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Water for Prosperity and Development

Risks and Opportunities for the Gulf Cooperation Council Countries

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WORLD BANK GROUP

Contents

Abbreviations

BOT	build-operate-transfer
DBO	design-build-operate
GCC	Gulf Cooperation Council
MENA	Middle East and North Africa
MSF	Multistage flash distillation
O&M	Operations and maintenance
OECD	Organisation for Economic Co-operation and Development
PPP	Public-private partnership
PRG	Partial Risk Guarantee
RO	Reverse osmosis
TDS	Total dissolved solids

Acknowledgments

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1. Introduction

The aim of this note is twofold: (1) summarize emerging challenges and opportunities for the water sector in the Gulf Cooperation Council (GCC) countries[1] and (2) suggest ways to respond to these challenges where the World Bank's Water Global Practice can provide support. Following a description of the GCC's water resources and water service delivery challenges, two sets of recommendations and related actions are discussed. The first set relates to managing a diverse set of conventional and nonconventional water resources for security and sustainability. The second set of recommendations is linked to delivering better water services with accountability and financial sustainability.

2. The GCC Countries' Water Challenges

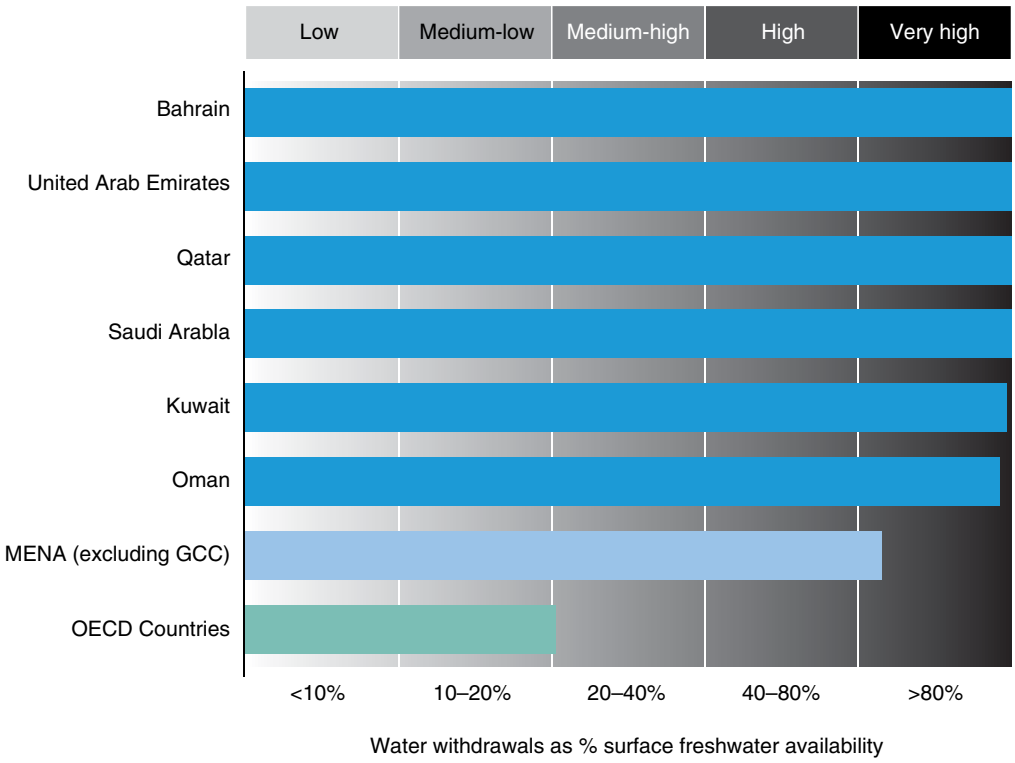
2.1. Water Stress and Groundwater Depletion

The GCC countries have the highest levels of water stress in the world. Water stress arises when water withdrawals for human, agricultural, and industrial uses are higher than the level of renewable water resources—that is, a high water withdrawal-to-availability ratio. In all the GCC countries, water withdrawals are more than 95% of surface freshwater availability, as shown in Figure 1. This indicates greater competition for limited freshwater resources, the need to augment supplies with nonconventional sources, and in most cases, unsustainable use of freshwater resources.

The share of unsustainable groundwater use in the GCC countries is the highest in the world. The GCC countries are a global hotspot of unsustainable groundwater abstraction (Wada and Bierkens 2014). Unsustainable groundwater abstraction arises when the rate of groundwater pumping exceeds the rate at which groundwater is naturally recharged. If the groundwater balance of a country is compared with a bank account, then unsustainable groundwater use is equivalent to the withdrawal of money faster than it is deposited. In some GCC countries, almost all groundwater abstraction is unsustainable, as shown in Figure 2. When groundwater resources are abstracted faster than they are replenished, the quality of the remaining groundwater decreases, and the resource eventually becomes depleted.

[1]The GCC countries are Saudi Arabia, Kuwait, Bahrain, the United Arab Emirates, Oman, and Qatar.

