action Plan Strategic Partnership for the Mediterranean Sea Large Marine Ecosystem
GEKA	Societe General des Eaux Khatib and Alami
GEWP	Gaza Emergency Water Program
GWP-Med	Global Water Partnership - Mediterranean
ICA	Israeli Civil Administration
IWRM	Integrated Water Resources Management
IWSR	Institutional Water Sector Review
JCSPD	Joint Council for Services, Planning and Development
JWC	Joint Water Committee
JWU	Jerusalem Water Undertaking
KfW	Kreditanstalt für Wiederaufbau (German Development Bank)
LACS	Local Aid Coordination Secretariat
LEKA	Lyonnaise des Eaux Khatib and Alami
MDLF	Municipal Development Lending Fund
MIC	Ministerial Information Committee
MoA	Ministry of Agriculture
MoF	Ministry of Finance (became Ministry of Finance and Planning in Autumn 2015)
MoH	Ministry of Health
MoLG	Ministry of Local Government
MPAD	Ministry of Planning and Development (became Ministry of Finance and Planning in Autumn 2015)
NGEST	North Gaza Emergency Sewage Treatment
NIS	New Israeli Shekel
NRW	Non- Revenue Water
NWC	National Water Company
NWU	Northern Water Utility
OECD	Organisation for Economic Cooperation and Development
PA	Palestinian Authority

PMA	Palestinian Monetary Authority
PMU	Project Management Unit
PPP	Public Private Partnership
PSP	Private Sector Participation
PWA	Palestinian Water Authority
RIA	Regulatory Impact Assessment
RU	Regional Utility
RWU	Regional Water Utility
SAWSIP	Southern Area Services Improvement Project
Sida	Swedish International Development Cooperation Agency
SP	Service Provider
TWW	Treated Wastewater
UfM	Union for the Mediterranean
UFW	Unaccounted for Water
UNDP	United Nations Development Programme
UNEP/MAP	United Nations Environment Programme (UNEP)/Mediterranean Action Plan (MAP)
USAID	United States Agency for International Development
VfM	Value for Money
WBWD	West Bank Water Department
WSRC	Water Sector Regulatory Council
WSSA	Water Supply and Sewage Authority
WW	Wastewater



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# 1. FOREWORD

It is widely acknowledged that the global ‘water crisis’ is in fact a ‘governance crisis’, necessitating the efficient design and effective implementation of policy reforms, with due consideration to inclusive stakeholder engagement, pro-poor and gender-sensitive approaches, aligning with the principles of Integrated Water Resources Management (IWRM). However, governance reforms, through the operationalisation of dedicated strategies and plans for the provision of safe drinking water and basic sanitation to the populations, require funds that countries often fail to secure. The mobilisation of finance for the Mediterranean water sector in particular, has proven a formidable task, and is usually beyond individual government capacities. Though aid to the water and sanitation sector has increased over the past years, it still falls short of the requirements that the implementation of individual country strategies necessitate. In conjunction with that, discussions over the potential role of the private sector for the sustainable financing of water services have brought into the forefront the need to have a sound water governance framework in place.

Stemming from the realisation of the inherent linkages between governance bottlenecks and the mobilisation of financial resources for the water sector, the *Governance & Financing for the Mediterranean Water Sector* Project aims to diagnose these bottlenecks and identify plausible and realistic recommendations to help overcome them. The Project, jointly designed and implemented by the Global Water Partnership-Mediterranean (GWP-Med) and the Organisation for Economic Cooperation and Development (OECD), was formally labelled in 2012 by the Union for the Mediterranean (UfM), as an endeavour of regional scope that contributes to peace, stability and sustainable development. Strategic partnerships with the Swedish International Development Cooperation Agency (Sida), the FEMIP Trust Fund (FTF) of the European Investment Bank (EIB), the GEF-UNEP/MAP Med Partnership Programme and the Mediterranean Component of the EU Water Initiative (MED EUWI) have been instrumental in setting the project in motion and under effective implementation.

The official Project launch took place in Barcelona, Spain, on 28-29 May 2013 during a High-level Regional Conference organised by GWP-Med and the UfM Secretariat. Palestine was one of seven countries that have officially requested to be among the focus countries of the Project’s technical work.

During the first year of the Project’s implementation, Policy Dialogues in Tunisia and Jordan were conducted and evolved through a series of fact-finding missions and consultation

workshops, interviews and bilateral meetings, and were built on active input from the stakeholders via surveys and written feedback on draft technical documents. Conducting national assessments was necessary in order to gain understanding of the structures and processes of policy-making in the water sector of these countries and how these processes challenge sustainable financing, including through private sector participation. The diagnostic process, carried out by an OECD multi-disciplinary team of experts, was found to be effective in reaching a set of policy recommendations based on international best practices and country-specific action plans. The technical work developed in parallel with national multi-stakeholder policy dialogues, facilitated and supported by GWP-Med, and involved representatives from the water supply and sanitation sector and beyond (authorities, utilities, donors, civil society, the private sector, water users, academia, etc.). The dialogues were crucial for solidifying stakeholders' understanding and building ownership and consensus on the findings of the analytical work and –more importantly- on the country-specific roadmap for action.

The Policy Dialogue in Palestine falls within the second year of project implementation (2014-2015) and was conducted by the Global Water Partnership- Mediterranean (GWP-Med) in close collaboration with the Palestinian Water Authority (PWA). It was officially launched in Ramallah, on 13 November 2014 under the auspices of H.E. Mazen Ghuneim, Minister/Chairman of PWA. The technical work was carried out by GWP-Med in cooperation with a socio-economic water expert retained for the purpose: H.E. Koussai Quteishat, former Secretary General of the Jordanian Ministry of Water and Irrigation. The ToR for the expert identified the process, as similar to the Jordan and Tunisia exercise, yet highlighted the need to identify the uniqueness of the sector and the governance modalities in Palestine. The focal point in Palestine was PWA, and efforts were intensively made to actively involve, throughout the process, all the relevant stakeholders representing as much as possible the various factions of society from within both, the public and the private sectors (Annex 4). The particularity and added value of the Palestinian Dialogue stems from the emphasis on semi-structured interviews as a key input for the technical analysis. As mentioned above, the technical work builds on related GWP-Med/OECD methodology and tools, with this report following closely the format used in the two earlier country studies in Tunisia and Jordan with that of Jordan serving as a template.

The present National Report was prepared with a focus on the governance challenges to the mobilisation of sustainable financing for water services, also through private sector participation. As GWP-Med takes the overall responsibility for the planning and the

implementation of the activity, in close coordination with PWA, the expert was directly responsible to the GWP-Med, worked under the guidance of the GWP-Med Project Manager and in coordination with the Palestinian counterpart.

The duration of the Palestinian Dialogue was from November 2014 until December 2015. During this period, an inventory of available literature on the subject was made, a stakeholder mapping was prepared and the Dialogue's process developed through an interplay of technical work and consultation workshops; cross-feeding each other.

Travelling to Palestine took place on five occasions: November 2014, February 2015, May 2015, June 2015 and December 2015. An internal Scoping Note was prepared after the first trip and the First Consultation Workshop (13 November 2014), thus setting the ground for the work to be conducted. The second trip (mid-February 2015) included gathering further literature and conducting more bilateral meetings leading to the preparation of the **Draft National Report** which was shared with the stakeholders in advance of the third trip when additional bilateral meetings took place along with the organisation of the Second Consultation Workshop (6 May 2015); this time to share and discuss findings and provisional policy recommendations. The amended and finalised National Report, incorporating also a roadmap for action tailored to the country context, was shared with the stakeholders prior to the fourth trip and formed the basis of the discussions during the Third Consultation Workshop (16 June 2015). A concluding Workshop, under the auspices of H.E. Mazen Ghuneim, Minister/Chairman of PWA took place on 2 December 2015 and discussed the final National Report and the ways forward.

## 2. EXECUTIVE SUMMARY - DIAGNOSTIC ANALYSIS & RECOMMENDATIONS

### 2.1. DIAGNOSTIC ANALYSIS

The water sector in Palestine has been under severe pressure, stemming from geo-climatic particularities, demographic and urbanisation trends, suboptimal management and governance modalities and notwithstanding the lingering political situation. The Government embarked into a water reform process in 2010 (which was enacted in 2014), including concrete legislative actions for the management of its resources through the application of integrated and sustainable water resources management principles, for improving the provision of water services to all citizens. The Government, committed to effectively reform the service subsector, established in 2014 as an independent regulatory entity, and included in the new Water Law a clause indicating its willingness to improve the governance structure needed to attract private investment into the sector.

Though substantial donor aid was made available to the sector, the investments needed far exceed what is available due, among other reasons, to the rising demand from Government for social projects. There are limited funds available to the Government for covering source development costs, along with substantial deficits in operational and maintenance costs from the national budget. Hence, opting for private sources of finance of the type that brings with it expertise seems apposite but requires further exploration.

Good governance, highlighted by solid regulatory mechanisms, attracts private investments. Should the right governance conditions be in place, private sector participation (PSP) could play an important role in bridging the financing gap of Palestine's water sector. The latter, entails significant potential for small-scale and large-scale PSP projects that extend across the entire spectrum of the project cycle. The sector has had experience in management contracts (Gaza), and can replicate the experience but, it has yet to experience other project modalities such as service contracts, operation and maintenance, performance-based projects, and build-operate-transfer (BOT). The Government is well aware of the important contribution PSP has had in the development of neighbouring Jordan's water sector and elsewhere in the region and beyond. It has thus, endorsed PSP as a tool that can lure and introduce investments, especially those that bring in also the needed technical knowledge and expertise. However, there are specific framework enabling conditions that need to be in

place for a PPP to succeed. These conditions are related to planning, financial management, appropriate and adequate capacity, socio-economics, and regulatory abilities.

The new Water Law 2014 has consolidated responsibility and clarified the roles of the entities within it. The sector is currently in an undefined period of transition as structure and responsibilities are being shifted. This is apparent in the following:

- The Palestinian Water Authority's (PWA) role of regulating service providers is given to the newly established Water Sector Regulatory Council (WSRC) as an independent entity, which has now been established (in late 2014);
- The West Bank Water Department (WBWD) will initially undergo a transitional period of financial and management upgrade to be followed by the establishment of a publically owned water company to cover the Gaza Strip and the West Bank. The new company will be called the National Water Company (NWC);
- Individual water departments in the municipalities will first consolidate to form Joint Services Councils and eventually amalgamate even more to form regional water utilities (RU); ideally four in number; three in North, Centre, and South of the West Bank and the fourth in Gaza. The Gaza structure is nearly clear but needs to be completed as the Coastal Municipal Water Utility (CMWU). In the West Bank, the Middle will be serviced by the Jerusalem Water Undertaking (JWU), the South will be modelled as the Hebron and the Water Supply and Sewage Authority (WSSA) utilities, while in the North the transitional model is to replicate the Joint Services Council (JSC) formed by six villages near Jenin. This consolidation is to be supported through coordination between the PWA and the Ministry of Local Government (MoLG). The Municipal Development Lending Fund (MDLF) can assist in the process;
- As for irrigation water, the model is that of providing the services through Water Users Associations (WUA) to be established according to a regulation that will be proposed jointly between the PWA and the Ministry of Agriculture (MoA).

The regulatory reform has thus, started with the establishment of the WSRC to regulate the entire process of the service provision delivered by all water supply, delivery and wastewater utilities. This restructuring is taking place in parallel to continued efforts to consolidate and corporatize the water service providers in order to increase efficiency. This is accompanied by the establishment of an effective and efficient monitoring system for the service providers.

The PWA, on the other hand, protects water supplies, carries out tasks related to the planning, regulation and evaluation of water resources management in terms of economic and social feasibility, and monitoring the implementation of water and wastewater projects. Additionally, the Law explicitly stipulates that the PWA promotes private sector participation in the water sector, in coordination with relevant authorities, by issuing regulations for creating a climate conducive to private sector investments and implementing institutional, regulatory, and economic reforms to that effect.

Since PPP projects are inherently different than conventional projects, the PWA requested the French Government to support them in establishing a PPP unit within PWA. The French Government and their consultants proposed (yet to be reviewed and approved by the Cabinet of Ministers) a central PPP unit to be established at the Ministry of Finance and Planning for all development sectors. Irrespective of its location, the unit is an important contribution to the regulatory framework and plays a major role in the project development process. It would focus on (a) strengthening the procedures of project selection and approval, (b) ensuring that the tools needed to decide on project procurement are in place, and (c) the value for money analysis is applied by public entities on regular basis in the process of financially evaluating the projects.

The PWA is mandated by law to cooperate with related parties in order to create the enabling environment through institutional, regulatory and economic adjustments according to a specific regulation to be formulated for this purpose. That would encourage private sector investment in water leading to partnership between the private and public sectors (Article 8.16). To do this, capacity within the PWA needs to be enhanced as part of the institutional, regulatory and economic reform process that the PWA is undergoing. There are still important regulatory functions that need to be put in place prior to and during the process of introducing PSP. The following items, when completed, will create more confidence and give additional credibility to the process:

- Identifying the roles and the relationship of the various entities within the water sector and establishing the methods of internal communication;
- Maintaining the roles and responsibilities of other stakeholders from outside the sector in the PPP procurement process, primarily the Ministry of Finance and Planning, whereby donors will have a role in the PPP project development and whereby the Ministry, taking over the role of the Ministry of Planning and Development after 15 September, 2015, would facilitate the submission of project proposals to donors;



- Identifying different types of enterprises that could potentially invest in/carry out small and large scale PPP projects;
- Identifying the higher authority that receives the economic analysis of projects from the PPP unit, and approves project prioritisation. Such authority can comprise a few Ministers but, to avoid establishing future similar committees, include in the membership of this committee the entity (ies) responsible for public debt and the issuance of government guarantees;
- Defining the responsibility of the Ministry of Finance and Planning with regard to the budgetary management of PPPs;
- Putting in place tariff regulations, which would reinforce the concept of cost recovery and sustainability. Analysis of existing tariff and subsidy structure is needed to identify the objectives of a tariff policy. The tariff analysis should also be done with a gender and diversity perspective to understand affordability and willingness to pay issues (all statistics should be disaggregated). Ultimately, the objective is to ensure that costs and implications of such policy are conveyed to and understood by all;
- Identifying the role of the donors, who have been historically the greatest contributors to the water sector, is essential in most of the PPP modalities as donors are themselves increasingly enhancing the role of PSP.
- Developing a gender-sensitive framework for Corporate Social Responsibility to support the private sector in developing trustful relationships with the public sector and the broader public.
- Enhancing the regulatory capacity of the WSRC

The process of reform assigns new roles and responsibilities to entities that the public is already familiar with. Affordability and willingness to pay analysis is needed prior to putting forward a tariff structure and pricing policies. The PSP option is being introduced in the Sector and in the country as a matter of government policy. All these factors highlight that accountability to the public in Palestine's water sector is more important now than ever before.

Communication is the key, with awareness raising starting from within. Awareness raising must be complemented by social analysis, which as mentioned above, could be done simultaneously with the affordability and willingness to pay analysis. Such analysis should take into account attitudes and behaviour related to water management and services and it should be done with a gender perspective (disaggregating results to sex and discussing why different stakeholders and female/male individual might have different perceptions and

attitudes). Such information would make a communication strategy more effective as messages to different stakeholders could be better targeted.

The communication process may follow a three-tier approach with several components per tier. The tiers are at the intra-sector level (within the sector), inter-sector (with other public entities), and out with the public at large with targeted messages to different types of actors and to women/men and children. Particular focus will have to be put on communication and dialogue engaging the private sector. Since the private sector is a key target for the reform, it needs to be effectively engaged, and also be given the opportunity to develop trustful relations and increased maturity. Whereas the first two tiers are methodological, engaging the public according to a set plan requires innovative ways and is a challenging effort. The success of the reform depends on the methodology with which the various government bodies address the public. Public consultation has important implications on the communication and buy-in of any scheme, let alone private sector intervention to which they are often opposed. In this context, the private sector could also be invited to partake in a significant way in the dialogue with the public.

While the general public is aware of Palestine's water scarcity challenges, there is scope to discuss the affordability of water services and quality of service provision alongside the national dimension of water. Some platforms for doing so already exist; the process initiated by the Palestinian Policy Dialogue needs to be championed and institutionalised, since it has been recognised as an effective platform for discussion. In this context, women's access to and influence in such fora requires reinforcement, as it appears to be limited. On the other hand, it is expected that water users associations (WUA) will become platforms for stakeholders' engagement, as they are designed with that purpose in mind. WUAs, however, rarely have female members, although women constitute half of the users and are mainly responsible for actual farming in rural areas. In brief, there are various ways/approaches for ensuring stakeholder engagement, but full engagement remains largely a challenge.

It has also to be borne in mind that the political context in Palestine plays a major role in slowing the development process, as Palestine lacks sovereignty of authority over its own resources, compounded by impacts of repeated Israeli security actions hindering movement of people and goods.

## 2.2. KEY RECOMMENDATIONS

This report identifies recommendations pertinent to the three governance challenges that face the water sector in Mediterranean countries. Other than water availability issues and rules imposed due to the political situation, Palestine faces similar obstacles as other countries in delivering water projects involving the private sector. The general headlines for these challenges are budgetary, regulatory, and stakeholder oriented. These are described in Sections 2.2.1 through 2.2.3 below. In consideration of the PPP process, practical recommendations are also provided.

### 2.2.1. IMPROVING THE BUDGET PROCESSES

The financial constraints faced by the Government of Palestine in support of its water sector are numerous and beyond budgetary capabilities. In conjunction with deteriorating or non-existent infrastructure, limited technical capacity and existing socio economic context, the situation is likely to worsen unless both financial and know-how deficiencies are tackled. This can be achieved through partnership with the private sector that can contribute to the cost of infrastructure projects and help increase operational efficiency with social equity in consideration. This is not without risks, however, that can range from encountering contingent liabilities, projects yielding lower than expected returns, and costs exceeding the affordability of the users. These risks fall under the budgetary governance component and can be circumvented if the respective governance structure and methodology are in place. On a national scale, the latter include:

- Budget management by the Ministry of Finance and Planning;
- Conducting Value for Money (VfM) analyses by a PPP unit;
- Prioritising and driving the projects forward through a Special Ministerial Committee;
- Preparing and managing the PPP scheme by the procuring entity;
- Regulating the process through an institutional regulator;
- Performing audits by the State Audit & Administrative Control Bureau, and
- Having the capacity to monitor VfM from a quantitative and qualitative social perspective (e.g. social safeguards within health, human rights, gender equality and equity).

