

# Making the Most of Scarcity



MENA DEVELOPMENT REPORT

Making the Most of Scarcity  
Accountability for Better Water  
Management Results in the  
Middle East and North Africa



**THE WORLD BANK**

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1818 H Street NW  
Washington DC 20433  
Telephone: 202-473-1000  
Internet: [www.worldbank.org](http://www.worldbank.org)  
E-mail: [feedback@worldbank.org](mailto:feedback@worldbank.org)

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# Preface

Water—the resource itself as well as the irrigation and water supply services derived from it—is important for every country. It is fundamental to human health, wellbeing, productivity, and livelihoods. It is also essential for the long-term sustainability of ecosystems. Here, in the Middle East and North Africa (MENA) region, the most water-scarce region of the world, good water management matters even more than it does elsewhere. Water management problems are already apparent in the region. Aquifers are over-pumped, water quality is deteriorating, and water supply and irrigation services are often rationed—with consequences for human health, agricultural productivity, and the environment. Disputes over water lead to tension within communities, and unreliable water services are prompting people to migrate in search of better opportunities. Water investments absorb large amounts of public funds, which could often be used more efficiently elsewhere. And the challenge appears likely to escalate. As the region’s population continues to grow, per capita water availability is set to fall by 50 percent by 2050, and, if climate change affects weather and precipitation patterns as predicted, the MENA region may see more frequent and severe droughts and floods.

Since ancient times, the countries of the MENA region have adapted to their water conditions—aridity, high variability, and high dependence on water that crosses international borders. The region spawned some of the world’s most accomplished civilizations based on both farming and trade. To do so, they developed complex organizational structures and elaborate technologies to channel water to crops, to protect their populations from floods, to store water in times of drought, and to govern access to water points. With the rapid population and economic growth of the twentieth century, plus the availability of modern construction techniques, governments began investing in infrastructure to secure supplies and to provide water supply and irrigation services. Now, however, as the region’s people and economies require increasing volumes of water and more complex water services, as they generate increasing volumes of pol-

lution, and as they take advantage of new technologies to tap into groundwater for drinking and agricultural purposes, they are overwhelming the capacity of regulators to manage the resource effectively.

Clearly, something has to change. Water professionals across the region recognize the need to focus more on integrated management of water resources and on regulation rather than provision of services. The region has seen some major advances, but on the whole, progress toward better management has been slow. Sluggish water reforms are not unique to the MENA region. Indeed, most countries in the world share the problem. However, given the resource challenge, the cost of inaction is likely to be higher in this region than elsewhere. The urgency of accelerating the progress seen to date is absolute.

Why has progress been so slow? One important reason is that countries have delayed tackling many important water reforms, such as reducing subsidies that encourage inefficient water use. The changes have been too politically unpalatable; in part because accountability to the public has been weak. The voices of some groups—women who carry water from standpipes, children who get sick from poor sanitation, environmentalists who campaign to make water management more sustainable—are not sufficiently heard in the decision-making processes. Another reason is that some of the most important factors affecting water outcomes lie outside the responsibilities of traditional irrigation, water supply, and environmental agencies. Factors such as trade, energy pricing, real estate, credit, and social protection, have a real impact on farmers' decisions about what to grow and how to irrigate and on investors' decisions about development of new commercial schemes. If policies outside the water sector give farmers and businesses little incentive to use water well, it is not possible to tackle the problem through water sector reforms alone. Water management is not just a sectoral issue, to be dealt with by the region's excellent irrigation, water supply, and water storage technicians. Rather it is a shared *development* challenge, one that requires attention from a range of perspectives.

This report addresses the issues of the political economy of water reform and stresses the importance of “beyond the sector” policies. It analyzes the factors that drive the political economy of water reform and shows how some of them are changing in the MENA region in ways that could open up opportunities for water reform. For example, the report discusses how the challenges and opportunities of the increasingly global economy may change the dynamics of water policy and how the changing demographics of the region (such as rapid urbanization, and increased education levels) might affect demand for water services. The report suggests that accountability to citizens and users of water services will be key for allowing countries to act when opportunities arise and to

pass reforms that lead to real improvements in water resources and services. By emphasizing the importance of factors external to the traditional water sectors, the report reminds the region's nonwater actors that they, too, play a key role in making best use of scarce water resources and expensive infrastructure investments and in maintaining resources for future generations.

The report suggests that MENA can meet its water management challenge. People have a very real need for water for drinking and for household uses. This domestic use, however, accounts for less than ten percent of a typical country's water consumption. Every country in the region has enough water resources to meet domestic needs, even accounting for the larger populations expected in the future. And policy decisions can help improve the way drinking water and sanitation services are delivered so that people get the services they need. The bulk of a typical country's water consumption goes to agriculture. This demand depends on such factors as the structure of the economy, people's consumption preferences, agriculture and trade policies, and how efficiently water is used. These factors can be influenced by policy choices. Similarly, countries can protect their environmental quality with policy and institutional choices. The necessary policy changes are far from easy. Yet they are essential, and, when coupled with improvements in accountability to the public, water resources and services will support communities and promote economic development and bring benefits to the entire population.

We hope that this publication will encourage a broad spectrum of actors to think of their roles in improving water management. Water is everyone's business, which means that actors inside and outside the sector need to work together to ensure that policies and incentives are as effective as they can be. By highlighting important areas of progress in the region—cases in which governments have made themselves more accountable to the public; where utilities that have begun providing high-quality services that users are willing and able to pay for; schemes that have decentralized responsibility to users of water services—we hope to encourage a rapid spread of these pockets of success. In addition, by emphasizing that policy changes are likely to be most successful reforms when they adapt to the realities of the political economy, we hope to encourage systematic analysis of the drivers of change within the reform planning process.

DANIELA GRESSANI

VICE PRESIDENT

THE MIDDLE EAST AND NORTH AFRICA REGION

THE WORLD BANK





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# Acronyms and Abbreviations

AHD	Aswan High Dam
ALRI	acute lower respiratory infection
AMS	Aggregate Measure of Support
Aus/NZ	Australia, New Zealand
bcm	billion cubic meters
bn	billion
CEDARE	Center for Environment and Development for the Arab Region and Europe
EAP	East Asia and Pacific region
ECA	Europe and Central Asia region
EEIS	Egyptian Environmental Information System
EU	European Union
FAO	Food and Agriculture Organization of the UN
GDI	Global Development Indicators
GDP	gross domestic product
ICARDA	International Center for Agricultural Research in the Dry Areas
ICBA	International Center for Biosaline Agriculture
LAC	Latin America and the Caribbean region
LE	Egyptian pound
MENA	Middle East and North Africa region
NAFTA	North American Free Trade Agreement
NBI	Nile Basin Initiative
NGO	nongovernmental organization
O&M	operations and maintenance
OECD	Organisation for Economic Co-operation and Development
SA	South Asia region
SONEDE	<i>Société Nationale d'Exploitation et de Distribution des Eaux</i> , Tunisia
SSA	Sub-Saharan Africa

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UAE	United Arab Emirates
UNESCO	United Nations Educational, Scientific, and Cultural Organization
US\$	United States dollar
WBG	West Bank and Gaza
WDI	World Development Indicators
W-Europe	Western Europe
WFD	European Union Water Framework Directive
WRR	water requirement ratio
WUA	water user associations