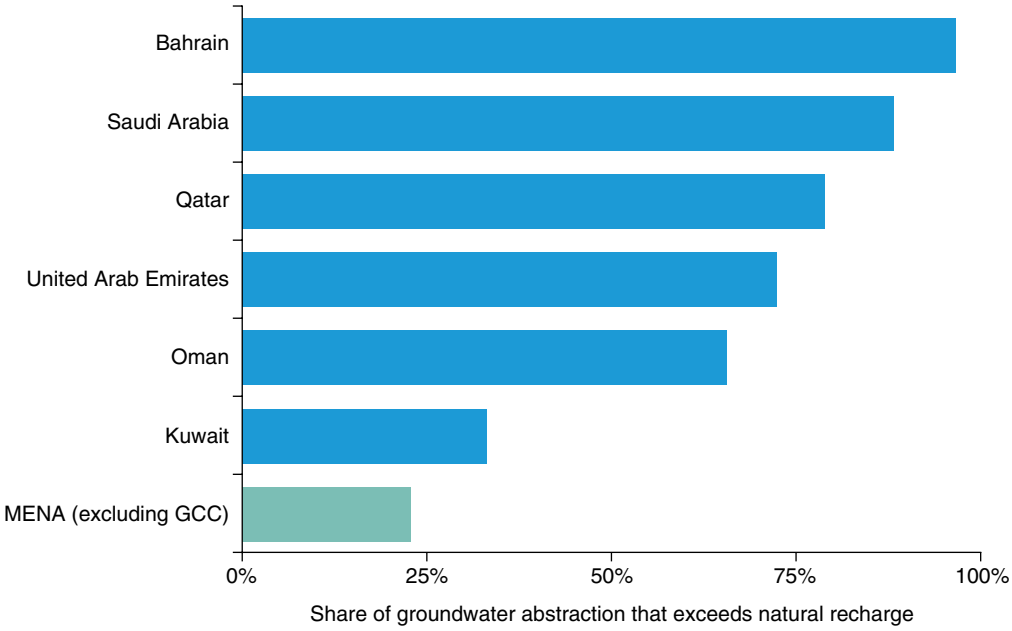
FIGURE 1 Water Stress in the Gulf Cooperation Council (GCC) Countries and Average Water Stress for the Middle East and North Africa (MENA) Region and Organisation for Economic Co-operation and Development (OECD) Countries



Source: World Bank 2017a.

Domestic water consumption for GCC residents is almost twice the consumption for residents of other high-income countries. Countries with similar levels of development and much greater freshwater resource endowments have much lower levels of residential water consumption (PwC 2014). This high consumption is due in part to disincentives to use water wisely, such as low water tariffs, lack of metering, and lack of water-saving devices. Reducing high residential water consumption can potentially free up water to meet projected demands, allowing for the deferral of expensive supply-side investments.

FIGURE 2 Groundwater Depletion in the Gulf Cooperation Council (GCC) Countries and Average Water Stress for the Middle East and North Africa (MENA) Region as the Percentage of Groundwater Abstraction Exceeding Natural Recharge (1960–2010)



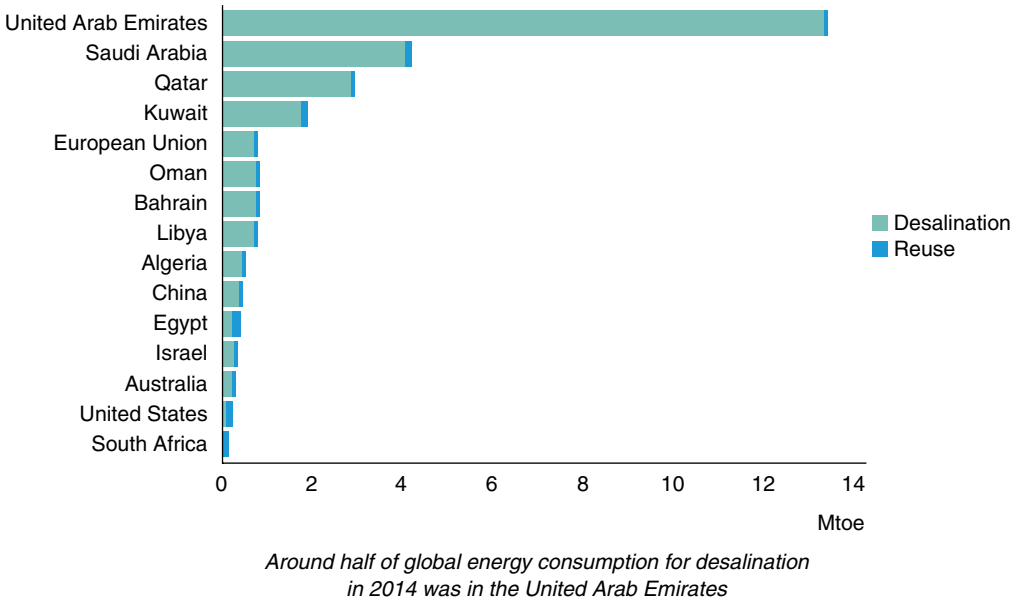
Source: World Bank 2017a.

2.2. The Water-Energy Nexus and Emerging Solutions to Close the Water Supply-Demand Gap

GCC countries rely on the energy sector for their water security. Water production, treatment, and conveyance, as well as wastewater treatment and distribution, require energy. In the GCC countries, given the scarce freshwater resource endowment and heavy dependency on energy intensive water desalination, the water sector is heavily dependent on energy. As such, any policy affecting energy allocation and consumption, including subsidies, will distort how water is allocated, managed, and eventually used. This highlights the need for integrated water and energy sector strategies.