The VfM methodology and the budgetary process are collectively used to ensure that a PPP project is affordable and sustainable. Establishing and qualifying a PPP Unit, whether at the central government level or within the water sector, is an important step in the development

of a PPP framework in Palestine. At the sector level, prioritizing, driving and managing PPP projects is the mandate of the procuring entity which, for water, is the PWA.

The following is a suggested checklist for action related to budgetary issues:

- Build strong and dedicated PPP capacities and establish PPP units (one inside the PWA), ensuring that training/capacity building is provided for men and women alike;
- Assign the high level committee to sign off projects and ensure guarantees.
- Develop a basic VfM methodology for projects identified or championed by the PWA; such methodology to include social parameters and gender role indicators which are unique to the water sector, and disseminate the methodology accordingly;
- Avoid legal obstacles in a PPP contract by developing standard sections of the contract in template format;
- Raise awareness on contingent liability reporting needs (taking into consideration gender issues) and educate staff on the process of reporting;
- Appoint a dedicated professional transaction advisor to projects;
- Champion and institutionalise the process initiated by the Palestinian Policy Dialogue as a platform for exchanges and discussions among different actors, and
- Add Palestine to the list of countries eligible for the EIB MED 5P advisory facility.

### **2.2.2. DEVELOPING THE REGULATORY FRAMEWORK**

The level of service provided and the increase in financial feasibility are commensurate with the quality of the regulatory framework. Reduced bureaucracy and a clear legislative framework significantly facilitate private investment. Tariff regulations are always a cause of concern for the private sector as they represent the source that pays for their service from the start to the end of the project.

The following is a suggested checklist for action related to regulatory issues:

- A good regulatory policy is to periodically consult with regulated entities and the public on new regulations, while regularly evaluating the outcome from existing regulations. Regulatory impact assessments (RIAs) should also gauge social impacts using different parameters such as the performances of socio-economic groups and related communities. Though the roles and functions of WSRC are clear in the Law, they should

establish accountability mechanisms and enhance the credibility of the regulatory framework. Specific actions include:

- Ensure transparency in WSRC activities by systemising a process for publicly availing all information on the performance of service providers, including social data on social conduct.
- Encourage the amalgamation of service providers and enhance their autonomy. This involves taking steps to:
  - Build the capacity of water authorities on PSP aspects, including monitoring of social safeguards;
  - Build the capacity of the staff of the RUs, and properly choose their boards and managers ensuring that female professionals are included at all levels, while ensuring that staff are gender aware;
  - Apply the cost recovery basis in tariff setting and provide support to the collection of revenues through both compliance and enforcement means;
  - Identify roles and responsibilities clearly to ensure accountability as an anti-corruption measure;
  - Provide transparent and publicly accessible (based on gender/social equity considerations) reporting on the use of revenues to increase credibility and help associate collection with service levels;
  - Encourage the private sector to also report on PSP issues including financial matters, service provision, tax payments, obstacles and how they are overcome, employment, environment, social behaviour, etc.
  - Apply performance indicators with proper emphasis on the base case and publish these indicators regularly to promote accountability and social equity; included in these reports are social indicators such as public health, public access to information, and complaint mechanism set-up.

### **2.2.3. PROMOTING AND ENSURING STAKEHOLDERS ENGAGEMENT**

While it is necessary, at this stage in particular, for the Palestinian water sector to show accountability in order to obtain support to the reform process and gain acceptability of PSP through stakeholders' engagement, it is expected that such engagement will drive private actors and public authorities to also increase their accountability. This will naturally require targeted activity planning from the private sector, calling for joint efforts between private and

public actors. Building on existing mechanisms, if/when effective, would broaden the consultative and supportive base.

There are many options to help address the key issues for dialogue. The main issues include the water policy, equity and social justice, willingness to pay and the financial sustainability of the sector. Naturally such an agenda calls for contributions from all stakeholders to the water sector.

The following is a suggested checklist for action related to stakeholder engagement:

- Raise the awareness to empower the public (based on social equity considerations) by strengthening the information base on critical issues such as the condition of the national water resources, the importance of tackling corruption and illegal activities in the sector, real cost of water and wastewater supply services. This would require building a special reliable data base to be updated regularly.
- Identify and engage with groups of stakeholders to discuss and gain support on several issues that would include investments, private sector responsibilities and transparency, tariff levels, and service quality, ensuring that women and men are equally and equitably represented from households to private enterprises.
- Prepare a communication strategy, with the dual purpose of raising awareness and show responsiveness to consumers' needs and interests. Such strategy should target key stakeholders such as youth and women. Women are central to household water management and hygiene and can provide critical feedback as customers to water suppliers and utilities. Clear goals for awareness raising activities are to be tracked by indicators to measure levels of performance. The awareness-raising activities should identify targeted messages to different groups (men/women, public/private etc.). Means of communication that are appropriate for each group, like radio, television, house visits, flyers etc. need to be identified. This strategy should ideally be developed and implemented together with the private actors engaged in the sector to also build broad-based relations and knowledge.
- Support the implementation of the Action Plan evolving from the 2012 "Gender Strategy for the Environment Sector with emphasis on water and solid waste", which sensitises gender into water policies while monitoring and enhancing the leadership role of women.

## **3. GOVERNANCE CHALLENGES TO PRIVATE SECTOR PARTICIPATION IN THE PALESTINIAN WATER SECTOR**

### **3.1. INTRODUCTION**

This chapter presents the technical analysis of the governance challenges that faces private sector participation in the Palestinian water sector. Since the sector is undergoing reform, the main entities involved in the functions of the water sector are identified along with those institutions that have the potential to be involved in PSP, both during and after the reform. First, capacities of these public authorities (and other entities involved in water and wastewater services) to carry out their activities are assessed. Second, an overview of the country's experience to date with private intervention in water services is made to determine the probability of further private sector involvement. Lessons learnt and opportunities are identified in the process. Third, the chapter assesses the government's willingness to adopt the PSP process and analyses the policy, legislative and regulatory framework for this objective when related challenges are identified. Fourth, the chapter addresses financial sustainability of the water service sector and affordability issues. Lastly, the chapter introduces both value for money as it relates to financial sustainability and the need to engage stakeholders in policies related to the provision of water services.

### **3.2. ENTITIES RELATED TO PRIVATE SECTOR PARTICIPATION IN WATER AND WASTEWATER ACTIVITIES IN PALESTINE**

#### **3.2.1. THE MAIN INSTITUTIONS IN WATER IN PALESTINE AND THEIR DEVELOPMENT**

The institutions involved in Palestinian water services are shown schematically in Figures 1a and 1b below. Annex A1.1 tabulates the functions versus the respective entities. The water sector is centralised in terms of strategy, policies, project development and identification of bulk water supply, yet decentralised to the point of fragmentation among municipalities in the

provision of services. At the time of this analysis, the water sector is amidst a transformation as the result of a carefully investigated reform process<sup>\*</sup>.

The reform process started after the Emergency Rehabilitation Project (ERP) was initiated by bilateral donors following the conclusion of the interim agreement (September 1995) between the Palestinian Liberation Organization (PLO) and the Government of the State of Israel. Focus at the time was on the water situation in Gaza which was considered to be very critical with the available water not only of limited quantity but also badly contaminated. Accurate accounting of water production or consumption was lacking, with service coverage for sewerage only at about 25 percent and the inefficient treatment plants continuing to cause severe environmental degradation particularly on the coastal areas and aquifer. In addition, the institutional structure was fragmented and incompatible with efficient service delivery and the integrated management of the limited water resources.

Shortly after the interim agreement, the Palestinian Water Authority (PWA) was established in April 1995 as the institution responsible for policy-making and regulation of the water sector. It was quickly realised and agreed that private sector involvement was the only way to rapidly improve the water supply and wastewater disposal systems. Since any long-term arrangement would pose significant risks to both the Palestinian Authority (PA) and potential private contractors, a management contract, accompanied by a rehabilitation investment programme, was considered as the most appropriate for Gaza as it would allow the Palestinians to assess the advantages of private sector management without committing to any long-term relationship.

The Institutional Water Sector Review (IWSR) in 2011 analysed both governance and management functions and concluded that the PWA showed signs of confusion regarding its role with several examples of conflict of interest within its mandate, while water was not given the necessary strategic importance. Furthermore, a primary component of governance, namely the regulatory function, was lacking.

Water supply was managed by the West Bank Water Department (WBWD) as a water wholesaler, buying water from a number of sources such as the Israeli Mekorot (another wholesaler) but also producing water from its own wells, and selling and distributing water to West Bank service providers and private users. In addition, WBWD has the technical

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<sup>\*</sup> It is noted that the overall governance structure in Palestine is also under a reform process and thus, the institutional setting presented in this Report may differ (for example, in autumn 2015 a decision was made to merge the Ministry of Planning with the Ministry of Finance).



capacity to drill, operate and maintain its own wells along with transmission pipe mains and associated pumping equipment. However, the study found that WBWD has not performed well financially and the southern water supply system had fallen into disrepair. Other characteristics of the Department include high level of unaccounted-for water (UFW) caused by both technical and administrative losses, billing and collection below acceptable rates, and the Department was carrying a huge debt of over NIS 1 billion in 2014.

Another water entity is the Project Management Unit (PMU) which is essentially focused on project implementation. It provided project-oriented services to Donor-funded projects. Such services included water supply system design and review, construction supervision, procurement and contract management. The Director General of the PMU reports directly to the head of PWA. Some working arrangements in the PMU operations are considered to be in conflict of interest, an example is the situation of designing water supply systems and having the ability to review the designs (in-house) – and seek approval for final design from the regulatory department, which is also within PWA.

The third water management role concerns the individual service providers (SP). The nature of these service provision actors is such that they have evolved on their own in the absence of any strategic or master plan governing their creation. They are quite individualistic in terms of their mode of operation, in managerial and commercial practices, in operational and maintenance philosophies and, specifically, in the lack of financial accountability. However, the Jerusalem Water Undertaking (JWU), a major service provision entity, has surfaced as a successful model organisation for a number of years. It is essentially a Regional Utility (RU), and the likes of other emerging RUs took note of the JWU functional structure. To ensure that service provision to the customer comes in a “recognisable form”, it was recommended that a suitable service provision functional structure, modelled throughout Palestine, is adopted.

Given the situation at the time of deciding the necessity of a reform process, it was then apparent that a change in the law or a new water law was forthcoming. The reform started with the Water Sector Audit Report in 2008 followed by the World Bank report of 2009, after which PWA started the reform internally according to a plan which was endorsed by the Government. In 2009, the Cabinet of Ministers endorsed an “Action Plan for Reform”, which would lead to the definition and implementation of a comprehensive programme of institutional and legislative reforms. In 2012, the Ministerial Infrastructure Committee (MIC) approved the principle of the reform plan, and the recommendations of the IWSR and tasked PWA to prepare a new Water Law. The latter would define the general structure and function

of the institutions governing and managing the water sector and clarify the responsibilities of the different Ministries involved. The new law would also define legal issues related to water.

The overall reform included the reorganisation of the water sector and the institutions within it, capacity building, and the revision of strategies and policies, when necessary, as a result of any change in the architectural re-arrangement of the sector. The reform process was funded by a number of donors such as the World Bank, Sweden, Norway, etc. The process covers institutional, legal and technical aspects of reform. Institutionally, this has led to solutions by splitting functions between economic and policy matters; hence, the Water Policy and Strategy was developed. Legally, the reform led to the enactment of a Water Law which was endorsed through the related formal legal process in June 2014.

The new Water Law of 2014 “aims to develop and manage the Water Resources in Palestine, to increase their capacity, to improve their quality, to preserve and protect them from pollution and depletion, and to improve the level of water services through the implementation of integrated and sustainable water resources management principles”. The Law further identifies the roles and relations among the various water sector institutions. The Palestinian Water Authority (PWA) has the overall responsibility for the management of the resources, setting policies, determining water allocations, protection of water quality, and project development.

Furthermore, the PWA develops and qualifies the West Bank Water Department for the provision and supply of water in bulk at the Governorates level on sustainable basis according to a provisional regulation, yet to be issued, for this specific purpose. The regulation outlines the roles and duties of this Department and defines the transitional period and mechanism of transfer of all its movable and immovable assets to the PWA and the transfer of its duties and responsibilities to the National Water Company (Article 64.2). The Law further specifies that all assets currently managed by the West Bank Water Department will be transferred to the National Water Company along with all rights and liabilities (Article 64.3).

In other words, our interpretation is that the NWC inherits, manages, upgrades and develops as necessary the bulk supply infrastructure from the PWA and the West Bank Water Department. The Company will be in charge of supply and sale of bulk water to water undertakings, local authorities, joint water councils and associations. The Company extracts or develops any resource and transmits it in bulk based on a license issued by PWA. Points of delivery of the bulk water are Regional Water Utilities for all water users (other than for

irrigation), and Water Users Associations for irrigation of water. These two entities are yet to be developed by the PWA in coordination with related Ministries. Although named as the Water Sector Regulatory Council, its objective, as defined by the Law, is to “monitor all matters related to the operation of water Service Providers including production, transportation, distribution, consumption and wastewater management, with the aim of ensuring water and waste water service quality and efficiency to consumers in Palestine at affordable prices.” Figures 1.1a and 1.1b below depict the institutional framework before and after the Law. Tables 1.1a and 1.1b identify the new roles and inter-related responsibilities of the various entities. Annex 1 further elaborates on these relationships.

As a result of the Law, and as forecasted in the Policy and Strategy document of 2013, several regulations for water resources, water supply and wastewater need to be developed, including, but not limited to, the water tariff regulation, regional water utilities regulation, a regulation on licensing of service providers, and water and wastewater connection regulation. The Strategy calls for strict controls to be introduced on the use of groundwater including the elimination of the free abstraction and limiting the abstraction quantity based on the aquifer safe yield. Enforcement measures against illegal use, abuse and deteriorating groundwater conditions shall also be introduced. Furthermore, water resources protection legislation will be established to legally implement water resources protection zones for drinking water resources.

And finally, the Strategy of 2013 expected that the reform may also provide opportunities for greater private sector engagement through various business models. The Strategy further states that the specific roles and responsibilities of the functional roles of the various institutions will be investigated before formalising them through legislation. The legislation that ensued was the Water Law of 2014, thus formalising the Strategy’s expectations.

Situation as it stands now: a comprehensive Strategy and Policy document is in place; the Water Law is enacted; PPP is an objective; all are mandated to the PWA for implementation.

Figure 1.1a. Water Sector Framework According to 2002 Water Law

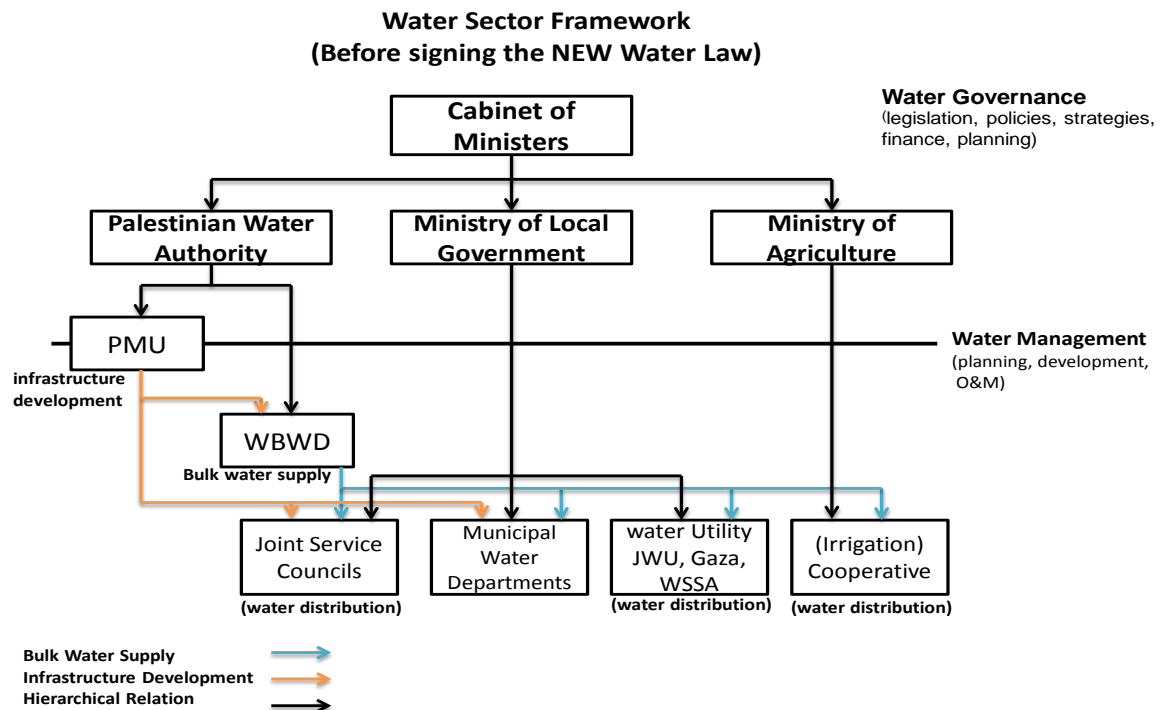
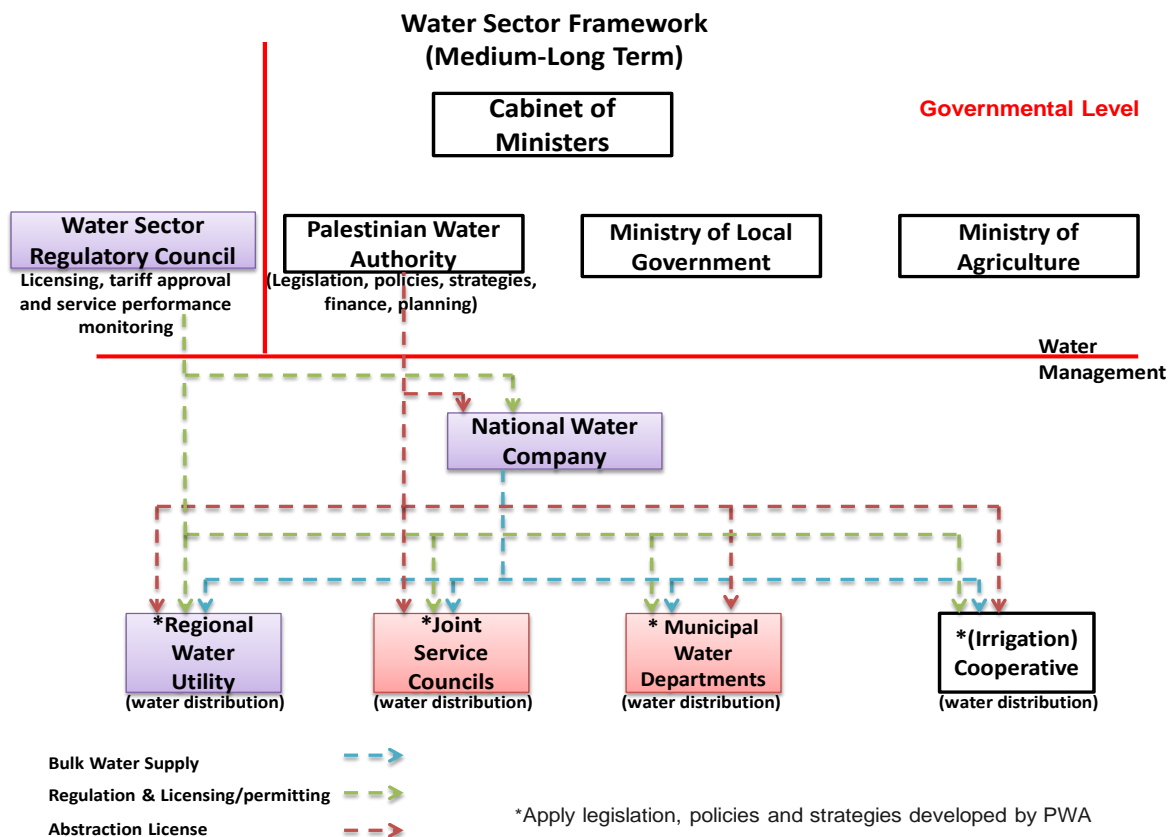


