



# Water Integrity in the Middle East and North Africa region

Synthesis report of Water Integrity Risk Assessments in Jordan, Lebanon, Morocco, Palestine and Tunisia





This report was completed as part of the Regional Capacity Building Programme on Water Integrity for the MENA region, a multi-year project supported by the Swedish International Development Cooperation Agency (Sida) and implemented by the UNDP Water Governance Facility at SIWI (WGF) in collaboration with Global Water Partnership – Mediterranean (GWP-Med), and International Union for Conservation of Nature – Regional Office of Western Asia (IUCN ROWA). Each of the national risk assessments that are synthesized in this report were produced by American University of Beirut, Lebanon; Al-Quds University, Palestine; Jordan University of Science and Technology, Jordan; CERTE-Centre for Water Research and Technologies, Tunisia; and Al Akhawayn University, Morocco. The contents of this report and its recommendations do not necessarily reflect the positions of Sida, the government of Sweden and the national project partner institutions.

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# Foreword

The Middle East North Africa (MENA) region has always been challenged with relatively scarce water. Governments can and must manage water resources more sustainably to support the livelihoods of their people and maintain healthy ecosystems. Corruption in the water sector impedes that goal. It squanders scarce and precious resources and results in people losing their basic right to have access to clean water and sanitation. Building integrity within the institutions and governance systems for water plays an essential role to limit corruption and ensure that resources are managed effectively and equitably for everyone.

This is why the UNDP Water Governance Facility at SIWI (WGF) works in collaboration with the Global Water Partnership – Mediterranean (GWP-Med), and the International Union for Conservation of Nature – Regional Office of Western Asia (IUCN ROWA) to implement the Regional Capacity Building Programme on Water Integrity for the MENA region. The programme, supported financially by the Swedish International Development Cooperation Agency (Sida), aims to improve transparency and accountability practices in water resources management by working with targeted water stakeholder groups at different governance levels across the region. In the period 2014-2016, 374 participants were trained to identify and address integrity risks and supported to develop integrity management action plans. Participants with the most promising action plans

(25 in total), currently take part in a mentoring programme where they receive continued training and support for their implementation.

The present Regional Synthesis Report is based upon extensive national water sector integrity risk assessments made in Jordan, Lebanon, Morocco, Palestine, and Tunisia. It also incorporates key lessons learned from the regional capacity building programme. The national assessments highlight priority areas of risk to maintain integrity within water sector institutions and provide a foundation for relevant stakeholders at all levels to take action to prevent corruption.

The findings of this Report provide useful insights to guide and support action for promoting integrity in the water sector across the region. It identifies several common challenges faced in the MENA region and highlights needed actions to address them; for example, improving the evaluation of water governance processes, harmonization of legal frameworks, investment in capacity building and systematic interventions to incentivize individuals and institutions to act upon integrity principles. The Report provides a valuable contribution for advancing our work in the region in this field. We greatly look forward to building upon the strong commitment of the project partners to promote improved governance and sustainable, equitable and effective management of water resources in the region.



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# Executive summary

This Synthesis Report provides an overview of the main water integrity risks in Jordan, Lebanon, Tunisia, Morocco and Palestine. It also identifies the capacity gaps that must be addressed to reduce these risks. Based on these findings, a set of policy recommendations to improve national water governance and integrity in the sector are presented. The report is based upon the national water integrity assessments undertaken as part of the Regional Capacity Building Programme on Water Integrity in the Middle East and North Africa. The assessments included literature reviews, case studies, interviews and diverse discussions with relevant actors in the water sector. Although the degree and manifestations vary among countries, each face serious integrity risks at all levels of water governance. Priority areas for capacity building to reduce corruption risk and enhance integrity across the region include:

- Policy making
- Legislation and regulation
- Planning and budgeting
- Enforcement of regulations
- Human resources management
- Procurement and public works
- Payment for services

Measures to enhance integrity and build capacity within key institutions at all levels should prioritize the following areas for each of these major stakeholder groups:

**Civil society** | Educate civil society on their rights, roles and responsibilities to:

- Engage in policy making, budgeting and planning processes
- Understand access to information laws, relevant water legislation and water licensing processes
- Perform community monitoring and evaluation of water projects

**Mid-level managers** | Provide training and improved oversight to managers in:

- Financial analysis of projects
- Monitoring and control procedures in contract management
- Control of illegal connections
- Customer complaint mechanisms
- Use of performance indicators

**Public officials at national level** | Develop mechanisms for better transparency and accountability in:

- Planning and budgeting
- Recruitment processes
- Performance evaluation of employees

**High-level decision-makers** | Review and develop measures for transparency and accountability for water governance, with focus on:

- Public administration
- Compliance with legal provisions
- Application of anti-corruption tools and use of indicators to monitor and measure corruption

Table 1 presents a summary of the specific weaknesses identified for key stakeholder groups targeted by the programme (civil society, public officials/water managers, and high level decision makers) that can pose risks for breaches of integrity in the water sector.

The report concludes with regional recommendations, and informs on how the recommendations will contribute to national and regional policy processes: through national high-level meetings, a High -level Learning Summit, and through inputs to the water and governance agendas of the Union for the Mediterranean and the League of Arab States. Looking ahead, it emphasized the importance to continue investment in water integrity and respond to requests to upscale the work conducted by the regional and national programme partners. The soil is now fertile for water integrity to plant deep roots in the MENA region. Now is the time to re-double our efforts.