The GCC countries account for about half of the world's installed desalination capacity (Global Water Intelligence 2016). The GCC countries top world rankings for energy consumed in desalination (Figure 3). Low energy prices and technology improvements, which have lowered plant operational costs, have in part enabled the steady growth of desalination.

FIGURE 3 Energy Demand for Desalination and Water Reuse



Note: Mtoe, million tonne of oil equivalent.
Sources: GWI (2016); IEA analysis; World Bank 2017b using Global Water Intelligence data.

Water security does not need to be expensive or rely on nonrenewable energy sources. Technological and management innovation offers opportunities to reduce the costs of water supply. Emerging water recycling and desalination technologies could lead to significant cost reductions, yet choosing the best technology option is challenging. Some of these technologies are listed in Table 1 and include multi-effect distillation, hybrid desalination systems, nano-membranes, adsorption, and electrochemical desalination.

Leapfrogging to cutting-edge technology for water desalination using solar power is another renewable energy opportunity that remains untapped. Desalination powered by solar energy will not only ensure an affordable, sustainable, and secure freshwater supply, but will also help increase the capacity for new industrial and farming activities and reduce domestic gas consumption for water production (World Bank 2012).

Two key pillars of a long-term desalination infrastructure strategy are emerging—adopting more energy efficient desalination technologies, such as reverse osmosis, and transitioning to alternate energy fuels, such as solar. Solar photovoltaic technology can be used for membrane-based reverse osmosis desalination.

TABLE 1 Overview of Desalination Technologies Widely Used in the Middle East and North Africa Region and Their Costs

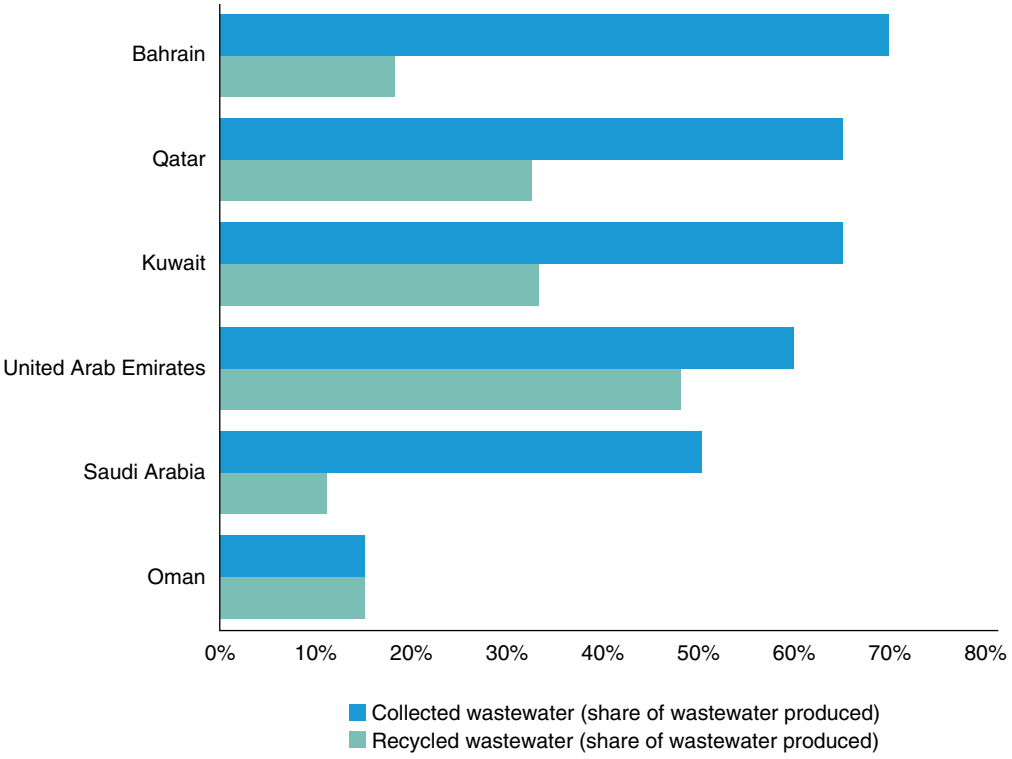
Item	Multiple Stage Flash	Multiple Effect Distillation—Thermal Vacuum Compressor	Seawater RO (Arabian Gulf)	Hybrid
Capital costs (US$ million/ million liters per day)	Range: 1.7–3.1 Average: 2.1	Range: 1.2–2.3 Average: 1.4	Range: 1.2–1.8 Average: 1.5	Range: 1.5–2.2 Average: 1.8
O&M costs (US$/m3)	Range: 0.22–0.30 Average: 0.26	Range: 0.11–0.25 Average: 0.14	Range: 0.36–1.01 Average: 0.64	Range: 0.14–0.25 Average: 0.23
Cost of water production (US$/m3)	Range: 1.02–1.74 Average: 1.44	Range: 1.12–1.50 Average: 1.39	Range: 0.96–1.92 Average: 1.35	Range: 0.95–1.3 Average: 1.15
Key advantages	Simplest to operate. Lowest O&M costs. More cost-effective than RO for seawater with TDS > 46 parts per thousand. Low TDS and boron product water. Source water quality has limited effect on performance.	Lower energy demand than MSF. Uses less chemicals than MSF and RO. Cost of water comparable with RO for large plants. Low TDS and boron product water.	No need for steam. Lowest total energy use. Lowest capital and water production costs. Discharge does not create thermal pollution.	Lower capital costs. Lowest RO energy use. Lowest RO production cost. Second-pass RO system not needed.
Key disadvantages	Highest energy use. Highest thermal discharge footprint.	More complex to operate than MSF. Higher energy use than RO.	Highest O&M costs. Most complex operation. Reliability sensitive to source water quality.	Most complex desalination plant configuration.