Figure 1.1b. Water Sector Framework According to 2014 Water Law



Source: PWA

**Table 1.1** Institutional mapping of roles and responsibilities in the water sector at central government level according to the new water law

**a. Allocation of roles across ministries and public agencies**

AREA	WATER RESOURCES	WATER SUPPLY			Wastewater Treatment
		Domestic	Agriculture	Industry	
Strategy, priority setting and planning, including infrastructure	PWA	PWA	PWA	PWA	PWA, MOH, EQA
Policy Making	PWA	PWA	PWA	PWA	PWA, EQA, MOH
Information, monitoring and evaluation	PWA EQA, envt condition MOH, health qly	PWA WSRC EQA MOH	PWA WSRC EQA MOH	PWA WSRC EQA MOH	PWA, EQA WSRC, MOH
Stakeholders engagement, citizen's awareness	PWA EQA MOLG MOH	PWA MOLG MOH	PWA MOA MOH	PWA MOH	PWA EQA MOH

**b. Institutional mapping for quality standards and regulations**

AREA	WATER RESOURCES	WATER SUPPLY			Wastewater Treatment
		Domestic	Industry	Agriculture	
Allocation of uses	PWA	PWA	PWA	PWA, MOA	PWA
Quality standards	PWA, MOH	PWA, MOH	PWA, MOH, MOA	PWA, MOH	PWA, EQA, MOH, MOA
Compliance of service delivery	PWA	WSRC	WSRC	WSRC	WSRC
Economic regulations (tariffs)	PWA	PWA	PWA	PWA	PWA
Environmental regulation	PWA, EQA	PWA, EQA	PWA, EQA, MOA	PWA, EQA	PWA, EQA

PWA: Palestinian Water Authority

MOA: Ministry of Agriculture

WSRC: Water Sector Regulatory Council

EQA: Environment Quality Authority

MOH: Ministry of Health

MOLG: Ministry of Local Government

As seen from the tabulation above, there are several entities involved in the Water Sector, and from further analysis of the Law articles, as tabulated in Appendix 1, and as the PPP structure may also require, the above list is not comprehensive as it does not include for example the Ministry of Finance and Planning, the Ministry of National Economy, the

Permanent Economic Ministerial Committee Prime Minister Decree No. 17, 2007, Municipal Development and Lending Fund (MDLF), the Palestine Monetary Agency (PMA), and the Project Investment Fund (PIF). The latter two agencies in particular can be very instrumental in the PPP. The Strategy document suggests that PWA will support the establishment of a Water Sector Advisory Board, an entity representing the key players interested to participate in sector monitoring. Its composition is still to be proposed and agreed upon, but, if put in place, it should include at least the main stakeholders in the water sector defined by the Strategy as MoA, MoLG, municipalities, water utilities, and NGOs through the EWASH Group. A worthy point to note here is that the Water Law of 2002 called for the establishment of the National Water Council, to be made up of representatives from all relevant stakeholders and almost all Ministries. Though established, the Council was never effective. The new Law of 2014 does not refer to the said Council, nor does it refer to the Water Sector Advisory Board, suggested in the Strategy of 2013.

*Figure 1.2. Functional structure of the water sector entities – Law 2014*

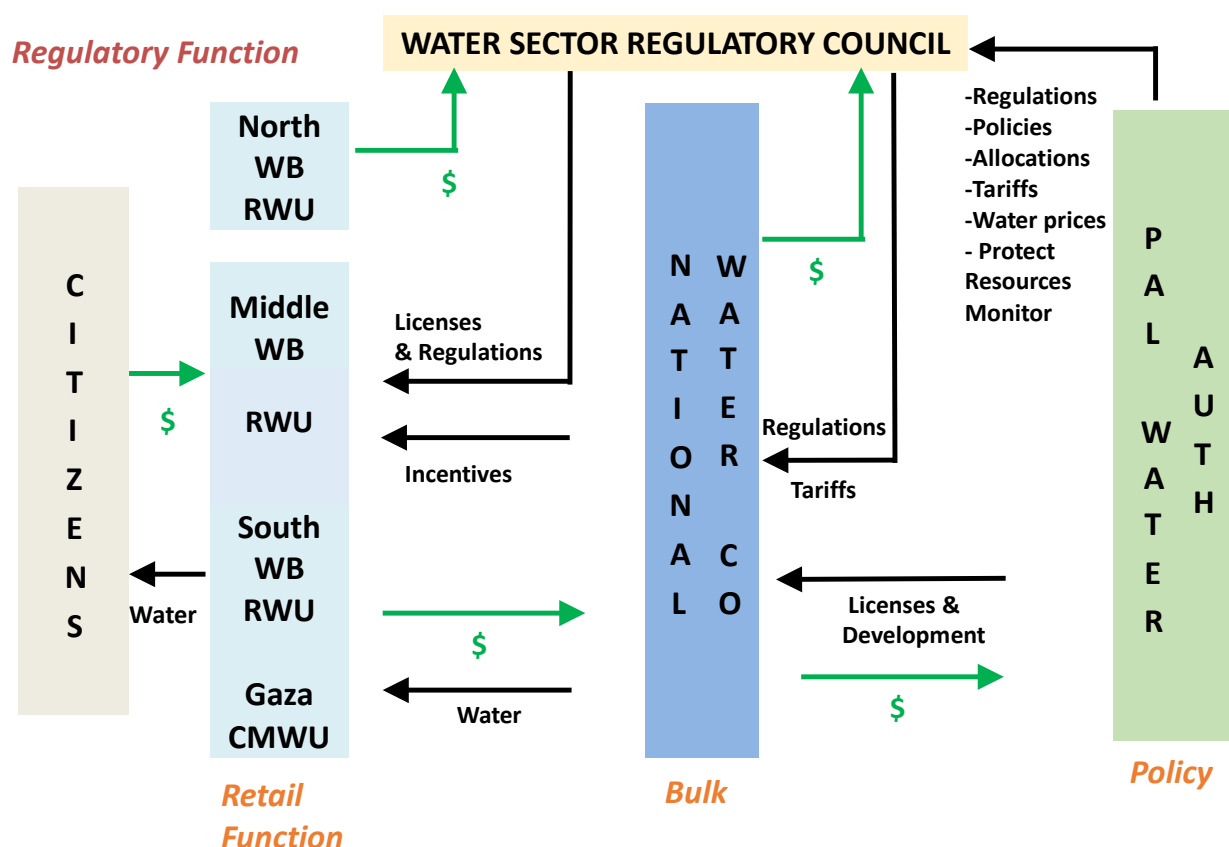


Figure 1.2 illustrates the functional structure of the water sector entities, as developed according to the 2014 Water Law. In the figure, the different operational and regulatory relationships between the various entities are shown clockwise: regulatory, policy, bulk supply, retail supply, and consumers. Arrows in black are functions whereas arrows in green show the direction of flow of funds. As seen, the consumers (citizens) pay the respective retail unit (Gaza CMWU, for example) for the water delivered. The retail unit then pays both the bulk supplier for the water supplied and the regulator for its services such as license fees, whereas the bulk supplier pays the PWA for licenses granted to exploit and develop the supply sources.

### 3.2.2. PROVISION OF SERVICES AND WATER UTILITIES

Local Authorities Law No. (1) of 1997 states that the role of a local government unit in a defined geographic and administrative zone is to (a) provide the inhabitants with quality water, (b) ensure its supplies in terms of meters and pipes, (c) determine the price of water and connection fees, and (d) protect the springs, canals, wells and basins from pollution. As for sewage, they are to construct, manage and monitor sewage facilities (does not specify whether sewage facilities include networks or plants or both). In contrast, the Water Law No. 3 of 2002 provided the legal basis for the establishment of "national water utilities".

On the other hand the Ministry of Environment is responsible, in cooperation with relevant authorities, for the setting of standards and monitoring the quality of potable water as well as the standards necessary for the collection, treatment, reuse, and disposal of wastewater.

The Water Law of 2014 states, among other things, that the PWA is fully responsible for managing and protecting the water resources in Palestine, preparing general water policies, strategies and plans, and the establishment and development of the National Water Company and the Regional Water Utilities, as well as.....partake in the development of approved standards of water quality.

Though the subjects of resource protection and the provision of quality water to consumers are interactive, conflict may arise in the service provision component. In reality, there are four models for the provision of services in domestic water supplies, otherwise called Service Providers, in the form of (1) a Regional Utility, (2) a Joint Service Council, (3) a Municipal Water Department, or (4) a Village Council; covering the entire geography of the West Bank (all three zones A, B and C) and Gaza. Water services in the West Bank continue to be provided by municipalities, two multi-municipal utilities (Regional Utilities), joint water

councils and village councils. Ideally, PWA's goal is to establish four regional utilities, one in Gaza and three in the West Bank (North, Centre and South). Establishing regional utilities depends on agreement among the municipal water departments. Currently, the trend is to build regional utilities at the Governorates' level: seven in the West Bank and one in Gaza. Efforts in this direction have culminated in the following:

**In the Centre:** The Jerusalem Water undertaking (JWU) is the largest and oldest service provider serving the two cities of Ramallah and Al-Bireh, 10 smaller towns, and more than 45 villages and 5 refugee camps. The founding law of the Jerusalem Water Undertaking (JWU) was enacted in 1966 with a mandate to develop new water resources, control all water projects in the area and bear the responsibility of providing the population with potable water. According to this law, JWU was established as a corporatized entity, non-profit, and independent civil organisation run by a Board of Directors with representatives from the three main municipalities in the area; Ramallah, Al-Bireh and Deir Dibwan, a representative from Kufr Malik village and an assigned official from the Government. The JWU is located in the Ramallah and Al-Bireh Governorate encompassing major urban areas and about 100 villages and refugee camps. JWU employs about 207 staff and services about 330,000 people. The JWU is described by the World Bank as one of the public water and sanitation utilities that 'have performed relatively well from the beginning.' Unaccounted for water (UFW) is at about 26% conforming thus, with the World Bank's view of industry good practice. However, it should be noted that it has one of the highest tariffs in the region. Working ratio, O&M and administration costs to operating revenues in water services only is nearly 93% with collection efficiency of 96% (GIZ, 2012).

**In the North:** In cities such as Tulkarem, Qalqilya, Nablus, Jenin, Jericho, Tubas and Salfit as well as in small towns, municipalities provide the water and sewer services, if existing. In the North-Eastern Jenin area, two Joint Service Councils (JSC) one formed by six villages, and the other by eleven villages provide the water. These Councils were established according to the Joint Council for Services, Planning and Development (JCSPD) Bylaw, enacted in 2006, further to Article 15 (C) of the Local Authorities Law No. (1) of 1997. The goal is to have a Northern Regional Water Utility (NRWU) servicing the above Governorates. The development of this water utility has received the least attention though there has been some investment in developing water infrastructure in those Governorates. The NRWU undertaking will be significant since the water sector in this region is more fragmented than in any other region and the area has previously suffered military incursions that had caused damage to several water infrastructure facilities. Replicating an existing sub-regional utility in



the northern area, meaning to have a number of joint service councils, will require extensive planning and investment to develop and consolidate water resources and infrastructure in this region.

**In the South:** The Water Supply and Sewage Authority (WSSA), a much smaller utility than JWU, serves Bethlehem and the neighbouring towns of Beit Jala and Beit Sahour. In total, it employs 80 people and services a population of 105,000. The WSSA utility was established and still governed by an Israeli military order. Working ratio here is 90% (GIZ, 2012) and the NRW is 38%. The Southern Area Services Improvement (SAWSIP) Programme, funded by the World Bank, aimed at improving sufficiency and efficiency of water and wastewater services in the southern area of the West Bank, prepare and implement an appropriate institutional framework for water and wastewater services provision, and build regulatory and institutional capacity. The desired impact was to restore infrastructure, strengthen institutions, and facilitate PSP presence in the economy. The programme started in 1999 and was completed in early 2006. The creation of a Southern Utility, however, could not be achieved under the SAWSIP Phase I. Preliminary negotiation between the World Bank and PWA for the financing of a second programme phase (SAWSIP II for the period 2007-2010) are continuing, and SAWSIP II was supposed to follow but never materialised.

All utilities and municipalities in the West Bank depend to a varying extent on bulk water supply by the West Bank Water Department and the Israeli water company Mekorot. The latter, for example, delivers about 80% of the water distributed by JWU. In rural areas, water is provided by Village Council water departments.

**In the Gaza Strip:** There is one water utility in Gaza, namely the Coastal Water Management Utility (CWMU) in addition to water divisions in a number of municipalities. The Coastal Utility was established by a Decree of the Minister of Local Government in 2000. Its internal by-law was issued in 2005. The by-law states that the municipalities representing the centres of the five governorates in Gaza Strip are permanent members of the Board of Directors (Gaza, Jabalia, Deir El-Balah, Khan Younis and Rafah). It also states that all 25 municipalities in Gaza Strip are members of the general assembly of CMWU. Three members from the Northern governorate, Middle area governorate and Khan Younis governorate are elected to sit in the Board periodically, while the Chairman of the Board is also elected. CMWU provides a wide range of services to the water sector in the Gaza strip and to the 25 municipalities regardless of their level of participation in CMWU. In this sense CMWU is acting as a Project Implementation Unit for the different projects funded by the donors. This has been a fairly successful model leading to operational improvements like

more rapid response to repairs, while benefitting from the economy of scale as well. However, the process is not completed, as the Strip has 25 municipalities and there had been some problems in the transfer of assets and staff mainly due to political strife. Moreover, the events and circumstances prevailing in the Gaza Strip since 2007 created additional difficulties and obstacles in the way of CMWU to become fully functional on the administrative and service levels. In Rafah municipality, only the CMWU has full administrative, financial and service control on the service, facilities and staff. The utility employs 435 staff, serves nearly 600,000 people with water and 350,000 with wastewater and operates at a working ratio of over 100% (operational ratios excluding capital costs). These figures are based on 2012 figures and it is highly doubtful that they are still valid.

### **3.2.3. KEY ISSUES TO THE MUNICIPALITIES STRUCTURES**

In light of water scarcity and uneven distribution of resources, a certain degree of centralisation is needed for proper management of service provision. Though regional consolidation of individual municipalities continues to show decisive benefits, and has been in progress for some time, the process has been developing at a slow pace. The institutional setup and feasibility of this option, however, need to be updated particularly in the West Bank as the concept of Joint Services Council has been gaining acceptability and is progressing at the level of small towns and villages, though women are generally excluded from these fora. There is a need to link these new entities to the broader planning and investment needs, with due considerations to socio-economic equity. This concern is confirmed by the World Bank report of 2009 and expressed by the Director General of the Municipal Development and Lending Fund (MDLF), a key player in the process.

The role of the smaller municipalities is limited to collection, and some house connections, with no real water management that would need or lead to collaborative efforts. The intended policy is to amalgamate 7 to 8 municipalities, taking into account socio-economic conditions, to merge their services and form a joint services council. This process has already started through cooperation of PWA and MoLG. A road map for establishing Regional Water Utility is also underway. Now that the regulatory entity (WSRC) is in place, it can help with gathering the data and putting it together in a merged system. Local government policies can be translated into projects that merge smaller municipalities together. The modality would be to have innovative projects, put in place capacity building packages, provide O&M budgets to the individual municipality, and deliver the project water system to the Joint Water Council that has a water department common for the member

municipalities. All this is at an interim stage so as to ease the transformation from scattered providers to amalgamated entities acting regionally, as the Law stipulates, to provide water and wastewater services. The law states in this regard that “responsibilities, powers, and procedures pertaining to the licensing, structure, management, financial resources, dissolution, and all other matters related to the work of Regional Water Utilities shall be regulated pursuant to a regulation issued by the Cabinet of Ministers.”

### **3.3. OVERVIEW OF PRIVATE SECTOR PARTICIPATION IN WATER INFRASTRUCTURE**

#### **3.3.1. OVERVIEW OF INVESTMENTS AND THE LIMITED PRIVATE SECTOR PARTICIPATION IN WATER AND WASTEWATER SERVICES TO DATE**

Palestine has seen a well-run public sector utility (the Jerusalem Water Undertaking – JWU), two contracts for management of water utilities in 1996 and 1999, and several attempts at others. Donors have been very active in supporting water projects of all sizes while pursuing reform of the water sector in West Bank and Gaza. This section overviews first the PPP attempts and elaborates on investment projects to better identify the nature of investments in Palestine.

In 1996, a company known as LEKA consisting of France's Lyonnaise des Eaux (now Suez) and Khatib & Alami was awarded a four-year contract to manage the water and wastewater system in the Gaza Strip. In 1999, Khatib and Alami also partnered with Vivendi, as the GEKA consortium in the Bethlehem and Hebron management contract. The contracts are essentially private sector intervention schemes and are short term to assist the local government service providers and the Palestinian Water Authority to improve water services. These contracts offer the advantages of access to operational funds and allow for capital investments as well as staff selection and compensation free from civil service and government procurement.