Note: O&M, operations and maintenance; RO, reverse osmosis; TDS, total dissolved solids; MSF, multistage flash distillation.
Source: World Bank 2017b.

Reverse osmosis is the preferred desalination technology in other parts of the world. Potable water supplies in Singapore and parts of Spain, Australia, and the United States rely primarily on reverse osmosis (World Bank 2017b).

Recycled water is also part of the solution to closing the supply-demand gap. As urban water demand grows in response to population expansion, the volume of wastewater will also increase. Traditionally, the public sector collected all wastewater and treated and recycled or disposed of it, normally in the sea. The growing trend in the world's arid regions is for some users to retain their wastewater, treat and recycle it, and use it internally for industrial processing and landscaping. The recycled wastewater subsector is the most challenging given the magnitude of the problems needing resolution, the work that needs to be done, and the costs of doing it. Figure 4 shows the level of wastewater collection in the GCC countries and the level of treated wastewater that is recycled. Although some GCC countries collect more than half of their wastewater, they

FIGURE 4 Collected and Recycled Wastewater as a Percentage of Wastewater Produced

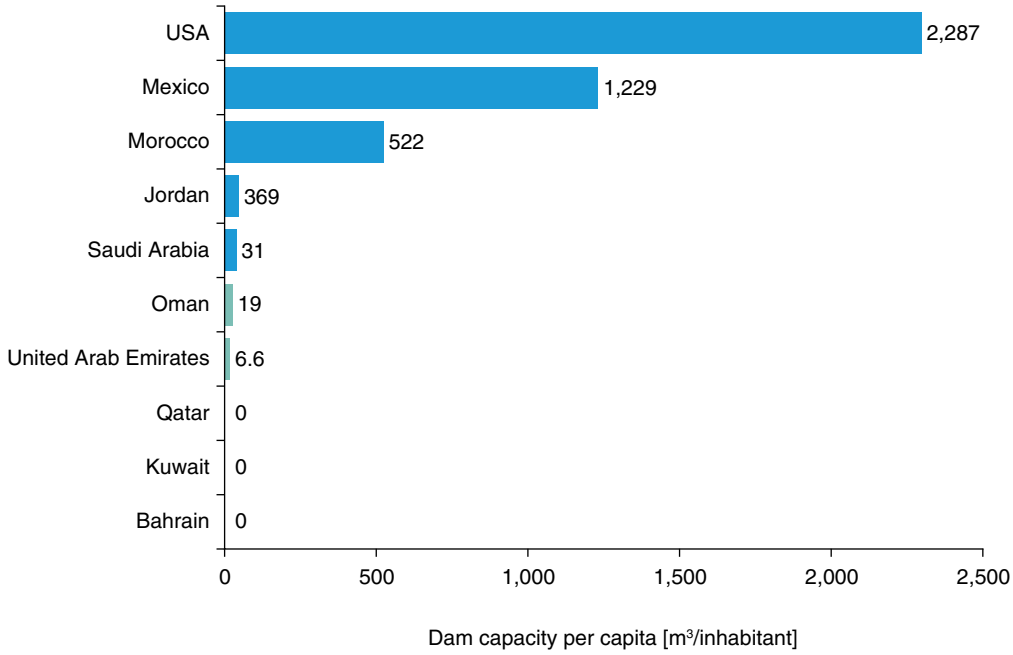


Source: World Bank 2017b.

recycle only half of this collected wastewater, missing the opportunity to create an additional water supply.

Another alternative and possibly lower cost option to augment water supplies is to use groundwater aquifers as reservoirs. This water management solution, often referred to as managed aquifer recharge,[2] could significantly improve water security by increasing water storage capacity, which is currently very low in the GCC countries (Figure 5). Water policy innovations are needed for managed aquifer recharge to work. First, conjunctive use planning of recycled water and groundwater resources needs to be in place. Second, regulation of groundwater use and groundwater and associated land zoning, as appropriate, are needed to establish a groundwater reserve and ensure that groundwater resources remain pollution free. For managed aquifer recharge to become part of the solution, groundwater needs to be abstracted at sustainable levels.

FIGURE 5 Dam Capacity per Capita in the Gulf Cooperation Council and Other Countries



Source: World Bank using Food and Agriculture Organization Aquastat data.