The World Bank has always indicated that “Sector reforms should raise revenues enough to cover all or most of the costs of a management contract thereby increasing private sector interest in such arrangements”. Both contracts produced noticeable performance results (see Boxes 1.1 and 1.2), the Gaza contract reached conclusion and was extended, whereas the Bethlehem contract was terminated for security reasons.

### Box 1.1: Gaza Management Contract Summary

#### **GAZA MANAGEMENT CONTRACT (LEKA)**

Key lessons learned	Indicator	1995	1999
1. Operational fund needs	UFW	50%	31%
2. Identifying indicators (31); fewer would be better; less were used in Amman and Hebron	Revenue, NIS	1.1m	30.7m
	System Mapping		80%
3. Balancing indicators for incentive payment	Leaks Repaired		2,000
	Connections Replaced		10,000
4. Regulatory plus audit needed; not audit alone	Meters Repaired		7,000
	Meters Replaced		8,000
	Illegal Connections Identified		11,000

### Box 1.2: Bethlehem and Hebron Efforts at Management Contracting

#### **BETHLEHEM & HEBRON MANAGEMENT CONTRACT (GEKA)**

*Scope:* Managing water supply of 600,000 inhabitants

*Focus:* Operating the Bethlehem system; technical assistance to Hebron

*Details:* Install new meters, install new pipes, reduce leakage, reduce NRW, improve and manage institution, introduce better billing and collection, introduce better maintenance procedures

*Operational Funds:* \$ 21m WB credit plus gap between MC fees and revenues

*Capital Investment:* \$ 36m EIB

*Payment:* Management Contract (MC) fees, performance bonus against set targets

Contract terminated one year after its commencement curtailed by the intifada, and the premature cancellation of EIB support

*Company claims:*

- more than 75% of first year service goals were achieved
- significant improvement in water quality
- 50% decline in customer complaints re supply interruption
- unaccounted for water declined from 50% to 24% in Hebron & 10% in Bethlehem
- illegal connections eliminated in Hebron and more than halved in Bethlehem.

Another important Capacity Building Program at the operational level is the Gaza Emergency Water Project (GEWP) 2005-2012, also a World Bank Project. The main objective of the GEWP, under a Management Contract covering the period from mid-2005 to mid-2008, was to transfer the water and wastewater departments of the 25 municipalities in Gaza Strip to one single utility, namely the Coastal Municipalities Water Utility (CMWU), with the technical and management support of an international Operator (InfraMan). InfraMan's contract was terminated earlier than foreseen (early 2008) due to performance and contractual issues, and the project was continued by PWA, PMU and CMWU. (See Box 1.3 below)

### **Box 1.3: Operator InfraMan's Brief**

InfraMan's contract, which was to run from 2005 for three years, was built around CMWU and the municipalities handing all of their 25 fully functional facilities, installations, equipment, financial systems, and staff of the entire service area at the beginning of the contract to the InfraMan, which did not happen at any point of time in the contract. In fact, the internal by-law of CMWU had not been signed by the Minister of Local Government until late in 2005; it was not up and running as the contract suggested in the first place. In the period of the contract, InfraMan declared three Force Majeures; one related to kidnapping InfraMan's General Director and another senior staff (both Austrians), the second related to lack of fuel and access to facilities and the third was due to civil war conditions prevailed in Gaza Strip at that time. CMWU terminated InfraMan's contract early 2008 due to performance issues, and ultimately negotiated and compensated them their dues. The project was continued by PMU and CMWU.

As for project profiles, the Palestinian Water Authority (PWA) has been initiating projects in the West Bank to develop new water resources (especially wells) and to construct bulk pipelines to convey additional water to the underserved or poorly served administrative areas. In Gaza, PWA has been working on large infrastructure projects such as the regional water carrier and seawater desalination plant and water network expansion projects.

Besides new infrastructure, PWA has been improving the conditions of the existing infrastructure suffering from leakage and causing interruptions in supply, and contributing to

the deterioration of the water quality. The investments include the purchase of water meters, rehabilitation of distribution pipelines in the villages and municipalities of the West Bank, and the construction of wastewater reuse systems in Gaza.

PWA started executing wastewater projects during the last decade. In the West Bank, several commitments have been made to establish new WWTPs by KfW and USAID for the urban areas of Hebron, Nablus, Tulkarem, and Ramallah. In Gaza, a number of water treatment plant projects have been implemented, according to the Master Plan for Wastewater and Storm Water Management of 1996. Three separate WWTP projects are financed and are in various stages of design or pre-construction and construction (North Gaza WWTP, Central WWTP to cover Gaza city and Middle Area, and Khan Younes WWTP).

The West Bank Emergency Water Project (2003 – 2008; 12.5 Million USD) funded by the World Bank consisted of two components. The first component involved the rehabilitation and improvement of water supply transmission and distribution; namely the rehabilitation of wells and the installation of pipelines, in East Herodian; the construction of a pipeline from Halhoul regional water reservoir to Kharas and Nuba villages; and the rehabilitation of the existing network of the village of Kharas. The second component consisted of technical support and assistance to the existing PMU within PWA to implement and supervise the project execution, and to create a framework for the development of clusters of Joint Services Councils, which would then be responsible for operating and maintaining retail water distribution in the project areas. It also supported the PMU to prepare the design and bidding documents for the Dura and Yatta villages' distribution networks (for a follow-up project) and supported the PMU's incremental operational costs.

Prior to that, the Water and Wastewater Improvement Project (WWSIP) started in 1996 and ended in 2002. The project was implemented in three phases: Service Improvement Programme implemented through a Management Contract with the private international operator, Lyonnaise des Eaux /Khatib & Alami (LEKA). The second phase, covered by investment funds provision, enabled LEKA to implement the service improvement programme. The funds, which were built into the management contract, were used to procure goods and services for rehabilitation and maintenance throughout the contract's duration (including the successive extensions). Finally, the technical assistance and capacity development phase was implemented to provide consultants for monitoring the operator's technical and financial performance, and to strengthen the role of PWA as a water sector

regulator. During the first year of project implementation, difficulties in procurement prevented the operator from performing well in many tasks. The incentive was therefore shifted to be possibly gained in the second year. Thereon, implementation continued smoothly and targets were achieved satisfactorily.

Refugee camps in the West Bank and Gaza are within the assistance portfolio of the European Commission through UNRWA. About 14 million euros have been allocated to water supply and sanitation in Gaza refugee camps. The Commission also contributes to the Second Emergency Wastewater Project for North Gaza, collaborating with the World Bank and the AFD (see below). In the West Bank, projects in water supply are ongoing. Significant investment for small-scale wastewater treatment plants is also planned.

The North Gaza Emergency Sewage Treatment Project (NGEST) aimed to meet the growing demands of the increasing population of the Gaza Strip, which the Beit Lahia wastewater treatment plant, built in the 1970s, could no longer satisfy. NGEST poses an opportunity for PSP to operate the first phase, to finance infrastructure in the second phase, and ultimately to operate the entire scheme. Value of the project is approximately 100 million euros, started in 2010 and was scheduled to be completed in 2014. Evaluating the activities financially up to this Report's date shows the overall progress, in financial terms, as 96.27%. Civil works are at 99% while the mechanical and electrical works have stopped at 98.44% and 77.14%, respectively. A feasibility study on using renewable energy sources (solar) to generate the 3 MW needed for the project is under implementation by the energy team and in cooperation with the water team. The completion date was intended to be 10 January 2014 and the intended operational acceptance date to be 10 April 2014, but due to politically-driven obstacles, the project will be probably delayed for a year or so. Moreover, the project will need to be extended for an additional four years to allow support for the operation and maintenance capacity building, which is part of the third additional financing from the World Bank and AFD. A detailed design study for effluent recovery and reuse, which will provide long-term protection for the underlying aquifer as well as irrigation water for about 1500 hectares of agricultural land, has been completed. The total cost for fully implementing the schemes is estimated at US\$30 million. The first phase of the reuse scheme is estimated at US\$12 million which is expected to prevent long-term impacts on aquifer water quality. Currently, US\$7.1 million is available for the first phase, leaving a financing gap of about US\$4.9 million.



### 3.3.2. LESSONS LEARNT AND OPPORTUNITIES FOR FURTHER PRIVATE SECTOR PARTICIPATION

Box 1.4 below shows the highlights of the only PPP project concluded successfully in the West Bank, pertaining to a Solid Waste Landfill Operations at the Joint Service Council-Hebron & Bethlehem JSC-H&B. It is essentially a simple Operation and Maintenance contract, but is very innovative, and can be replicated easily over a range of wastewater facilities. The project was formulated with the help of IFC. The details of the project are given in Appendix 1.2. Applicability of this example to Operation and Maintenance of wastewater treatment plants, for example, would utilise the expertise available in managing technologies otherwise not available at the Joint Service Councils, particularly when the plant is constructed, to serve more than one provider.

#### Box 1.4: Post-tender results

##### Solid Waste Landfill Project Hebron

- First PPP in West Bank
- Strong potential for demonstration effects as an innovative mechanism to deliver public services
- Will benefit 840,000 people in towns and villages in Bethlehem and Hebron, who will significantly enjoy improved solid waste management services
- Estimated reduction of GHG emissions by 13,400 tons over 7 years

As for PSP potential, a 2011 study funded by the EIB on PPPs in the MENA region, concluded that “The West Bank has no project financed PPP experience or programme, as infrastructure development relies predominantly on grant-funding. Although there are some positive signs of private-sector participation in the procurement of infrastructure, political stability and institutional development are prerequisites to the development of a PPP market.” This is very true in the long term perspective, and makes consideration of PPPs in development even more challenging as the basic condition for investment, that of having political stability, is not yet met. In the short to medium term, however, opportunities for PPPs remain but require that few proactive actions are taken.

A joint Committee, designated by the Prime Ministry, met on 20 May 2012 and discussed the merits of PSP, and specific potential opportunities for PSP (desalination in Gaza, NRW reduction as performance-based contracts, and wastewater treatment plants). The Committee addressed seven needed actions as recommendations. All actions relate to governance and the regulatory process, namely (1) starting a dialogue with the private



sector, (2) establishing a qualified team within the PWA and assigning a higher ministerial committee as a reference entity, (3) identifying the regulator to these partnerships, (4) identifying subsidies/guarantees to ensure the success of the partnerships, (5) promoting reuse of treated wastewater through a policy, (6) setting tariff and fees regulations, and (7) seriously addressing the phenomenon of non-payment of water and wastewater bills (see Box 1.5).

### **Box 1.5: Ministerial Joint Committee Recommendations**

#### **On Public-Private Partnerships**

In order to build a true partnership with the private sector it is necessary to create and develop a competitive environment that is fully transparent and establish a mechanism and procedures for qualifying and selecting Palestinian private companies according to the type and specialty of the partnership project; with all this being done by:

1. Starting a dialogue with the Palestinian private sector through the Ministry of National Economy and the PWA to introduce them to the opportunities and capabilities available in the water sector.
2. Preparing the institutional framework that supports the partnership through transparency in the contracting procedures in tenders and contracts by:
  - a. Appointing a specialized team within PWA in order to identify and prepare partnership projects requiring full coordination with related parties before adopting any partnership project with the private sector,
  - b. Adopting a reference entity for adopting partnership projects which could be the Ministerial Infrastructure Committee or the Ministerial Economic Committee (a specialized committee appointed by the Cabinet of Ministers)
3. Identifying the role and authority of the entities and institutions in charge of regulating and monitoring the domains in which the partnership agreements take place.
4. Investigating and defining government subsidies and/or guarantees that would ensure the success of the partnerships.
5. Put in place a comprehensive economic policy to encourage farmers to use treated wastewater in irrigation to also include access for agricultural products to regional and international markets.
6. Adopt the water tariff regulation, regulations for domestic wastewater connections, and the unified regulation for the water and wastewater utilities due to their importance in the development of the work of those providing the water and wastewater services.
7. Find meaningful solutions for the behaviour of non-payment of water and sanitation bills through comprehensive plans adopted by the government (Ministry of Finance, Ministry of Local Government, PWA, Municipalities and Water Undertakings).

The 2013 Policy and Strategy document considers private sector partnership to be an essential part of the reform process. This is specifically mentioned, not only regarding special projects, but also as it pertains to services provided by the bulk water supplier and the regional utilities.

Furthermore, efforts were pursued by the Cabinet of Ministers and letters were issued on 26 May 2013 (a) authorising the Ministry of Agriculture to set a comprehensive policy to encourage farmers to use treated wastewater in irrigation, seemingly in support of a private project in Jenin, (b) requesting the Permanent Economic Committee to adopt PSP studies conducted for the water sector to be followed by the legal process of competitive tendering, (c) requesting the Ministry of National Economy alongside the Ministry of Local Government, Ministry of Agriculture, and PWA to open a dialogue with the Palestinian Private Sector to discuss investment opportunities in the Water Sector, and (d) requesting the Head of PWA alongside the Ministry of Local Government and Ministry of Agriculture to conduct studies and prepare for Private Sector Participation in water and wastewater projects and in coordination with relevant authorities and submit these projects to the Permanent Economic Committee.

With the political will in place, what does it take to forge a partnership that will contribute to the development of the sector?

### **3.3.3. THE LEGAL FRAMEWORK: COMPLIANCE AND ENFORCEMENT**

The 2014 Water Law specifically mandates the PWA to help create a stable and suitable investment environment to encourage the private sector to invest in the activities and investments of the water sector. It also calls for making institutional, regulatory and economic changes to encourage partnerships with the private sector; all according to a Bylaw to be drafted for this purpose. The purposes for this call are three-fold; one is that the legal tradition in Palestine and the region relies on written laws, and having a specific PSP bylaw, therefore, is seen as beneficial to the process and is also in line with efforts taken in this regard elsewhere in the region, such as Egypt, Lebanon, and Jordan. Secondly, enactment of a PPP bylaw or law would be a way to demonstrate political commitment to PPP, and thirdly, the need for such legislation came as a specific request from the local private sector.

PPP regulations usually address key issues such as the procurement processes and the issuance of guarantees to cover the contracting authority's payment. The recent Jordanian

PPP law, for example, addresses the procurement and contracting process, and conflict resolution. It does not address guarantees but assumes that they are part of the contracting process, and went one step further by opening the opportunity for the private sector to propose projects and for the public sector party to undertake sole source negotiations. There are certain conditions for this, of course, but it is indeed a major step in the otherwise traditional procurement process. In this regard, PWA requested the French Government to investigate the establishment of a PPP unit for water projects. The French Government, with the input from French companies, indicated the need for a central government organisation and proposed a central PPP unit. The companies submitted their report with a detailed proposal to the Prime Ministry for consideration, which has yet to be reviewed and decided upon. This should not, however, prevent the PWA from establishing its own unit for the purpose and manning it with technical, legal, social safeguard and financial expertise.

#### **3.3.4. THE REGULATORY FRAMEWORK IS NOT COMPLETE**

The new Water Law (2014) sets the ground for further action by the PWA. Translating this concept into action would require regulations that would guide the framework towards what the Sector should achieve. The institutions in transition during the reform process include the WBWD, PWA and its regulatory powers, the PMU, MoLG in relation with the utilities and the MoA with the WUAs. The new Law allows these entities to maintain existing authority until the final structure is institutionalised. The key then becomes the need for compliance to maintain cohesiveness until all are properly in place. In the interim, however, no activity by any party should fall within the context of non-compliance. Nor should there be repeated referrals to the Cabinet for resolution of conflicts that may arise.

One advantage for issuing the set of regulations and approvals by the Cabinet is to create synergy between different players in the water sector. That is to say the fact that any regulation must be endorsed and ratified by the Council of Ministers should provide an opportunity to create synergy among certain ministries and governmental bodies whose laws give them a statutory role in the water sector.

The synergy has been tried and tested in the version of the Law of 2002, even when it referred to private sector participation in water schemes, albeit indirect. The primary attention now is devoted to the Water Sector Regulatory Council which, though its functions are not new, is essentially a new body with its independent status. Although, and as stated earlier, according to the Law this body bears the name 'Sector', yet it is mandated to monitor

the performance of the utilities. Verbatim, the WSRC “monitors the operation of Water Service Providers including production, transportation, distribution, consumption and wastewater management, with the aim of ensuring water and waste water service quality and efficiency to consumers in Palestine at affordable prices.”

Irrespective of the time when agreement on the interpretation of the Law is reached, and based on experience in many parts of the world, it is imperative that the roles are clarified and understood, not only by the Regulator, but also by all entities that have even a remote relationship with the Sector at large. Where co-ordination is a daily norm, close communication and related processes thereof should be pre-defined so that the objectives of all parties are met, and mechanisms for communication are put in place. Rules of Procedures are, therefore, essential. Protocol agreements between entities (though unusual among government entities) are also essential to first clarify the roles and second to create and agree on the means and methods of communication.

## **3.4. FINANCIAL SUSTAINABILITY IN RELATION TO THE BUDGET**

### **3.4.1. PUBLIC FUNDING AND DEBT SUSTAINABILITY**

A Strategy for financial sustainability of the water sector was prepared in 2014 which, after identifying revenue sources for each of the entities, indicated a 5-year target for self-sufficiency and cost recovery for all entities. Since the strategy does not identify the source for closing the financing gap for the different entities until self-sufficiency is achieved (including service providers), it is assumed that the national government will be responsible for closing that gap. The Budget process for the year 2016, and particularly the monitor thereof, would thus be challenging and educational in light of the structural changes introduced by the Law.

The challenge would be to stop the central government’s budgetary coverage sooner than later.

The PWA would always rely on the national state budget. Other revenue sources, such as grants, donations, assistance and loans, are to be placed in a dedicated account for the benefit of the Authority. Whereas fees collected in consideration to the issuance,

amendment and renewal of licenses and permits issued pursuant to the law, in addition to levied fines, are all sent immediately to the Ministry of Finance and Planning.

NWC revenues would come from bulk sales of water to the Service Providers, who in turn rely on tariffs and fees to cover capital and operational expenses.

For WSRC, fees will be their future mainstay.

The above Strategy, was prepared by the PWA, post-enactment of the new Law. It identifies an extensive set of measures that would yield maximum revenues versus minimum costs. The Strategy also states that, at present, the main focus for service providers' sources of funds is on consumer tariffs, government funding and donor funds (grants and loans). In the future the focus will remain on consumer tariffs but will shift away from government and donors to loans supported by self-funding and indirect funding.

### **3.4.2. TARIFFS AND THE FINANCIAL SUSTAINABILITY OF WATER SYSTEMS**

As described above, tariffs should be set to cover investment and operational needs, once these are known. Although setting may appear simple, yet the implementation is formidable as it is governed by more than mere socio-economics but also by cultural and historical determinants.