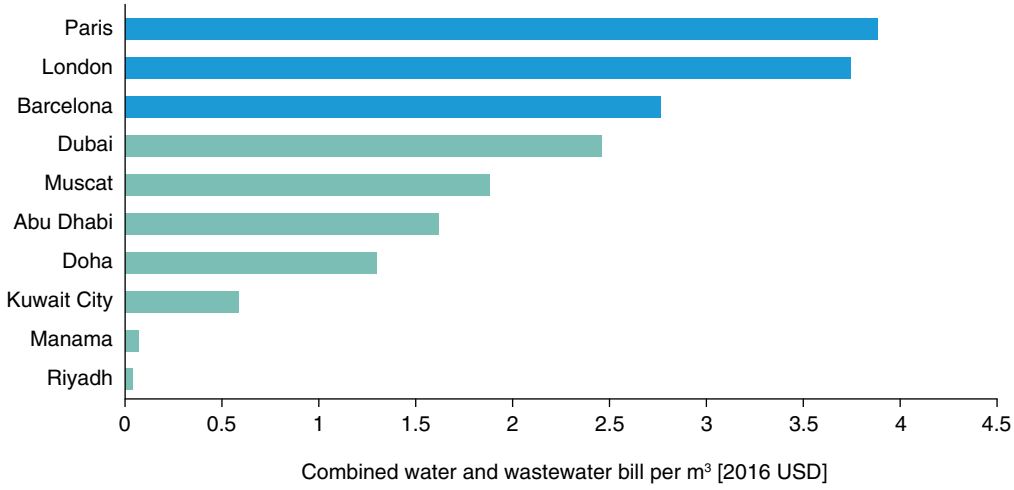
[2]Managed aquifer recharge consists of intentionally recharging aquifers (e.g., via pumping or infiltration basins), which can be done for different purposes: storing water and preventing evaporative losses, improving water quality, sustaining groundwater levels.

In the context of a highly subsidized supply of gas for power generation and low consumer tariffs, it will continue to be difficult for solar-based desalination, wastewater recycling, and managed aquifer recharge options to compete with fossil fuel-based desalination options. A detailed strategic plan with dated targets and an approved list of incentives, including auction or feed-in tariff-based policies, priority in dispatch, and other conditions, may be needed to attract more participation and investments from the private sector.

2.3. Water Service Delivery and Financing

Despite this challenging water resource situation, water tariffs are very low in some GCC countries. Low water tariffs indicate that water utilities have very low cost recoveries and rely on government subsidies to finance their operations. For example, high-income GCC domestic water users pay less for their household water than high-income citizens of Paris, Barcelona, and London (Figure 6). The difference is even more striking between the GCC countries, with water users in Abu Dhabi paying about 50 times as much as water users in Riyadh, as shown in Figure 6. Overall, the Middle East and North Africa (MENA) region

FIGURE 6 Combined Water and Wastewater Bill per Cubic Meter in Selected Gulf Cooperation Council and Other Cities



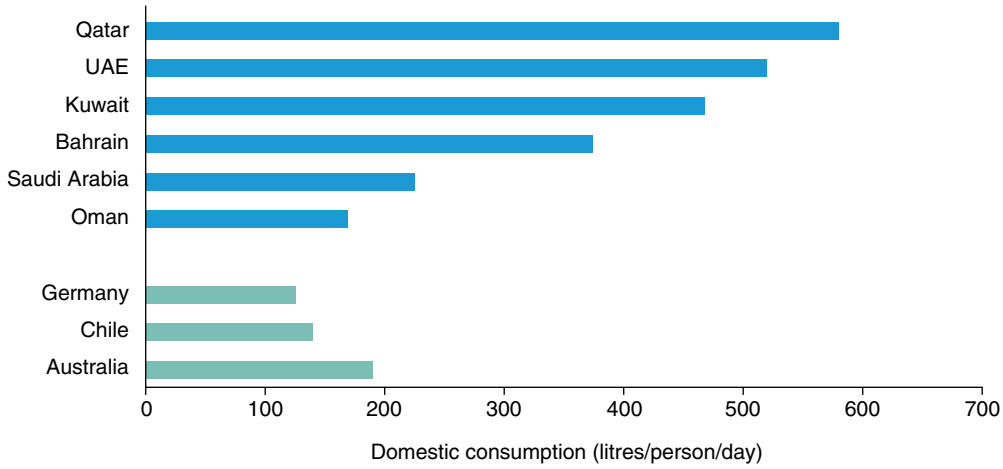
Note: Average water use varies according to household size and water utility and is here assumed to be 15 cubic meters per month.
Source: Global Water Intelligence Water Tariff Survey 2016 using exchange rates on July 1, 2016.

spends a higher proportion of gross domestic product (about 2%) on water subsidies than any other region in the world (Kochhar et al., 2015).

High water subsidies and low water tariffs undermine incentives for efficient water use and encourage overexploitation. Part of the water challenge in the GCC countries lies in managing demand and putting the right water-saving incentives in place. The GCC countries are reported to have the greatest domestic per capita water consumption in the world, as analysis of national domestic per capita consumption suggests (Figure 7). These are politically sensitive issues, yet it is essential that they be addressed to improve water service delivery and water resource productivity. The more energy and water are subsidized, the higher the demand is as their true cost is externalized.

Non-revenue water also challenges the sustainability of the water service delivery model in the GCC countries. Levels of non-revenue water[3] in some GCC countries stand well above median values for other high-income countries (Figure 8). High levels of non-revenue water can be reduced using appropriate

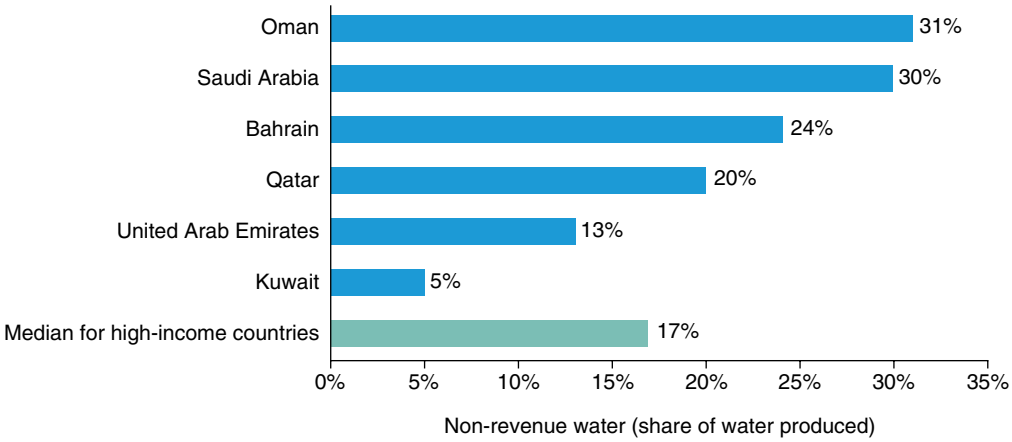
FIGURE 7 Domestic Water Consumption in the Gulf Cooperation Council (GCC) and Selected Countries



Note: Estimates should be used with caution because domestic consumption is defined and calculated in different ways from country to country and between different water suppliers in the same country.
Source: Al Zubari 2017 for the GCC countries, International Benchmarking Network for Water and Sanitation Utilities for Australia and Chile, and Environment Agency for Germany.

[3]Non-revenue water is water that has been produced and is "lost" before it reaches the customer (through leaks, theft, or legal use for which no payment is made).

FIGURE 8 Non-Revenue Water in the Gulf Cooperation Council and High-Income Countries



Source: PwC 2014 and International Benchmarking Network for Water and Sanitation Utilities.

management and technical actions. The "retrieved" water can then be used to meet increasing demands, deferring investments in expensive supply-side options.

2.4. Demographic Growth, Climate Change, and Fiscal Challenges

Investments in policies, infrastructure, and reforms are required to address demographic growth, climate change, and other uncertainties such as energy prices. Projected increases in water demand from population growth, especially in urban areas, could lead to further unregulated exploitation of groundwater resources. Demographic growth will raise supply costs and costs to collect and treat wastewater, posing fiscal challenges.

Climate change effects on the water sector are going to be significant. The World Bank estimates that water scarcity related to climate change might lead to 6 percent to 14 percent reductions in annual GDP growth in the region (World Bank Group 2016). Climate change will bring about higher temperatures, leading to increased water requirements for agriculture. It will also increase coastal flood risk and cause more extreme rainfall events (Verner 2012), leading to flash floods, such as the 2009 floods in Jeddah, Saudi Arabia, which brought losses of US$1.36 billion (World Bank 2014). All these effects will pose additional challenges to the planning and operation of water systems, requiring

novel management and decision-making tools to support water sector investments in the face of climate change.

3. Taking the Water Security Agenda Forward

The World Bank can support the GCC countries in addressing the common set of challenges and opportunities to achieve water security highlighted in the previous section, using its global experience, sectoral expertise, and country context knowledge to support a range of policies, from sustainable groundwater management to utility performance improvement. The World Bank Water Global Practice's expertise and experience that are of relevance to GCC countries cover seven major areas. The World Bank Water Team has analytical expertise in supply and sanitation, institutional reform, public-private partnerships (PPPs), behavior change, and finance, among other specializations. The World Bank uses its global experience and its long-term presence in the region to provide GCC countries with a "one-stop" window for advisory services.

This section proposes broad recommendations to take the water security agenda forward in the GCC and highlights areas where the World Bank can provide support, with the following overarching objectives:

1. Managing a diverse set of conventional and nonconventional water resources for security and sustainability

2. Delivering better water services with accountability and financial sustainability

3.1. Managing a Diverse Set of Conventional and Nonconventional Water Resources for Security and Sustainability

Managing water resources in a cost-efficient, resilient way is a key element of water security. Water resource management aims to provide reliable supplies amid uncertainties related to supply availability (rainfall, groundwater), demand (increasing population), and energy (costs of desalination) at a reasonable cost. Different measures exist to achieve these objectives, including diversification of water supplies, storage, and contingency planning. Identifying the most cost-effective and resilient water management strategy requires understanding the extent to which data and information on water and economic variables are available and the extent to which governance, incentives, and institutions are aligned to make change happen.

One of the big challenges of water management in the GCC is the availability of data to inform policies. Data on water-related variables, such as availability and use, and economic-related variables, such as cost of option, are often lacking. Effective assessment of the availability, in quantity and quality, and use of water resources is a first step toward achieving sustainable water resource management. This includes monitoring of surface and groundwater resources, actual rates of water use, and wastewater and effluent discharges. It also includes assessing how these water-related variables might change in the future as a result of increasing population, food security concerns, or climate change and developing responses that are proportionate to these changes (Box 1).