The Strategy and Policy document of 2013, Article 22.2, states that the production and distribution costs vary from region to region and from system to system, according to physical features (elevation, groundwater quality) and to the condition of the water network (leakages, breakdown frequency). The water tariff implemented by each water utility would reflect these differences and the tariff would, therefore, vary from one municipality to another. Having a valid set of data and information that would allow proper determination of tariffs is not easy. In all events, however, principles and procedures behind the setting should be uniform across all utilities.

Article 35 of the new Water Law, on the other hand, does not differentiate between the cost of water production and transmission of the various resources and states that the Council shall set, in line with the government policy, a unified price for the provision of bulk water supply to Service Providers in all areas of Palestine, pursuant to a regulation issued by the Cabinet of Ministers. This means that the single points of subsidy are well defined. It is expected that issues will arise when dealing with likely situations of having a utility provided

with water from nearby wells charged the same rate as another receiving water through the National Water Company/WBWD that is highly dependent on Mekorot for example.

Furthermore, the gap in finance between the tariff charged to the utility by the NWC and the cost of production and transport would certainly show in the national government budget and that of the NWC. The Company would remain under pressure to seek alternatives of supply and, as a corporatised entity treated as yet another service provider, is likely to reach financial insolvency in a short period of time if bulk water tariffs do not cover the costs of operations as well as investment, or if the utilities default in their payments.

As collection is a serious problem for the utilities, the strategy for sustainable financing calls for the use of prepaid meters, if all the various suggestions given in the strategy to improve collections do not succeed. The question arising is why shouldn't those meters be used in the first place, if they are guaranteed to improve measurement of consumed quantities hence collections? Literature on the subject is quite extensive and shows that a certain degree of success in collection can be attributed to the use of prepaid meters in Palestine. However, there has been opposition to their use, in that prepaid meters do not distinguish the poor and are not suitable for areas covered by intermittent supplies. Additionally, refugee camps have a history of non-payment as well.

The above discussion raises the two conventional "payment for water services" topics of willingness and affordability. The basic principle remains valid, in that the willingness to pay increases when the quality of service is good and when there is a feeling that tariffs are equitable and just. In addition, if there is a culture of non-payment for water, this will not change because the services are improved. Changing a behavioural pattern will require extensive customer outreach and political commitment. Taking into account that willingness to pay may differ between men and women, it will be essential to include in a communication/outreach strategy approaches for changing the payment behaviour.

In addition, the ability to pay is also a complex issue. It has been conventionally dealt with by defining a lifeline free quota before charges are introduced and resorting to cross subsidies between those that can and those that cannot afford payment. The complexity, however, arises when distinguishing, in consumption terms, between the ones that need subsidy and the ones that can/should subsidise. In addition, women and men might have different affordability as is raised in the National Gender Strategy for water and solid waste. The issue of tariff setting requires extensive public hearings that ensure women are also heard as they are generally not included in this kind of activities as well as a constant dialogue and the use

of innovative approaches in both; setting the tariff structure and communicating it for buy-in. However, without a true understanding of socio-economics, gender aspects and substantially validated base data and norms, the water sector cannot face the –often-sceptical public.

In the absence of any updates to the affordability study conducted by the Palestine Hydrology Group PHG in 2000, Boxes 1.6 and 1.7 below show excerpts from an older 2000 research that seem to still apply, assuming that serious changes have not occurred since then. It seems from Box 1.6, and as the study concludes, that more transparency is needed between the utilities and consumers. Public needs to be informed about the way water prices are being calculated. In addition, the problems encountered with the reliability of water supply in general and the people’s belief of being overcharged in particular, might affect the willingness to pay for water. However, it is essential that the study is updated to reflect both the current state of economy, welfare of the population at large, and where subsidy and its extent are needed. Such survey may also identify the level of trust and awareness between the public and the water utilities serving them.

#### Box 1.6 Excerpts from PHG Research of 2000

1. 92.3% of the people believe that the water supply networks are not adequate and pollution occurs mainly through these networks
2. 75% of the people believe that obtaining good quantity water with adequate quality is both a basic human right and basic need
3. The overwhelming majority of the people (96%) believe that water supply needs to be managed by the public sector

#### Box 1.7 Gender aspects regarding water services, PHG 2000 Research

	Females	Males
support the idea of women having strong role in water resources management	86.4%	74%
use grey-water	63.9%	46%
use the hose	67.5%	45.3%
indicated facing problem with high water prices	87.5%	95.7%
are satisfied with the quantities and qualities obtained	66.7%	46.9%

are worried about waterborne diseases	45.6%	61.5%
perceive paying for water	79%	95%

## 3.5. TRANSPARENCY, ACCOUNTABILITY, AND THE VALUE FOR MONEY

### 3.5.1. ENSURING THE VALUE FOR MONEY

There is a change in paradigm when the government procures conventionally and when it is offered the option between using its own finance or that provided by the private sector. Several additional considerations are taken into account ranging between cost-benefit analysis to socio-economic assessments and to the improvements expected in both management and financial traits. The government also needs to consider the social accountability of the private sector actors involved, which means that capability regarding due diligence of corporate social responsibility is needed. Additional considerations include the evaluation of risks, public comparator tests and new contract formatting. Specific regulations, that deal with the tender phases separately, are usually issued to guide this process. The tender process should be prepared to take into account also non-financial goals, such as respect for human rights, gender equity, environmental concerns, transparency and accountability. However, the capacity to undertake the process is usually lacking among public officials and warrants a certain expertise.

A key justification in the decision of whether to go private or remain public lies on the answer as to whether there is value for money in the process of implementing a specific PPP. “Value for money” means achieving the optimal combination of benefits and costs in delivering the services that the users want. Benefits, in this context, means a broad definition of quality, also including the social responsibilities of companies involved. Essentially it is an assessment of whether a PPP is likely to offer better value for the public than conventional public procurement. For this purpose, a qualitative assessment is first made to ensure that the PPP is structured well, and would induce competition. A quantitative assessment can then be made comparing the chosen PPP option against a “Public Sector Comparator”



(PSC) which is a calculation of the value of the contract when tendered conventionally. In order to neutralise the comparison, the Comparator should have in it cost items that are usually in the public procurement but are not accounted for, such as taxes. It should take social safeguards into account and the issue of corruption. It would also include the value of risk items usually taken by governments that would now be borne by the private sector in the PPP modality. A section detailing the financial feasibility behind PSP projects is given in the next chapter.

### **3.5.2. ENGAGING WITH STAKEHOLDERS**

Any discussion on private sector intervention comes at a time of serious structural changes within the water sector institutions in Palestine, both in terms of strategies and policies. It also comes at a time that relations are being defined between governance and operational entities, as well as between the operational entities (water suppliers and service providers) and the Regulator. While all represent the internal stakeholders' scene, it is the relation between the sector and the public that represent the biggest challenge above all. As expected, many facets of reform require extensive engagement with the internal stakeholders and with the public, indicating that a multi-layer engagement process is expected. Within the process comes the opportunity to introduce all stakeholders to the concept of private sector partnership. A menu of options is detailed in a subsequent section of this report.

## **4. WAYS FORWARD: IMPROVING FINANCIAL SUSTAINABILITY, THE REGULATORY FRAMEWORK & STAKEHOLDERS' ENGAGEMENT**

### **4.1. INTRODUCTION**

This chapter builds on the diagnostic analysis and proposes ways forward to overcome the main governance challenges faced by Palestine in its effort to reform the water sector, including the involvement of the private sector in the water and wastewater development plans. Introducing PPPs is inherently a reform process because in order to set the playing field proper, numerous reform activities are necessary in advance. In all fairness, however, associating the introduction of PSP with the need for an entire overhaul of the systems and frameworks is not correct. Reform is a process, and so is introducing PSP which in many ways, may be simpler than the reform itself. After all, it is simply a contract, though it differs from other contracts in that the right of the public has also to be protected, over and above the rights of the contracting parties. This brings focus to the necessity to address the domain of corporate social responsibility. The private companies engaged in the sector need to work based on ethics and with a focus on the return value for the society, not just short-term company profits and revenues. From the documents collected during the Policy Dialogue, and interviews held, the view is that PSP is a tool to generate funds and execute projects efficiently. The longer vision, however, is to develop and sustain the local economy. This chapter focuses on areas of recommendations that emanated from the diagnosis, specifically related to moving forward by (1) introducing PPPs in a weak fiscal setting; (2) reducing the regulatory risk by introducing a PPP regulatory framework separate yet in harmony with the regulation of utilities; and (3) proposing, in brief, stakeholder engagement mechanisms to build trust, create accountability and improve buy-in. The Palestinian authorities are taking steps in all these areas and many initiatives are in progress. This chapter provides practical recommendations in that direction.

## **4.2. IMPROVING THE BUDGET PROCESS AND STRENGTHENING FINANCIAL SUSTAINABILITY**

One criterion for financial sustainability of a project is that it can deliver the value for money (VfM). A prerequisite for applying value for money analysis, however, is the presence of competition in the bidding process. The VfM analysis is prepared by the PPP unit and needs to address a broader goal than short-term costs. Reference can be made to the procurement frameworks in the European Union, where it is now standard to introduce social and environmental requirements. Assessing the results needs a competent qualified team to safeguard the process. The team usually consists of the procuring party which is the PWA in the case of water, the PPP unit (also the PWA if the unit is established in-house), the central budget, the public auditor and the sector regulator. The PPP unit presents the results to the rest of the team who would then apply it to a prepared list of prioritised projects and select the PPP project that gives more value for money than the conventional procurement process would. In the VfM analysis, a comparator may be needed. Government budgetary process is then applied in full transparency.

The water sector in Palestine faces shortage in funds and sustainability issues. The Palestinian tax system is complex in that Israel collects from the Palestinians tariffs on foreign imports and value added tax, keeps the equivalent of water and power bills and forwards the balance to the PA. This balance has been repeatedly and arbitrarily withheld for extended periods of time on occasions when the PA has acted politically to Israel's dissatisfaction. The December 2014 tax, for example amounted to about US\$127 million with the amounts withheld until May 2015. Such moves strains the cash flow of a government that suffers from chronic financing problems, and potentially sowing unrest within the Palestinian territories by halting the funds used to pay monthly salaries of public servants. In this context, it is highly unlikely that the needs of the water sector can be met in the short or the medium term.

Furthermore, Palestine's water sector is not sustainable financially as it relies on support from the general budget. The WBWD, for example, has accumulated a debt in excess of NIS 1 billion, and the PWA has been locked by budgetary constraints (due to a heavy non-payment culture) between the individual utilities and their consumers, and between the utilities (service providers) and the bulk suppliers. Cost recovery is very low among the

utilities. According to GIZ figures of 2012, bill collection rates in the West Bank range between 41% in Tulkarem and 96% at JWU with JSC/Jenin exceeding 100% as prepaid meters were installed. Corresponding figures in Gaza are 64% though several statements were made that it is now not exceeding 20%. In parallel, about half (44%) of the produced water is non-revenue water (NRW), water which is not billed due to leakage, improper metering or water theft. The share varies widely from 17% in Jericho to nearly 50% in Tulkarem and Jenin city. In the Gaza Strip, NRW is estimated to be about 42%, out of which 5% is attributed to unregistered connections and meter losses. Exacerbating the problem is the rising demand for water services; the depletion of water resources at an increasing rate; unsustainably high non-revenue water; deteriorating capital stock; and significant investment needs in resource development and service expansion.

In order to address these financial impediments, actions related to strategic planning, funding abilities, procurement and VfM process, as well as human capacity, are urgently needed.

#### **4.2.1. STRATEGIC PLANNING**

A committee has to be established that would approve capital/PSP projects. The Committee should have among its members the financial arm of the Government that can issue guarantees and relate them to the national debt. This was one of the seven items needed to be put in place as requested by the Committee appointed by the Prime Minister to investigate the PSP (see above Box 1.5).

Investment planning may also include political objectives. One such obvious example is the replacement of the WBWD by the National Water Company. Other may include those that need Joint Water Committee JWC approvals, or wastewater treatment in the vicinity of settlements. The Government's Development Plan, prepared by the Ministry of Planning prior to its integration into the Ministry of Finance and Planning, in coordination with the relevant entities and the Water Sector Plan are also important political documents. The heavy presence of donors is conducive to a situation where investment is prone to be donor-driven. From an overview of the donors' profiles, it appears that the donors have developed niches in one subsector or another. The fact that most municipalities have had their water investments funded by donors is significant. This calls for high degree of cooperation among donors, which apparently was resolved by establishing the Local Aid Coordination Secretariat (LACS). LACS supports local aid coordination structures in Palestine by

providing coherent technical assistance and financial support to the Palestinian people based on national priorities and in line with the OECD-DAC Paris Declaration on Aid Effectiveness of 2005. It might also call for the need to have a proactive investment plan to be prepared by the PWA in coordination with municipalities, the Ministry of Local Affairs, the MDLF and the Ministry of Planning. Whereas this addresses smaller and conventional projects, the high level committee referred-to earlier would need support from a specialised unit that would assist the high level committee by providing analytical work, assessing VfM of the various procurement options so that this analysis is used by the Committee in their prioritisation of projects to be aligned with national plans and political buy-ins. It is believed, however, that if the PPP unit (centralised or otherwise) is established, then it would partake in this supporting role. An entity of the sort was also one of the seven items needed to be put in place as requested by the Committee appointed by the Prime Minister to investigate the PSP (see above Box 1.5).

#### **4.2.2. FUNDING**

There would be no need for external funding in the water sector, if revenues from water fees and tariffs cover the total cost of water. This, however, is not the case in Palestine because the real costs are not related to the price of water and because of high non-revenue water (NRW) in the systems. A combination plan of reducing NRW, and the setting of appropriate tariffs, both in the cost of the bulk supply and the retail schemes, is needed. Proper tariff setting would give the utilities incentives to take action. The decision on the price that consumers pay is politically driven yet both the strategy and policy document and the Water Law call for cost recovery. The strategy goes one step further by calling for cost recovery to take place within five years. Hence the political will exists but a joint effort is needed to evaluate both the users' affordability, and conduct consultations to develop a sector strategy in this respect.

Here comes the opportunity to introduce PSP projects that would involve efficiency increase and payment against performance. Any involvement of the private sector could be based on full cost recovery, beyond which the actor is compensated for efficiency gains. As this is usually not the case, the difference between the amount collected from the consumers and the amount dispensed by the private party should be covered by central government. This was also one of the seven items needed to be put in place as requested by the Committee appointed by the Prime Minister to investigate the PSP (see above Box 1.5).

It is difficult to address the extent of deficit in funding needed at this early stage of establishing an independent regulator. A centralised process is needed where the performance and needs of the water sector are annually assessed. Since cost recovery is not a short term possibility, the main issue from a budgetary point of view is to ensure budget transparency from the start. Though a new financial sustainability strategy for the sector has been adopted, a strategic financial plan for the water sector, including for the service providers, needs to be developed. The plan should identify the sources of revenues and the expected expenditures in the sector, and how the costs are being met within the socio economic context.

To address the funding issue, subsidies in the water sector should be well documented. The PWA can initiate the process through a specific study, while follow-up on their report can be done.

#### **4.2.3. PROCUREMENT AND VFM**

Even after a PPP unit is put in place, it remains the responsibility of line Ministries to prepare a viability report and feasibility study and for the Higher Committee to decide whether the proposed PPP projects ensure value for money on the basis of these documents and risks related to social safeguards. However, there is limited capacity at this time for public officials in Palestine to undertake the entire PPP process on their own. A VfM methodology should be adopted for water sector professionals to be trained in. Equally important is to be able to include in the analysis the likely contributions from Governments and/or donors. This process can be applied to other PPP components which can be broken down into sections for the purpose of training, including the contents of specific sections in the PPP contract itself, based on a standard contract prepared for all parties to adhere to. In all cases, a transaction advisor is usually retained for the purpose. The EIB has recently established a unit that would assist in the initial preparatory stages of PPP projects and should be pursued as Palestine is not on the list of beneficiaries.

It should be noted that the PPP effort is futile in the absence of competition. This is a dilemma in the whole region however, as private operators are few and mostly with insufficient experience. The Palestinian authorities should encourage local operators to enter the market in association with experienced operators with specific roles identified in advance. Standard contracts for PPPs should be developed, detailing social and gender safeguards indicators from which the enterprise performance will be assessed.

#### **4.2.4. CAPACITY**

To ensure success and sustainability of the process, it is essential to have qualified individuals, irrespective of gender, and entities involved in the PPP programme from both public as well as private sectors. Extensive training (gender sensitive) is needed but should be accompanied by hand-on practice for both male and female staff. This means that local and external experts can be retained and embedded within the procuring organisations.

### **4.3. IMPROVING THE REGULATORY FRAMEWORK FOR WATER**

The most significant step in the ongoing reform process has been the establishment of the Water Sector Regulatory Council (WSRC) as an independent regulator. WSRC is mandated with economic regulations regarding tariffs and cost of development and supply of water, as well as measuring efficiency and performance of the service providers. The will to make it more effective is there, but clarifying the roles internally and to the end users is an important step. This, in conjunction with efforts to amalgamate individual service providers are very likely to result in better provision of services. Having a regulator in place is also a comforting signal to the private sector involved in water and wastewater services.

#### **4.3.1. IMPROVING THE REGULATORY FRAMEWORK THROUGH THE ESTABLISHMENT OF THE REGULATOR**

1. The structure and authority of the WSRC has been established in the Water Law of 2014. The clarity of its role towards other entities it deals with is an essential element for success. It is necessary, therefore, that the following is implemented immediately: The purpose of the regulator and the objectives of the regulatory scheme are made clear to the regulator's staff, regulated entities and the public in general (both men and women).
2. The communication process with other entities (non-government and other levels of government) is established to avoid overlapping activities and ensure accessibility to data.
3. Functions that may conflict with PWA duties and those of the National Water Company, as well as service providers, are set clear in protocols that define the separate functions and where they interact. This includes agreed sets of performance

indicators and targets with the other parties trained to report on. These indicators may also include factors related to social responsibility.

The key is in the usefulness of Rules of Procedures set to delineate the activities of different Stakeholders, in relation to the water and wastewater services (WWS) regulatory framework, and the level of acceptability that they will generate by the utilities and other responsible authorities, including the PWA and various ministries with regulatory responsibilities.

According to the mandate given to WRSC by law, the functions are in line with international practices. These functions relate to:

- Tariff regulation:
  - Approval of water prices, costs of supply networks and other services required for the delivery of water and waste water services
  - Monitoring of these costs to ensure compliance with the policy adopted by the Authority
  - Ensuring that production, transport, distribution and wastewater treatment costs take into consideration the interests of all concerned parties
- Licensing:
  - Issuance of licenses to Regional Water Utilities and any operator that establishes or manages the operation of a facility for the supply, desalination, or treatment of water or the collection and treatment of waste water, and the levying of license fees
  - Monitoring and inspection of compliance with the terms, requirements and indicators stipulated in licenses and permits
- Monitoring of service delivery:
  - Monitoring operation processes related to the production, transport, and distribution of water and operational processes of wastewater management.
  - Monitoring the compliance of the National Water Company and Service Providers with the adopted standards for the provision of water and sanitation services.
  - Monitoring water supply agreements.
  - Development of performance incentives programs for service providers
  - Setting quality assurance standards for the provision of technical and administrative services by Service Providers to consumers, and their dissemination to the public



- Setting the basis for regulating the extent and percentage of local authorities' participation in the general assemblies of water utilities and ensuring implementation
- Addressing complaints of consumers against Service Providers
- Information and data gathering:
  - establishment of a database for technical, financial and statistical information

The Law does not accord the WSRC with a role in monitoring private sector contracts *per se*. Furthermore, WSRC can conduct inquiries, investigations and inspections, but does not impose fines or other financial sanctions. The powers of WSRC to enforce compliance with regulation (for instance enforcing the water quality standards) are not defined in its mandate. As the rules of procedures (RoP) are forthcoming, WSRC enforcement powers should be clarified, as should the recourses available to the regulated parties to contest a regulatory decision.

The function of transparency, to which regulators usually contribute by publicising information on water operators and their benchmark, is well defined. The WSRC has a clear responsibility of making the information collected on the state and performance of water services publicly available.

The Law clearly specifies that the resources (level and sources) available to WSRC are its own making. A grant was provided for WSRC to initiate its activities, and as they are in the initial stages of existence the grant covers the expenses until sufficient income is generated; all according to a Road Map included in the WSRC Conceptual Note of 2015.

From the diagnostic analysis of the regulatory framework, some regulatory functions for WWS shall be led by the PWA. The detailed Rules of Procedure should address this possibility, as well as the lines of responsibility and the detailed relations with other entities. If needed, agreements or protocols may have to be produced.

Furthermore, as a prudent regulator and in line with a national regulatory policy in Palestine, WSRC should systematically conduct Regulatory Impact Assessments, periodically evaluate existing regulations and consult with the regulated on any new regulations, with gender sensitive assessments and evaluations.

#### **4.3.2. SUPPORTING AUTONOMOUS, EFFICIENT AND FINANCIALLY SUSTAINABLE SERVICE PROVIDERS**

There are serious efforts to consolidate the water sector, reduce the number of service providers through joint services councils and more importantly, all individual entities are to operate and communicate on commercial terms. This creates a more conducive environment for private sector participation.

The financial sustainability of the service providers should be supported and revenues should be put back into the system. These are essential in order to be able to continue operating and improving delivery of the service. Well-defined financial policies and procedures should be introduced in all service providers e.g. accounting systems should follow accrual or modified accrual accounting in order to be able to measure the actual financial results, financial position, cost of services and tariffs to be implemented. Tariffs are considered to be low at many utilities who often rely on subsidies to cover the operation and maintenance costs, let alone expansion in the service. Furthermore, low tariffs send the wrong signals in terms of demand management. The financial sustainability of the service providers should be ensured through proper setting of the tariffs accompanied by accountability measures on the use of revenues, improving the collection of bills, and enhancing the capacities to efficiently manage the resources under their disposal. The presence of a regulator should change existing paradigms of apathy and lack of accountability. Re-setting tariffs would soon be based on increased transparency regarding the costs of supply and operations and thus, be based on consensual understanding of the connection between tariffs and service delivery. Additional effort will be needed to enhance behavioural change, particularly towards non-payment of bills. In this context special attention should be given to the different social clusters (poor, women, youth) and to making use of the roles of customers (female/male) to promote the behavioural change.

In addition, the importance of third-party independent audits of service providers should be emphasised. The separation of the water departments' accounts from those of the municipalities should be enforced by the regulator. All these activities will lead to more accurate calculation of costs to be gauged to cost recovery. Whereas autonomy in operating the facilities will be maintained, accountability mechanisms will be in place along with performance indicators that will be used to rate the utilities, hence the need to develop a set of common performance indicators and a reporting procedure for the whole sector. The resulting information needs to be publicly available

## **4.4. ENHANCING STAKEHOLDER ENGAGEMENT TO IMPROVE ACCOUNTABILITY AND CITIZEN BUY-IN**

Accountability in the water sector is a reflection of the overall accountability in the country, defined essentially by the lack of trust, and the lack of practical experience in interactive dialogue. The change in public policy lately, however, has transpired in an increased trend towards more interactive participation in the decision making process. Water is a social good however, and access to it is unquestionably considered as a basic right, even in a land like Palestine where the political circumstances may obscure many of the other basic rights.

Until recently, and as in most MENA countries (UNDP, 2013), accountability to the public in Palestine's water sector has been rather weak. These gaps observed in the water sector are also present in the broader public policy domain. Engaging stakeholders successfully in water PSP is contingent on the ability of stakeholders –regardless their gender– to participate in informed public debates.

Stakeholder engagement is, therefore, the key element in this chapter.

### **4.4.1. CREATING AN EQUITABLE SOCIETAL ENVIRONMENT, PROMOTING SOCIAL JUSTICE, REDUCING POVERTY, AND RAISING AWARENESS ON GENDER**

International regulations emphasise the need of highlighting the role of women, and integrating them in the various developmental processes pertaining to water and the environment. The national developmental plans in Palestine have always emphasised the necessity of women's participation in the country's economic and social developments.

Participation of women in water and waste management is an essential ingredient to sustainable and good governance of resources. However, recent analysis shows that there are shortcomings in terms of gender issues in the water and waste management sectors, which are manifested in very few regulations pertaining to gender inclusion; the number of women in the public sector workforce is rather low and the capacities of the institutions to promote and develop their female employees weak; and poor inclusion of women at the community level in environmental issues/management. Therefore, the Palestinian authorities have devised a Gender Strategy to promote the idea of integrating and addressing gender in

the solid waste and water sectors. The reasons behind little involvement of women in these important sectors stems, among other reasons, from women's reduced participation, which does not exceed 8% in water provision utilities, and 32% in ministries and authorities, not to mention that women do not assume leading/decision-making positions in any of these occupations. Women's representation in technical and specialised jobs is rare as insufficient attention is given by decision makers to issues like training and capacity building with limited availability of training professional opportunities, along with a general lack of information. Moreover, targeting women and integrating their input within the plans and policies and enabling them to access resources, benefits and opportunities are some of the ways to achieve integration of women in sustainable management of environmental resources (State of Palestine, 2012).

Analysis and evaluation of the plans and policies of the water and solid waste institutions indicated that they are not gender sensitive, nor responsive and lack the tools and mechanisms that guarantee mainstreaming gender participation. Moreover, the absence of gender sensitive follow up and monitoring mechanisms is a serious limiting factor. A SWAT (strengths, weaknesses, opportunities and threats) analysis found that women's community participation in the sector is restrained due to lack of awareness (of communities and local councils) regarding the economic effects of environmental aspects and the significant role women can play in this sector. The Water Sector Reform Plan (2013 - 2015) acknowledges that there are groups of the society, such as the poor or marginalised and women, with limited access to water and wastewater services, and therefore guarantees their access. The document also mentions the necessity of improving the working conditions of the employees in the sector. It prescribes that recruitment and promotion systems should be based on merit, not any other criteria and relevant performance evaluation with clear follow-up measures applied, along with continuously building the capacity of the staff to render them current and up-to-date.

Current water tariffs do not include the costs of operating the water utilities, whereas the Strategy states that water tariffs are to be based on the concept of full cost recovery (FCR) "achieved through revenues that cover operating and maintenance costs; calculating the depreciation of fixed assets based on real value; loans and their interests; and investments for development purposes" (PWA, 2014). The PWA should, therefore, consider the applicability of this tariff structure on marginalised segments of the society, such as women, residents of refugee camps, and the poor, to guarantee equal access to water and wastewater services (Box 2.1).

**Box 2.1: Note on Gender Strategy for the Environment Sector with emphasis on water and solid waste**

In November 2012, the Cabinet of Ministers endorsed a strategy document entitled “Gender Strategy for the Environment Sector, with Emphasis on Water and Solid Waste” 2013 – 2017.

The Palestinian State developed a **strategy for gender integration** within the environmental sector. The Gender Strategy aims to bridge the gap between the reality of women’s participation in solid waste and water sectors and their capacity to be among the decision-makers within these important sectors to reach sustainable and effective management of water and solid waste. This strategy was developed in a participatory fashion with the cooperation and participation of .members of governmental and civic entities and service providers, in addition to specialists in gender issues in environmental contexts/ issues. Lastly, the gender integration within the environmental sector strategy works on three levels: the policies, enabling working women, and women’s societal participation. The first addresses different national policies to become more gender-sensitive and responsive, while developing gender-specific indicators through gender-specific sub-strategies.

**4.4.2. STRENGTHEN EXISTING MECHANISMS AND PLATFORMS FOR STAKEHOLDER ENGAGEMENT IN PALESTINE**

Multi-stakeholder platforms help the water-governing authorities build consensus and communicate with the end-users. The Palestinian Water Strategy (2013) states that participation of water users, planners, and policy-makers at all levels should be the foundation of water resources development and management. It also states that gender inclusion should be adequately maintained in water and wastewater programmes and projects.

Several mechanisms exist in Palestine to build consensus on investment priorities, debate on tariff levels, prevention of conflicts, which are likely to arise around PPPs, and improving service quality. It is necessary to expand the dialogue on water-related issues to include non-governmental organisations (NGOs), academics, and citizens and local governments and service providers. This can help gain greater citizen buy-in, a shared understanding of the issues at hand and more informed inputs to the decision making process. A primary example of this is the Emergency Water, Sanitation and Hygiene group (EWASH), which is a coalition of 27 organisations working in the water and sanitation sector in Palestine. Established in 2002, its members include international and national NGOs and UN Agencies.

Furthermore, according to the National Water and Wastewater Strategy (2013), PWA and MoA will encourage the establishment of customer associations to advocate for consumer rights and voice their concerns regarding the quality and reliability of water services. It is expected these associations will play a role in the fair allocation of water among users and in addressing environmental issues.

Recent years have seen the development of local community organisations and Water Users Associations (WUA) in a number of countries including Palestine with varying objectives, constituencies and influence in the decision making. WUAs in Palestine are active bodies established to organise the distribution of irrigation water (fresh and treated WW) among the users. The PWA regards WUAs as “very important institutional partners” due to the potential role they can play in the management of irrigation water. Such entities have been successful in Jordan for example, as they have contributed to a more transparent and self-regulating process and also towards conflict resolution (UNDP, 2013). Unfortunately, a similar set up does not exist at the domestic water level.

### Box 2.2 List of Public Sector Stakeholders in Palestine Stakeholders Mapping Report (after 2002 Law)

**Key Stakeholders:** National Water Council (NWC), Palestinian Water Authority (PWA), West Bank Water Department (WBWD), Coastal Municipal Water Utility (CMWU), Ministry of Agriculture (MoA), Environmental Quality Authority (EQA), Ministry of Local Government (MoLG), Ministry of Public Work and Housing (MoPWH), Ministry of Planning and Development (MoPAD), Ministry of Health (MoH), Ministry of Finance and Planning [separate ministries before September 2015], Ministry of Finance (MoF), Israeli Civil Administration (ICA), Joint Water Committee (JWC), Israeli National Water Company (*Mekerot*), and the Israel Water Commissioner.

**Primary Local Stakeholders:** Municipal Water Departments, Village Councils, Joint Service Councils (JSC), Jerusalem Water Undertaking (JWU), and the Water and Sanitation Services Authority (WSSA).

**Secondary Stakeholders:** Donors, international NGOs (INGOs), local NGOs, unions, and educational institutions

Source: [www.undp.org/.../Reort%202%20WIA%20Stakeholder%20Mapping%](http://www.undp.org/.../Reort%202%20WIA%20Stakeholder%20Mapping%20Report)

#### 4.4.3. INFORMATION BASE TO RAISE CITIZENS' AWARENESS ON THE COST OF WATER SUPPLY AND SANITATION

In order to engage stakeholders in a meaningful way, regular and updated information for stakeholders needs to be available. This information acts as the base for debate and the justification for reform. One method, used in neighbouring Jordan, is to provide a tariff breakdown in the bills and indicate the subsidy amount on the bill itself. This is a good means to sensitise the population, but it is not sufficient to convey detailed information about the cost of treating, transporting and distributing water. Getting that message across would help raise awareness on critical issues such as the state of water resources, costs of water and wastewater supply services and the role that private companies can play in generating investment and increasing operational efficiency.

Generally speaking, there is awareness among the citizens of Palestine on the scarcity of water, usurpation of their rights to their own water and the dependence on Israeli companies, but matters such as trade-off of water among sectors are not even philosophically considered. Theoretically, this argument would follow once the reuse of treated wastewater is on the increase.

The PWA should be integrating economics in national water planning in Palestine as part of its Integrated Water Resource Management approach. To achieve this, decision-support tools can be used. This is fairly common in Jordan, for example, where WEAP (Water Evaluation and Planning) and its component MWYAS (Multi-year Water Allocation System), a combined software tool for integrated water resources planning, originally developed by the Stockholm Environmental Institute (SEI) in 1998, is being used. Literature shows that it has also been used by academicians at least on one occasion and for the same purposes in Palestine. The MYWAS/WEAP modelling approach would give the PWA the ability to do a system-wide cost-benefit analysis of water infrastructure projects and policy reforms, taking into account future scenarios related to drought frequency and intensity, population growth and economic/political developments (Governance & Financing for the Mediterranean Water Sector project, “*Water Governance in Jordan: Overcoming the Challenges to Private Sector Participation*” Report, 2014). In order to increase awareness on the true situation of water, cost of development and supply, data has to be generated first, established in a data base and a process of reporting from the data base to be administered periodically. This also applies to informing about the pros and cons of engaging the private sector, past experiences and existing potentials. The key here is to develop trust and establish a regular communication platform. As the private sector becomes progressively more involved in water and wastewater projects, it can co-lead the data gathering and have co-ownership of the produced database.

#### **4.4.4. FOSTERING GREATER MULTI-STAKEHOLDER INTERFACE BETWEEN NGOS, SCIENCE AND GOVERNMENT ON WATER SERVICES**

Data and information availability is generally inadequate. Public awareness is also insufficient in relation to technical water and wastewater issues (e.g. health issues related to the disposal of domestic wastewater without treatment, decentralised small wastewater treatment plant technologies, reuse of treated WW in irrigation). Multi-stakeholder interface focusing on governance issues, water rights, socio-economic impacts of water related issues, etc. should be encouraged.

NGOs and universities, for example, are fairly active in all aspects of water issues in Palestine and should be encouraged and supported to assist in developing a policy-making platform and informing it with the findings of relevant research. The new research strategy should consider several nexus modalities linking water to other issues such as gender, food



security, socio-politics, etc. Furthermore, the role of media cannot be emphasised enough, and should be a core stakeholder in the process.

#### **4.4.5. COMMUNICATION AND CAPACITY DEVELOPMENT STRATEGY TO ADDRESS CUSTOMERS NEEDS**

The Institutional Review of the Palestinian Water Sector recommends fortifying the efforts of the PWA in developing communication plans and strategies with relevant stakeholders. The National Water Strategy (PWA, 2013) emphasises the consultation with relevant stakeholders in the area of wastewater quality and the establishment of national standards and enforcement in the discharge of commercial, industrial wastewater; wastewater reuse in agriculture and defining salinity-friendly crops; discharging wastewater into natural water courses (wadis, rivers, sea); sludge collection, safe disposal and use. This is a clear sign of the State's understanding of the role that sufficient knowledge can play in facilitating the implementation of laws and regulations. Hence, the aim is to create a sufficient knowledge base and making use of the involved stakeholders as the medium for conveying the right information to the communities.

Children and youth of both sexes can play a key role to encourage behavioural change. Hence, better educational materials for different grade levels related to water availability and sustainable development should be developed. In order to make these support materials effective and to ensure that teachers are using them efficiently, comprehensive training programmes need to be developed for educators.

Environmental conservation clubs can be introduced by NGOs as contribution to awareness raising and capacity development. In the face of increasing water scarcity and rapidly growing population, it is proposed that a secondary school water conservation curriculum be established covering the natural water cycle and water sources in Palestine: irrigation, pollution, home gardens, household water consumption, and groundwater and surface water. The curriculum can emphasise the importance of engaging students in discussions and hands-on experiments to help them understand the topic's relevance and the need to change their water consumption habits. Such project would build skills among staff members of the NGOs, open a public dialogue on water conservation, and introduce Palestinian teachers to interactive teaching on water-related and environmental issues.

Representatives of Ministries, utilities, NGOs and private sector groupings can be trained on water issues. Utilities themselves can use the services of the Arab Countries Water Utilities

Association (ACWUA) to increase capacities and share experiences with other utilities in the region. The role of communication and bridging in knowledge cannot be ignored, and should be fully utilised as relevant and possible; this should be performed relentlessly. This role should not be left to the regulator alone, but across the sector entities in all capacities, technical, informative, and advisory. A gender perspective would significantly broaden the understanding of customers and how communication can be used to reach both men and women.

Efforts should be made according to a well-planned communication strategy designed with indicators to periodically assess the impact of the messages. This cannot be left to the water sector to execute singlehandedly. Specialised companies can be retained for the purpose until experience in-house is built. It is more than an awareness raising activity to the point where it is participatory and inclusive and with a long-term horizon. Analyses of consumers' needs and existing knowledge, attitudes and behaviours are also important. Such analyses are significantly more useful if conducted with a gender perspective (e.g. disaggregating data and analysing differences to develop an adequate communication strategy).

Including women in decision-making processes is expected to help increase awareness on issues of water scarcity and could lead to the potential adoption of water-saving/demand-led solutions. Women are, *inter alia*, the major customers to domestic water suppliers and should be included constructively in water management. As for engagement with the public, several community-based organisations are led by women, and could be used as partners to increase women's access to decision making.

Diversity in professional bodies dealing with water increases the likely positive impact of work, whereby not just engineers are required, but also economists, sociologist/gender specialist, communication experts, ICT experts etc. This may assist with engaging more professional women from other sectors as well. To this end, it is noted that female engineers and water resource experts are becoming more common in Palestine.