Economic and financial assessments are key to sustainable water resources management. Water supply options are often selected without consideration of cheaper alternatives, leading to financially unsustainable and economically costly outcomes. Water resource planning needs to transparently account for economic and financial costs when comparing options. This includes costing a range of supply-side and demand-side options, in particular for nonconventional supplies such as desalination and wastewater reuse. Fully exploiting wastewater reuse means gaining a full picture of the costs and benefits, identifying potential uses, and accounting for the benefits of improved treatment in terms of water quality. The World Bank has experience in developing economic and

BOX 1 Confronting Uncertainty in Water-Related Projects

The World Bank has developed a practical risk-based tool for the management of climate risks in water projects. This tool, the Decision Tree Framework, provides resource limited project planners and program managers with a cost-effective, effort efficient, scientifically defensible, repeatable, clear method for demonstrating the robustness of a project to climate change. The framework adopts a "bottom-up" approach to risk assessment that aims at a thorough understanding of a project's vulnerabilities to climate change in the context of other nonclimate uncertainties (e.g., economic, environmental, demographic, political). It helps to identify projects that perform well across a wide range of potential future climate conditions, as opposed to seeking solutions that are optimal in expected conditions but vulnerable to conditions deviating from the expected. The tool has been used to help Lima's water utility plan for the future, saving the city more than $600 million in infrastructure investments that would have not increased reliability under climate change.

financial assessments of water sector strategies, for instance in Tunisia, where it has supported efforts to preserve and better manage water resources. The World Bank has provided technical assistance and financial support for a range of water-related projects: renewal of water supply infrastructure, making better decisions relating to integrated water resources management, and providing environmentally safe recycling for wastewater.

Institutional coordination is needed to develop consensus and implement policies for sustainable water resources management. Global experience shows that to achieve water management objectives, mechanisms to develop consensus across sectors and geographic jurisdictions need to be in place. This is especially important when shifts in intersectoral water allocation are being planned, requiring an understanding of the relationships between the objectives of the water sector and the priorities of the other sectors. The World Bank has significant global experience in improving intersectoral coordination and supporting intersectoral reforms. In Morocco, the World Bank is working with the Office National de l'Electricité et de l'Eau Potable (a recently merged government-owned water and power utility) to identify synergies and evaluate trade-offs between energy and water resource planning. In China, the World Bank energy and water teams are collaborating with the National Energy Agency to incorporate potential water constraints in their upcoming 5-year energy plan (2016–2020).

A water sector strategy will be useful not only to provide detail, but more importantly to coordinate the actions and decisions of the government agencies that need to work together to achieve the water sector's objectives. For instance, achieving security of water supply requires a set of integrated, consistent decisions on water conservation, water pricing, agricultural policies, groundwater protection, use of treated sewage effluent, construction of new desalination plants, and development of strategic storage reservoirs. Thus, coordination is needed to achieve water security and improve outcomes for the people, the economy, and the environment (Box 2). The World Bank has supported Brazil's National Water Agency and the Ministries of Environment, National Integration, and Cities to develop a countrywide water sector strategy. The engagement supported activities regarding water resource management planning, irrigation and disaster risk management, water supply and sanitation, integrated planning and project management, and evaluation.

Water governance issues and incentives—in particular arrangements to manage water withdrawals and tools to influence intersectoral water allocations—are central elements of sustainable water management. Understanding the policy and economic tools and incentives, such as quotas and pricing, available for

BOX 2 The World Bank's Water Security Diagnostic

The World Bank has developed a water security diagnostic tool that examines status and trends related to water resources, water services, and water-related risks, including climate change, transboundary waters, and virtual water trade. The tool helps countries to determine whether and to what extent water-related factors affect the people, the economy, and the environment and whether and to what extent water-related factors provide opportunities for development and well-being. The tool is being employed in Pakistan to inform the process of developing an implementation framework for the Pakistan National Water Policy.

managing short-term adaptation and long-term shifts in water withdrawals in response to water availability helps in managing water resources for long-term sustainability. Alongside this understanding there is a need to develop governance arrangements for surface and groundwater resources in terms of implicit and explicit rights and expectations for water withdrawals and collective management. In Morocco, the World Bank is supporting the Om Er Rbia River Basin Agency to address the challenges of groundwater management. The activity supports regulation of the management of overexploited aquifers by facilitating agreements among stakeholders on the use of groundwater.

3.2. Delivering Better Water Services with Accountability and Financial Sustainability

In many GCC countries, the management and delivery of water supply and sanitation services are changing. After decades of government-run utilities, institutional roles are realigning, and private actors are gradually emerging. To ensure better outcomes for users, this realignment needs to focus on accountability and financial sustainability, as well as clearly define institutional roles and sector performance indicators.

Accountability is the first element needed to deliver better water services. Accountability is a condition whereby the functional roles and responsibilities are clearly defined along the water supply chain (bulk water supply, storage, conveyance, treatment, delivery to water users, wastewater collection, treatment, recycling). When areas of significant overlap or blurred responsibility exist,

accountability may be diminished. This in turn worsens the customer orientation of service providers, resulting in overall poor performance and experienced services.