## 5. RECOMMENDED ACTIONS FOR THE PALESTINIAN WATER SECTOR

This section provides a set of practical tools/recommended actions that can help overcome the main governance-related obstacles to PSP in Palestine's water sector. These actions were developed in the course of the Palestinian Policy Dialogue (2014-2015) and represent the tangible outcome of extensive multidisciplinary analytical work using internationally recognised practices and inclusive and open consultation among a wide range of stakeholders in the country. The below roadmap for action has been debated, reflected upon and endorsed by the Palestinian stakeholders as valid, timely and realistic, aligning with the ongoing water sector reform process.

*Stakeholders include all parties that can affect or can be affected by decision-making in the water sector, from individuals (as users/beneficiaries), to public or private organisations, institutions or industries. As for actions related to water, stakeholders become involved to varying degrees. Some are obligated by law and some regard it as a social role. Reform was mandated to the PWA by law and so are many of the actions that involve creating institutions, modifying existing regulations or recommending new ones. The spirit of the Water Law of 2014, as we understand it, is simply for PWA to implement the reform and execute the contents of the law including creating independent institutions that they themselves may no longer have control over.*

*It is with this in mind that the recommendations in the next few pages were developed and approved after consultation with a wide range of stakeholders from within and outside the water sector. These are to be read, however, in conjunction with the table in Annex I entitled "Annex I: Roles and responsibilities of water sector entities as defined by the Palestinian Water Law of 2014". Furthermore, as the PWA is mandated to lead the reform, its capacity on PPP needs to be enhanced, as relevant and appropriate.*

Recommendations	Practical Steps	Calendar (short, medium, or long term)	Current reforms and initiatives supporting the recommendation	Stakeholders	International experience
<b>Recommendation 1: Address intra-sector relationships according to the legal framework including the 2014 Water Law</b>					
Identify roles and responsibilities	<p>Establish MoU/Protocol between the parties</p> <p>Develop methods of internal communication</p> <p>Establish Rules of Procedures for Relevant Stakeholders (gender sensitive where possible)</p> <p>Develop Strategy towards fulfilling the 5-year target of self-sufficiency and cost recovery for all entities</p>	Short term	<p>The Water Law</p> <p>The National Strategy</p>	<p>PWA</p> <p>WSRC</p> <p>EQA</p> <p>Ministry of Agriculture</p> <p>Ministry of Local Government</p>	<p>Separation of policy, operations and regulations are signs of good water governance</p>
Recommendations	Practical Steps	Calendar (short, medium, or long term)	Current reforms and initiatives supporting the recommendation	Stakeholders	International experience

Recommendation 2: Align the roles and responsibilities of other stakeholders from outside the sector						
Establish platforms for stakeholders from outside the sector.	Establish a Committee for the purpose, promoting the representation of a wider part of the population (incl. youth and females) through related civil society organizations.	Short term	The Cabinet of Ministers issues, endorses, and ratifies the water-related regulations/approvals to create synergy among certain Ministries & government bodies whose laws give them a statutory role in the water sector.	Ministry of Finance and Planning [separate ministries before September 2015] EQA Other stakeholders from other ministries	Multi-stakeholder platforms are indicators of good water governance leading to more democratic water management and improved and more sustainable water service delivery	
Recommendations	Practical Steps	Calendar (short, medium, or long term)	Current reforms and initiatives supporting the recommendation	Stakeholders	International experience	

Recommendation 3: Enhancing the private sector relation						
Initiate a private sector stakeholder forum	Survey potential of existing private sector	Short term	Water Law promotes the start of a dialogue	PWA EQA Association of Banks Trade and Commerce Engineers Association Contractors Association Development Entities Ministry of Finance and Planning Development Companies	A forum has to be in place in any partnership	
Recommendations	Practical Steps	Calendar (short, medium, or long term)	Current reforms and initiatives supporting the recommendation	Stakeholders	International experience	

Recommendation 4: Capacity Building in PPP contracts						
Introducing different PSP/PPP modalities	<p>Project portfolio identification</p> <p>Identify project applicability to PSP or PPP</p> <p>Project Preparation methodology</p> <p>Basic VfM methodology</p> <p>Introduce the social context of investment into VfM</p> <p>Procedure for preparing a contingency liability report</p>	PSP in place in the short term – one year	Establishing a PPP Unit	<p>Ministerial Committee</p> <p>PWA</p> <p>Ministry of Finance and Planning</p> <p>PPP unit</p> <p>Entity responsible for public debt</p> <p>EQA</p>	<p>EIB MED 5P advisory facility promotes and supports project development</p> <p>Need to be realistic in developing countries in expecting the private sector to cover the investment/ water service cost when accessibility of the poor to water is the target</p>	
Recommendations	Practical Steps	Calendar (short, medium, or long term)	Current reforms and initiatives supporting the recommendation	Stakeholders	International experience	

Recommendation 5: Tariff regulations and tariff policy						
<p>Apply Law Provisions</p> <p>Consider the implications of having a unified tariff for bulk supply while cost-based tariff is applied for retail</p>	<p>Develop mechanisms to identify true cost of water in bulk and set up the process for the utilities to follow a uniform accounting system</p> <p>Conduct an affordability and willingness to pay study through public and multi-stakeholders' consultations, disaggregating gender, poor/middle income, etc.</p> <p>Develop a dynamic customer data base with a clear grievance mechanism.</p>	<p>Medium (two years)</p>	<p>The Water Law calls for preparing tariff regulations and policies</p>	<p>PWA NWC Utilities WSRC EQA</p>	<p>Cost recovery is a major indicator of a utility's success</p> <p>Different needs and interests are often linked to gender and reflected in willingness to pay. Ensuring both female and male voices are heard can very meaningful.</p>	
Recommendations	Practical Steps	Calendar (short, medium, or long term)	Current reforms and initiatives supporting the recommendation	Stakeholders	International experience	



Recommendation 6: Financial self-sufficiency of water entities						
Apply Law provisions	Assess the financial relationship between the entities (the flow of money)  Identify single points of subsidy  Use tariff studies data	Long (5-year target is set by law)	The 2014 Strategy for financial sustainability identifies revenue sources for the water entities  Future shift from government and donor funding to consumer tariffs, self-funding, and indirect funding	PWA WRSC NWC EQA Utilities	Standard practice is to generate additional revenues from:  - increased productivity (rather than merely collecting fees), - organisational restructuring and rationalisation, - reducing leakages, - more efficient collection of tariffs, and regional spread towards the agglomeration with increasing population density.	
Recommendations	Practical Steps	Calendar (short, medium, or long term)	Current reforms and initiatives supporting the recommendation	Stakeholders	International experience	

Recommendation 7: Establish accountability mechanisms for WSRC						
Enhance the credibility of the regulatory framework	Agree on core functions of WSRC  WSRC to regularly conduct RIAs with gender/socio-economic considerations	Short term	Bylaw calling for regulatory, institutional and economic changes is being drafted	WSRC  Cabinet of Ministers  PWA  EQA  Ministry of Local Government  Ministry of Agriculture	Regulation should tackle major issues of popular interest such as monopoly prevention, continuity of supply, and connecting the poor.  Standard practice to gain credibility and buy-in is to make the information collected by the WSRC on the performance of water services publicly available	
Recommendations	Practical Steps	Calendar (short, medium, or long term)	Current reforms and initiatives supporting the recommendation	Stakeholders	International experience	

Recommendation 8: Continue the consolidation of water providers					
Establish Regional Water Utilities	<p>Put in place a strategy and a road map for consolidation</p> <p>Service provision to the customer comes in a “recognizable” form, unify the processes</p> <p>Build the capacity of both male and female staff of the RUs, and properly choose their boards and managers promoting women’s access to elected decision-making positions.</p> <p>Link new JSC entities to the broader planning and investment needs</p> <p>Apply socio-economic/demographic indicators as part of performance indicators</p>	Medium term	Establishing WSRC	<p>PWA</p> <p>WSRC</p> <p>Min of Local Government</p>	<p>Reduction of regional spread towards the agglomeration of entities with increasing population density is easier to manage</p> <p>Both men and women should have access to trainings according to International conventions and to national legislation.</p> <p>Mixed management boards tend to show better productivity results and higher turnover.</p>
Recommendations	Practical Steps	Calendar (short, medium, or long term)	Current reforms and initiatives supporting the recommendation	Stakeholders	International experience

Recommendation 9: Strengthen the autonomy of water providers					
Ensure the autonomy of water providers	<p>Apply cost recovery basis in tariff setting and provide support to the collection of revenues through compliance and enforcement means</p> <p>Proper setting of tariffs accompanied by accountability measures on use of revenues, improving the collection of bills, and enhancing capacities to efficiently manage the resources under their disposal</p>	Long term	Establishing WSRC	<p>PWA</p> <p>Relevant stakeholders include but not limited to:</p> <p>WSRC</p> <p>Utilities</p> <p>UPWSP</p>	<p>International experience shows that giving more autonomy to the water providers is a way to achieving better performance through the establishment of an independent regulator</p> <p>To contribute to more autonomy, there should be effective measurement systems to allow monitoring of the utilities concerned.</p> <p>Applying performance indicators with emphasis on the base case and publishing these indicators regularly to promote accountability is a standard practice</p>
Recommendations	Practical Steps	Calendar (short, medium, or long term)	Current reforms and initiatives supporting the recommendation	Stakeholders	International experience
Recommendation 10: Suggested checklist for actions related to stakeholder engagement regarding PPPs					

Raise awareness  Engage stakeholders  Introduce and implement  Communication Strategy	Strengthen information base on critical issues: -national water resources -real cost of water production -wastewater services - roles of women and men in management of water resources  Engage stakeholders to discuss and gain support on several issues: -investments -tariff levels -service quality  Prepare Communication & Capacity Development Strategy, to raise awareness and help identify consumers' needs and interests, related also to socio-economic factors, mainstreaming youth, gender and equity.	Continuous	The 2013 policy and strategy document considers PPP an essential part of reform with regard to special projects, and services provided by the bulk water supplier and the regional utilities	PWA and other Water Sector stakeholders  Government at large  Local community  National extent  Engagement process initiated by this study has to be championed and institutionalised  Communication process may follow the four tiers of stakeholders	Regulatory issues which are important in the water sector, in particular in the case of increasing private sector involvement:  1. Regulation of the quality of water 2. Regulation of prices of the products: - Price of a m <sup>3</sup> - Price recovery mechanisms - Incentives to connect to the water system 3. Price adjustment and risk allocation 4. Regular and reliable supply 5. The amount of investments agreed 6. Pressure in the system 7. Capex ,regulating RR on capital Targeted communication for different social groups (youth, poor or women etc.) is essential and assists in having an impact.
Recommendations	Practical Steps	Calendar (short, medium, or long term)	Current reforms and initiatives supporting the recommendation	Stakeholders	International experience
<b>Recommendation 11: Submittals to Cabinet</b>					
Submit	- Water Tariff Regulations	Short term	The Palestinian	Cabinet of Ministers	Standard practice as defined by legislation

requirements stated in the Law	<ul style="list-style-type: none"> <li>- Water and Wastewater Connection Regulation</li> <li>- Regional Water Utilities Regulation</li> <li>- Regulation on licensing of service providers</li> <li>- Regulation to create environment that would encourage private sector investment in water</li> <li>- Legislation for WR Protection Zones</li> <li>- SPs Incentives by-law</li> <li>- Identifying and regulating extent of local authorities participation in general structure of Regional Utilities</li> </ul>		<p>Cabinet of Ministers is ready to address the necessary parties in support of improved PPP integration</p>	<p>PWA WSRC MoLG MoF&amp;P Business Forum (as per Recommendation 3, above) EQA</p>	
Recommendations	Practical Steps	Calendar (short, medium, or long term)	Current reforms and initiatives supporting the recommendation	Stakeholders	International experience
<b>Recommendation 12: Communications in support of PPP</b>					

Gain PPP acceptability	Produce clear and evidence-based information on the potentially beneficial role that private actors can play in the water sector to dispel the myths and clarify what the private sector has (or has not) brought in Palestine based on experiences (in Gaza and partially in Bethlehem).	Continuous	In support of government policy	In full consultation with PWA, an independent stock-taking & assessment exercise should clearly set out upsides & downsides of change and raise awareness among priority target audiences (e.g. households) on role, responsibility and contribution of the private actors in water	Governance structures of the private water companies or public utilities are important. The conditions should be in place to assure good governance, accountability and transparency. Communicating these results could then help secure the political acceptability of PSP projects and contribute to rebuilding trust among the public and the water supplier
Recommendations	Practical Steps	Calendar (short, medium, or long term)	Current reforms and initiatives supporting the recommendation	Stakeholders	International experience
<b>Recommendation 13: New controls on groundwater</b>					

Protect groundwater resources	<ul style="list-style-type: none"> <li>-Set up the database and feed it with validated information (including health-related indicators disaggregated on socio-economic status, sex and age), wherever groundwater is used</li> <li>-Eliminate free abstraction quantities</li> <li>-Assess aquifer safe yield</li> <li>-Limit abstraction quantities</li> <li>-Enforce measures against illegal use and abuse</li> <li>-Enforce against deteriorating GW</li> <li>- Legislate for WR protection zones</li> </ul>	Long term	Law calls for making necessary institutional and regulatory changes to protect groundwater resources	PWA Ministry of Agriculture EQA WUAs Farmers	Much experience is available internationally. Neighbouring Jordan is a good example
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## 6. ANNEXES

### ANNEX I: ROLES AND RESPONSIBILITIES OF WATER SECTOR ENTITIES AS DEFINED BY THE PALESTINIAN WATER LAW OF 2014

FUNCTION	BY	OVERSEERS/PARTIES
Allocation of water resources	PWA	Other official and relevant authorities
Preparing general water policies, strategies and plans, seeking approval thereof, and ensuring their implementation	PWA	Relevant parties, as well as the Cabinet of Ministers
Protection zones to prevent pollution	PWA	In cooperation and coordination with relevant authorities
Licensing and development of Water Resources and utilization	PWA	In cooperation and coordination with the relevant authorities
Measures and plans as required to establish and develop the National Water Company and the Regional Water Utilities	PWA	In coordination with the relevant authorities
Supervising the organization of awareness raising campaigns in the sphere of water and wastewater and promoting the use of water saving fixtures	PWA	In coordination and cooperation with the relevant authorities
The development of plans and programs for capacity building, training and qualification of technical staff working in the water sector and supervising their implementation with the aim of improving the management of water resources	PWA	In cooperation and coordination with the relevant authorities
Equitable distribution and optimal use of water to ensure the sustainability of ground and surface Water Resources	PWA	In cooperation and coordination with the relevant parties
Developing solutions and suitable alternatives in cases of emergency and contingency to ensure the continuity of water provision services	PWA	In coordination with Service Providers and relevant parties
Scientific research and studies related to water and wastewater	PWA	Specialized and relevant authorities
Partake in the development of approved standards of water quality for various uses	PWA	In coordination and cooperation with the competent authorities

FUNCTION	BY	OVERSEERS/PARTIES
All revenues collected	PWA	Deposit in the account of the Public Treasury
Accounts of the Authority and its records and all its financial affairs shall be regulated and audited	PWA	Ministry of Finance and Planning
Head of PWA appointment	PWA	Presidential Decree upon the recommendation of the Cabinet of Ministers
Deputy Head	PWA	Decision of the Cabinet upon a recommendation from the Head of PWA
Preparation of budget and financial reports	Head of PWA	Cabinet of Ministers for approval
Signing local and international water agreements on behalf of the Government	Head of PWA	Prior authorization from the competent and relevant authorities
Preparation of periodic reports concerning the activities of PWA and quality of performance, and the proposal of solutions for overcoming obstacles that hinder the progress of work	Head of PWA	To the Cabinet of Ministers
Establishment	WSRC	Decision of the Cabinet of Ministers
Regulating WSRC	WSRC	Be pursuant to this law
Reporting	WSRC	Cabinet of Ministers
Appointing Board of Directors	WSRC	Presidential decree , Cabinet recommends
Board Remuneration	WSRC	Regulation by Cabinet
Performance incentives	WSRC	Regulation by Cabinet
Internal regulations	WSRC Board	Approve and submit to Cabinet
Annual budget submittal	WSRC Board	Approve and submit to Cabinet
Audited financial reports submittal	WSRC	Relevant authorities
Audit and review of finances	WSRC	Official monitoring authorities
Regulating staff	WSRC	Board recommends to Cabinet
Issuing licenses and fees	PWA	Regulation from Cabinet
Terms of license stipulate prior approval	PWA	Competent authorities
Domestic harvesting	PH and Environ standards	Relevant official authorities
Prior use rights of Springs/wells and fees	PWA	Cabinet of Ministers
Licensing and registry and payments of fees	PWA	Right for public access to information
Water and wastewater tariffs	PWA	Regulation from Cabinet
Unified Bulk Water tariff	PWA	Regulation from Cabinet
Water prices	Service Providers	WSRC approves based on tariff regulations
- Regulation to create environment that would encourage private sector investment in water	PWA	Cabinet of Ministers

FUNCTION	BY	OVERSEERS/PARTIES
Capital of National Water Company	PWA	Decision by Cabinet
Financial affairs of National Water Company	PWA and MoF	Regulation from Cabinet
Water supply tariff and related services proposal	PWA	WSRC
Develop Unified Water Tariff Regulation	PWA	
Board of National Water Company	PWA	Cabinet decision
Quarterly and annual reports	NWC	WSRC and Cabinet
Establishing Regional Water Authorities	PWA	in coordination and cooperation with the relevant competent authorities
All matters	RWAs	Regulation from Cabinet
Provision of water and wastewater services	RWAs	Regulation from Cabinet
Establishing Water Users Association, joint recommendation	PWA jointly with MoAg	Regulation from Cabinet
Protect water resources and facilities and prevent their pollution by partaking proactively	PWA	Environmental Law and in coordination and cooperation with the authorities specialized in the protection of water resources and the prevention of their pollution
Regulation for protection of Water Resources and facilities	PWA	PWA recommends and Cabinet issues
Consideration of Water Resource Protection Zone and publication of notice	PWA	In coordination with other relevant parties and a regulation from Cabinet
Provide alternative resource to protected zone	PWA	As may be available, or compensate for damage as per existing laws
Applying penalties to specific offences	PWA	
Exercising current responsibilities	Existing institutions	Till RWAs and WUAs are established
Rehabilitate facilities of West Bank Water Department and in the transition period	PWA	Movable and immovable assets to PWA, powers and responsibilities to the National Water Company
West Bank Water Department final status	PWA	All assets, powers and responsibilities to the National Water Company
Regulations to implementation the Law	PWA	Cabinet issues regulations recommended by PWA

## ANNEX 2: CASE OF A SUCCESSFUL PPP SOLID WASTE LANDFILL OPERATIONS AT JOINT SERVICES COUNCIL OF HEBRON AND BETHEHEM JSC – H&B

<i>Type of contract:</i>	Operation and maintenance
<i>Type of facility:</i>	Solid waste landfill and two transfer stations
<i>Incentive objective for operator:</i>	Extend the lifetime of landfill
<i>Incentive value:</i>	Two year extension to a five year contract
<i>Benefit to owner:</i>	Delay in future investments
<i>Objective of contract:</i>	Closure of existing inefficient facilities, improve the quality of services, reduce health and environmental risks, and reduce greenhouse gas emissions.
<i>Capital investment:</i>	Support from WB & Donors to fund a modern, sanitary landfill, transfer stations, and access roads.
<i>Purpose of PSP:</i>	Unavailability of local expertise
<i>PPP design:</i>	IFC assisted the Joint Service Councils – Hebron and Bethlehem JSC-H&B
<i>Responsibility of operator:</i>	Operation and management of Al-Minya landfill and two transfer stations including the long-haul transfer of waste from the transfer stations to the landfill.
<i>Responsibility of client:</i>	Provide minimum waste guarantee of 500 tons/day to the operator and pay fees per ton of waste managed, as well as collection of primary waste
<i>Other support:</i>	IFC and the World Bank also supported structuring an \$8 million output-based grant from the Global Partnership on Output Based Aid (GPOBA) to improve sustainability of the SWM sector
<i>Monitor Indicators:</i>	A system of performance standards and penalties to ensure sanitary operation of the landfill, adherence to environmental standards on leachate and landfill gas, and performance of other critical operational requirements
<i>GPOBA benefit:</i>	Designed on specific service improvements and financial sustainability targets, providing additional comfort to the operator that the system can support operating payments
<i>Evaluation of bids:</i>	Two-stage evaluation process, technical evaluation followed by financial bid. Technical bids were evaluated by a committee that included the Hebron Joint Service Council, the Bethlehem Joint Service Council, and the Ministry of Local Government with support from IFC as well as technical and legal experts.