The second element needed to improve service delivery is financial sustainability. Lack of cost recovery is a challenge in some GCC countries, where average service costs are much greater than average service fees. Cost recovery is essential to ensure the long-term sustainability of water services and appropriate levels of investment in the operation and maintenance of water delivery systems—not just in infrastructure but also in training staff. Designing an effective tariff system helps to meet social development goals by supporting the expansion of services to underserved households. Effective tariff systems also improve overall performance by reducing utilities' dependence on government subsidies and thus increasing their customer orientation. Global experience shows that it is possible to design multitier tariffs that moderate the effects of price increases and allow for the gradual removal of subsidies to water service providers (Vagliasindi 2013).

Achieving accountability and financial sustainability requires understanding of the options available for institutional reform, including moves toward stronger private sector-led service delivery under effective public-sector oversight. As a first step, this entails identifying the priority areas of service delivery where government wishes to improve performance. Second, the alternative institutional structures available for service delivery should be considered alongside the advantages and disadvantages of different bundling and regulatory options. Third, when a model for private sector involvement has been identified, there is a need to clearly define performance targets (e.g., network reduction losses, improvement of service quality) and ascertain what is required from government to maximize the value of private contracting.

Whereas considerable attention is being paid to the role of the private sector in supporting service delivery in the GCC, the regulatory and oversight functions required to ensure successful private sector engagement have often been overlooked. Global experiences show that private sector involvement in service provision can improve the level of service that users receive and utility performance. This depends on the existence of the right incentives and oversight to review and reward performance and of a formal mechanism or regulatory body capable of setting standards and holding private service providers accountable for their performance.

Whether institutional actors involved in service delivery are publicly or privately managed, performance benchmarking is needed. Benchmarking in terms of financial and quality-of-service indicators is key to identify areas that need improvement. This calls for performance indicators that are well understood, measured, and evaluated and for a performance assessment that is transparent and conducted by relevant institutions. In Mexico, the World Bank supported the Mexico Water Utilities Efficiency Improvement Project, which promoted the use of standardized performance indicators at scale that the National Water Commission could track and aggregate. The project was aligned with the government's vision of reducing sector subsidies by improving the quality of existing services through management and efficiency gains and resulted in decreases in non-revenue water and increases in the commercial efficiency of service providers.

The World Bank Group works to help governments set explicit targets to track improvements in service delivery, including performance indicators that can be enforced through contracts. When countries decide to involve a private company, the World Bank Group works to ensure an open and transparent selection process and that appropriate oversight arrangements are in place to manage the private entity (Box 3). The World Bank Group also helps governments assess and strengthen regulatory frameworks to ensure accountability and manage risks. There is strong potential to replicate successful management contracts in Saudi Arabia (Jeddah, Riyadh, Mecca) and Oman to improve the performance of water utilities. The challenge under this approach will be to accompany governments in instituting in parallel the necessary institutional reforms and policy changes, including subsidy reduction and reform and changes in tariff structure reflecting the costs of service provision. This would require overcoming the high political pressure to keep water tariffs below true cost, which makes investments in the water sector more challenging. The new performance-based contracts developed in Tunisia for sewerage services are a good illustration of the potential of this approach in situations in which tariffs do not cover investment costs. In the broader context and in situations in which governments may not be interested in the short term in putting in place PPP schemes, technical assistance to improve efficiencies of public utility offtakes (leakage, collection rates), foster corporatization, and improve the creditworthiness of public utilities will help gradually create an environment in which new opportunities for PPP projects can arise. This will also entail increasing the capacity of governments and public utilities to understand PPPs in the water sector and how to properly design and manage contracts with the private sector.

BOX 3 Leveraging the Private Sector with Public-Private Partnerships to Develop Nonconventional Water Supplies

The World Bank has global experience in leveraging financing instruments to achieve water security. These instruments include build-operate-transfer (BOT) and design-build-operate (DBO) schemes for desalination and wastewater treatment plants. Two projects illustrate this approach. One example is the New Cairo Wastewater Treatment Plant BOT scheme (2009), in which the IFC's role as transaction advisor was essential to reassure potential investors (this was the first public-private partnership (PPP) in Egypt) and design a contract that included the necessary guarantees for the project to be bankable. Another is the Red Sea–Dead Sea project, which involves the construction under a BOT scheme of a desalination plant in Aqaba, Jordan, to provide desalinated water for Aqaba and the south of Israel (under a water trading agreement whereby Israel will provide water to the West Bank and north of Jordan) plus the construction of a pipeline between the desalination plant and the Dead Sea to carry the brine and help limit the evaporation of the Dead Sea. The Bank is providing ongoing support to the government of Jordan as the sole representative of donors in the tripartite committee between Jordan, Palestine, and Israel, and the government of Jordan has requested the Bank to provide a $100 m Partial Risk Guarantee (PRG) for the desalination BOT. These projects can provide an opportunity for the governments to switch to a more integrated approach to water resource management—for instance, by promoting the combination of construction of new desalination plants with programs to reduce water losses in distribution, thereby promoting integrated urban water management. In the case of irrigation DBO operations and maintenance schemes can be tested to improve service reliability for farmers, allowing them to switch to higher value crops and provide new employment opportunities for poor people in rural areas.

Alongside providing support to engage with the private sector, the World Bank also has experience supporting fiscal reform programs to improve service delivery. In Jordan, the World Bank is working with the government to improve financial viability and increase efficiency gains in the water sector. These gains will offer public electricity and water services to Jordanians in a more sustainable manner.

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