## ANNEX 3: EXAMPLES OF SELECTED PSP ACTIVITIES: JORDAN WATER SECTOR

The following is a tabulated summary of PSP activities conducted in the water sector in neighboring Jordan, even before instituting a PPP unit at the Ministry of Finance and Planning. Details follow.

TYPE OF CONTRACT	PROJECT
Service Contract	Several
Outsourcing	Belqa and Madaba Billing and Collection
Operations and Maintenance	Several desalination plants
Management Contract	LEMA, Yarmouk, Zarqa
Design Build Operate, DBO	Zarqa Ma'in
Build Operate Transfer, BOT	Disi, Samra

**Amman Management Contract:** This is the simplest form of PPP which yielded:

1. Higher revenues and reduced unaccounted for water
2. Reduced response time and improved repairs
3. Higher wages and incentives
4. Corporatization of the Amman Governorate Water Department to become the Jordan Water Company (Miyahuna)

**As-Samra wastewater treatment plant BOT Project:** This 25 years Build Operate and Transfer contract was planned to serve 2.3 million people. The government and USAID contributed with \$ 90 million to the capital cost (\$170 million) to encourage private sector participation and make the project attractive and financeable.

**As-Samra wastewater treatment plant expansion BOT Project:** In July 2012, under the terms of the BOT Project Agreement "New Investment Clause", MWI and As-Samra Project Company with the assistance of the US Millennium Challenge Corporation (MCC) concluded a deal to expand the plant capacity by an additional 100,000 million cubic meters per day. The new expansion included the increased biological load of phase one in addition to the load of the new capacity. Thus, the plant water line was increased by 38% and the solid line by 85%. The total capital cost was \$185 million, 50% of which is granted by the MCC.

**DISI Water Conveyance Project under BOT:** This is by far the biggest BOT contract aimed at drawing 100MCM of Disi aquifer water and conveying it 300 km to the demand centers and mainly Amman. Again, the government contributed US\$ 300 million to this US\$ 1 billion project to reflect the commitment of the government and make the project attractive.

**Zara Ma'in DBO Project:** This is another form of PPP as a design, build operate project to desalinate brackish water and conveying it to the capital Amman.

**Aqaba Water Company AWC:** This transaction entailed the creation of a state owned corporate entity replacing Water Authority of Aqaba city where ownership of assets was transferred from WAJ to AWC.

**Yarmouk Water Company Management Contract:** Again, this is the simplest form of PPP where water and wastewater services in the four northern governorates were planned to be managed by a private operator. This, however, was preceded by amalgamating the four water departments in the North of the country into one entity called Yarmouk Water Company. The Management contractor withdrew from the contract as WAJ was not able to meet their financial commitments along with rejection of the new conditions by the employees. This coincided with the Arab spring.

**DBO Mujib water to Karak:** This project is financed by the Gulf Grant involving treatment and supply of 5 mcm yearly from the Mujib Dam to the Karak governorate. The operation period, however, is limited to 2 year; certainly not sufficient to provide sufficient incentive for design optimization.

**Micro-PSPs in Madaba, Karak and Balqa governorates:** Local private companies took the responsibilities of billing and collection as first step to enhance the financial status of services in these areas making the environment conducive to further PSP involvement. The transaction can also be referred-to as outsourcing but termed PSP because payments are performance based.

**Several desalination and water treatment plants in the Jordan Valley:** These relatively smaller projects covered several forms of PPPs, namely BOT, Operations and Management, and DBO, tendered and awarded in a traditional procurement process. See Box below.

SMALLER WATER TREATMENT AND DESALINATION PLANTS WITH PSP MODALITY						
Plant	Governorate	Treatment	Capacity m3/h	Capital Cost, JD	Operate JD/m3	Remarks
CONTRACTED ON OPERATION BASIS						
Ras el Ein	Amman	Micro	100	74,000		LS Oper JD 9984/yr
Karameh	Mafraq	Desal	10	119,000		
Zarqa	Zarqa	Desal	600	75,000	0.079	
Omari	Zarqa	Desal	5	87,000	0.44	
Mudawara	Maan	Desal	35	89,500	0.033	
UNDER DESIGN/CONSTRUCTION						
Fahel	N Shuneh	Desal	176	571,000	0.069	DBO 2 years
Mujib	Karak	Micro	500			
Greagra	Karak	Iron/Sulfur	30	323,515		
Kufranja	Ajloun	Micro	300			
Sateh Ma'an	Ma'an	Hard/Turbid	15	17,000		
CONTRACTED ON BOT BASIS						
Kraymeh	Irbid	Desal	100		0.29	15 years
Mashtal Faisal	Jerash	Desal	300			15 years
Dhahret Ramel	Balqa	Desal	100		0.52	15 years
Al alali	Balqa	Micro	20		0.299	10 years

## ANNEX 4: LIST OF STAKEHOLDERS CONSULTED DURING THE POLICY DIALOGUE<sup>2</sup>

Abadi	Almotaz	Palestinian Water Authority (PWA)
Abadi	Almotaz	Union for the Mediterranean Secretariat (UfMS)
Abdo	Kasim	Indipendent Consultant
Abu Adi	Thaer	Ministry of Agriculture
Abu Alfailat	Malek	AUJA EcoCenter/EcoPeace
Abu Ktaish	Rami	USAID West Bank/Gaza
Abu Madi	Maher	Birzeit University
Abu Mohor	Elias	The Applied Research Institute - Jerusalem
Abu Qare'	Aqel	Birzeit University
Abu Qave	Shaddad	Independent Consultant
Abu Saoud	Rana	Palestinian Water Authority (PWA)
Abu Saoud	Sameer	National Water Regulatory Council
Abu Thaher	Ahmad	Environmental Quality Authority (EQA)
Abu Zahra	Bader	Ministry of Planning and Administrative Development
Abudiab	Nabil	Association of Banks in Palestine
Adawi	Raghda	Palestine TV
Ajramy	Ra'fat	Palestine Liberation Organization
Akel	Isam	Association of Palestinian Local Authorities
Al Jayyousi	Anan	National Water Regulatory Council
Al-Abid	Samih	Palestine Investment Fund
Alatrash	Imad	Palestine Wildlife Society
Alawneh	Majeda	Palestinian Water Authority (PWA)
Albaradeiya	Issa	Environmental Quality Authority (EQA)
Al-Hmaidi	Mohamed Said	National Water Regulatory Council
Al-Khatib	Nasser	EcoPeace/ WEDO
Alyyan	Zuhair	Union of Agricultural Work Committees
Amad	Ureib	Local Aid Coordination Secretariat (LACS)
Amro	Tayseer	Ministry of National Economy
Asa'd	Abdelkarim	National Water Regulatory Council
Atmatzidis	Konstantinos	Environmental Quality Authority (EQA)
Attari	Sally	PADICO Holding

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- <sup>2</sup> It is noted that the overall governance structure in Palestine is also under a reform process and thus, the institutional setting and affiliations presented in this Report may differ.

Atteereh	Adalah	Environmental Quality Authority (EQA)
Awayes	Yousef	Palestinian Water Authority (PWA)
Bader	Hanadi	Palestinian Water Authority (PWA)
Baransi	Said	BCI Group
Bateh	Fuad	Union for the Mediterranean Secretariat (UfMS)
Bateh	Fuad	Quartet Representative Office in Jerusalem
Battat	Rami	GIZ
Brouma	Anthi	Global Water Partnership-Mediterranean (GWP-Med)
Budeiri	Tawfiq	Ministry of Local Government / Strategic Development and Investment Planning (SDIP) for Palestinian Cities and Towns
Burchi	Stefano	SWIM-SM
Carmi	Natasha	Palestine Liberation Organization, Negotiations Support Unit
Collette	Sophie	European Union Technical Assistance Office - West Bank and Gaza Strip, UNRWA
Curradi	Paolo	European Union Technical Assistance Office - West Bank and Gaza Strip, UNRWA
Dajani	Rami	Quartet Representative Office in Jerusalem
Daraghmeh	Harbi	Ministry of Finance
Daragmeh	Ayman	Swiss Agency for Development and Cooperation (SDC) Gaza & West Bank
Driaat	Mahmoud K. A.	AUJA EcoCenter/EcoPeace
Eisenbach	Thomas	KfW Development Bank - Office Ramallah - Al Bireh
El Sheikh	Rebhi	Palestinian Water Authority (PWA)
Enaia	Ohood	Ministry of Local Government
Engelhardt	Marc	KfW Development Bank
Esswed	Rawan	Palestinian Water Authority (PWA)
Ghannam	Subha	Representation of the Kingdom of the Netherlands to the Palestinian Authority
Ghazenouch	Moh'd	Land Research Center
Ghuneim	Mazen	Palestinian Water Authority (PWA)
Haj Ali	Ayman N.	Consolidated Contractors Co. - CCC Palestine
Hamadalla	Waddah	KfW Development Bank - Office Ramallah - Al Bireh
Hijawi	Mohanad	PADICO Holding
Hindi	Ahmad	Palestinian Water Authority (PWA)
Hithnawi	Taghreed	Ministry of Planning and Administrative Development
Hulileh	Samir	PADICO Holding
Husseini	Rafiq	Makassed Islamic Charitable Society Hospital
Ihren	Niclas	CSR Expert/ Strategic Advisor
Issa	Kamal	Palestinian Water Authority (PWA)



Jabarin	Bahjat	Environmental Quality Authority (EQA)
Jaber	Bassam	Ministry of Public Works
Karmi	Abdel Khalek	Jerusalem Water Undertaking (JWU) & Union of Palestinian Water Services Providers
Kawasmi	Hazem	Municipal Development & Lending Fund
Khalailah	Saleh	Union of Palestinian Water Services Providers
Kittani	Hazem	Palestinian Water Authority (PWA)
Marei	Amer	Al Quds University (AQU)
Milhem	Ibrahim A. A.	The Housing Bank for Trade and Finance
Mohn	Tobias	GIZ
Mozoq	Haitham I.	The Housing Bank for Trade and Finance
Nofal	Issam	Ministry of Agriculture
Nofal	Abdel Mughni	Municipal Development & Lending Fund
Obidallah	Mohammed T.	EcoPeace/ WEDO
Olvik	Gunnar	Consulate General of Sweden in Jerusalem
Quteishat	Koussai	Lead Expert, Governance & Financing for the Mediterranean Water Sector project
Quttaineh	Ikram	Palestine Wildlife Society
Rabi	Ayman	Palestinian Hydrology Group (PHG)
Radaydeh	Fatima	GIZ Water Program
Rayyan	Abdalaziz	Environmental Quality Authority (EQA)
Riekel	Thomas	GIZ
Saifi	Emad	Palestinian Water Authority (PWA)
Salamah	Diaa	Agricultural Development Association (Parc)
Salameh	Mujahed	Ministry of Finance
Salameh	Estephan	Office of the Prime Minister
Samhan	Samhan	Palestinian Hydrology Group (PHG)
Sandaite	Jovita	EWASH
Sawafta	Farah	Ministry of Agriculture
Sbaih-Eghreib	Laila	Ministry of Finance
Sbeih	Mohammed	Irrigation expert
Shaheen	Hafez	An-Najah National University, Universal Group for Engineering and Consulting
Sha'rawi	Abdullah	PADICO Holding
Sharawnh	Hajeeb	Palestine TV
Shonnar	Beesan	Palestinian Water Authority (PWA)
Shukri	Ali	CairoAmmanBank
Speets	Robert	SWIM-SM
Taarup	Anja	Nordic Consulting Group

Nordlund

Tahboub	Naser	Union for the Mediterranean Secretariat (UfMS)
Tamimi	Abdel Rahman	PHG/Water governance group at PHG & AWARENET
Tawil	Mohammad	Jerusalem Water Undertaking (JWU)
Thaher	Rehab	Ministry of Planning and Administrative Development
Toame	Ziad	Ministry of National Economy
Vasilaki	Varvara	Global Water Partnership-Mediterranean (GWP-Med)
Yahya	Jamal	Consolidated Contractors Co. - CCC Palestine
Barahmeh		
Ziadeh Zakkak	Manal	Palestinian Water Authority (PWA)

## ANNEX 5: GENDER SITUATIONAL ANALYSIS, STRATEGY AND ACTION PLAN SUMMARY

Courtesy of Rana Soud, Beesan Shonnar, and Fatima Radaydeh

Based on this **Situation Analysis** to assess gender-related challenges in the Water Sector in Palestine, the development of a national gender strategy for the environmental sector with focus on water and solid waste was recommended to support bridging the gender gap in the sector. This analysis should be used as a base line data study, to track future progress and trends on a wider level.

The development of this **Strategy** required analysis and assessment of the current situation in terms of policies adopted and declared by the institutions in the environment sector and other relevant institutions focusing on water and solid waste management. However, it revealed a set of challenges and constraints that prevent the women's effective and significant participation in this important sector. The development of women's participation in this sector will not take place just by increasing their representation in decision-making positions in these institutions, even though it is very important, but it can also be by targeting women and integrating their needs in the plans and policies. This, in turn, is one of the main pillars of gender integration in order to achieve effective and efficient participation of women in the environment sector.

The fundamental problems revealed by the analysis led to developing the Gender Strategy in the water and wastewater sector which included three main levels:

(1) Policy level with following strategic objectives:

- Mechanisms, tools and policies that ensure gender mainstreaming in the Sector.
- Effective monitoring and evaluation system to ensure implementing gender responsive policies.
- Decision makers and Sector employees are more aware and capable towards gender responsive policies.

(2) Empowerment of professional women in the sector with following objectives:

- Institutions of the Environment Sector (with focus on Water and Wastewater) are effective from the gender perspective and take into consideration employing and developing women cadres.

- Training women cadres in decision making levels.
- Effective coalitions working towards the access of women to decision making in the Environment Sector related to water.

(3) Community level with following objectives:

- Effective participation of women on the societal level in the Environment Sector (with focus on Water and Solid Waste)
- Local communities are more aware of the importance of the role of women and their involvement in the Environment Sector (with focus on Water and Solid Waste Management).
- Local communities are more effective in the Sector and in societal oversight in regards to gender mainstreaming in the Sector.

In accordance with the national gender strategy, an **Action Plan** (separate for Water and Solid Waste, Finalized End of 2013) was developed in a participatory process together with the key stakeholders. The results can be summarized as follows:

1) Policy level

- The strategy should improve gender mainstreaming at the policy level, including gender policies, systems, audit, amendments of laws and regulations, manuals, and others.
- It should include monitoring mechanisms and measures.
- Gender monitoring units could play an important role at the different authorities,
- Measures that promote the increase of women in leadership could also be effective, as learned from the election process, adopting the quota at all decision making levels (as MoWA is suggesting) could be an effective measure.
- Use this study as a base line data study, to track future progress and trends on a wider level.

2) Professional level

- Empowerment and capacity building in personal skills, competitive skills, technical skills, and gender awareness.
- Establishing a professional women network in the water and environmental sector to share success stories and experiences, to promote peer learning and to provide support.
- Establish accountability and transparency systems within service provider entities and include gender complaints and monitoring system.

### 3) Community level

- Support women in local government units heading the water and environmental committees, and support the participation of women at the community level to participate within such technical committees.
- Measures and manuals including indicators to integrate women in the decision making of the water and solid waste projects.
- Measures and manuals to include gender sensitive strategies for the service providers that promote community participation and women involvement, in addition to the technical aspects.

Implementation of the strategy and action plan in water sector had not taken place and this was the reason behind conducting the kick-off workshop in May 2014, targeting the main partners to revive the enthusiasm of the sector stakeholders to implement the Gender Strategy and Action Plan, and define reasons that prevent the implementation process and to define entry points for realistic implementation. Stakeholders saw that the main reason was because the Action Plan is too broad with no clear implementation roles and responsibilities. They recommended simplifying the strategy and action plan. GIZ then supported a consultancy assignment targeting main stakeholders, namely PWA, six of the biggest water service providers and the PUWSP and some other related institutions. The study aimed to conduct an overall situation analysis in the main water sector institutions regarding gender mainstreaming. Particular emphasis is given to the current opportunities, challenges, political commitment and experiences in line with the Gender Strategy and Action Plan in the water sector, and in line with the GIZ Water Programme objectives and core processes. Results were presented in the gender planning workshop which was held on the 1<sup>st</sup> February, 2015 with active participation from the targeted institutions. Participants had the chance to develop realistic activities based on findings, and agreed on an operational plan to be implemented within 2015.

The operational plan focused on establishing Gender Unit in PWA, conducting gender audit in PWA, raising awareness of targeted institutions on the relation between gender and water, and exchange of experience on Gender in the Water Sector at a regional level.

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