**Table 1: Priority weaknesses in water governance for key stakeholder groups that pose integrity risks**

<b>Civil society</b>
Sub-categories: Non-Governmental Organizations (NGOs), Citizens Associations, Farmers, Media
<ul style="list-style-type: none"> <li>• Low participation by civil society, lack of transparency in policy formulation, lack of formal Water User Associations and weak advocacy/watchdog skills among media, and NGOs</li> <li>• Lack of awareness among citizens on their rights and responsibilities related to water, illegal water connections and tampering with meter readings</li> <li>• Breach of water licensing regulations by farmers, including illegal wells and tampering with meters, leading to over abstraction</li> <li>• Little experience among media in reporting on water and corruption, and questionable independence of media</li> <li>• Exclusion of women from dialogue about water</li> </ul>
<b>Mid-level watermanagers and public officials</b>
Sub-categories: Utility Operators, Private Contractors, Regional and Local Authorities; as well as Regulators, Planners, Controllers, and Anti-corruption professionals at the National Level
<ul style="list-style-type: none"> <li>• A closed culture based on patronage networks, resulting in preferential treatment of contractors and inflated prices in tendering and procurement processes</li> <li>• Poor human resource management: Overstaffing, low staff integrity, insufficient job descriptions</li> <li>• Nepotism in recruitment processes leading to appointment of non-qualified personnel</li> <li>• Women are sometimes not respected as equals and their work, ideas and contribution are overlooked or downplayed</li> <li>• Poor customer service of water authorities</li> <li>• Lack of accountability mechanisms and weak coordination between government bodies</li> <li>• Unclear budgeting, planning, budget allocation and budget management</li> <li>• Lack of feasibility studies for projects</li> <li>• Little transparency and low public involvement in decision-making</li> </ul>
<b>High-level decision-makers</b>
Sub-categories: Members of Parliament, Director Generals at Line Ministries, Heads of Anti-corruption Agencies, Auditor Generals etc.
<ul style="list-style-type: none"> <li>• Lack of transparency in formulating policies</li> <li>• Unclear basis for allocation of water rights between different uses</li> <li>• Weak monitoring of implementation of legislation and weak inspectorates</li> <li>• Partisan capture of seats due to patronage, bribing of communities/regions to gain political support and putting their own vested interests before the public interest</li> <li>• Lack of knowledge of corruption e.g. where it occurs, impacts on public bodies and how to prevent and manage it</li> <li>• Exclusion of women from high-level positions</li> </ul>

## Key recommendations

1. Evaluate water governance processes at the national-level to identify inefficiencies, excessive bureaucracy and accountability gaps.
2. Propose measures to streamline bureaucracy to improve efficiency, reduce accountability gaps and improve definition of roles between authorities.
3. Form independent agencies to regulate, monitor and oversee integrity, transparency and accountability in water institutions.
4. Harmonize legal frameworks to clearly delineate roles and mandates of the different agencies, ministries and government bodies in the implementation of laws to avoid overlap and clarify any confusion over responsibilities.
5. Carry out comprehensive accountability assessments periodically to provide the basis for action plans at the local and national level.
6. Invest in capacity building with the proper institutions to establish and oversee fair, transparent and robust tendering procedures in the water sector. This includes special training courses for jurists and legislators on water related integrity risks.
7. Focus on corporate governance development of water managing institutions. Integrity Management Plans aiming at ensuring impartiality as a core value in all management processes should be enacted inline with capacity development interventions. Impartiality and fair treatment should cover external relations (e.g. with water users and service customers) and internal staff management (e.g. recruitment and promotion)
8. Build functional systems to incentivize integrity of leadership and register complaints for violations in water sector institutions. Voluntary peer-support networks for employees may be a component in this.
9. Create transparent web-based procedures for water governance processes where applicable, especially for licensing of wells and groundwater abstraction. Open-access datasets about water quality should be established and updated.
10. Promote measurable actions to increase access to high-ranking positions for female employees in the water sector (through mechanisms such as quotas) and measures to expand the role of women in decision-making in government and water organizations.

*Detailed capacity needs per country and target group and national policy recommendations for improving water governance are provided in the subsequent chapters of the full report.*

# Acronyms and abbreviations

ACC - Anti-Corruption Commission	MoEW - Ministry of Energy and Water
AMAN - Coalition for Accountability and Integrity	MoF - Ministry of Finance
ANPE - National Agency of Environmental Protection	MoH - Ministry of Health
APAL - Agency for the Protection and Management of Coastal Areas	MoIM - Ministry of Interior and Municipalities
AQU - Al-Quds University, Palestine	MoLG - Ministry of Local Government
AUB IFI - Issam Fares Institute for Public Policy and International Affairs at the American University of Beirut, Lebanon	MoPIC - Ministry of Planning and International Cooperation
AUI - Al-Akhawayn University in Ifrane, Morocco	MoT - Ministry of Tourism
AWARENET - Arab Integrated Water Resources Management Network	NGO – Non Governmental Organization
CACP - Central Authority for Corruption Prevention	ONAS - L'Office national de l'assainissement
CERTE - Centre for Water Research and Technologies, Tunisia	ONEE - National Office of Electricity and Water
CESE - Economic, Social, and Environmental Council, Morocco	OPG - Open Government Partnership
CGEM - General Confederation of Moroccan Enterprises	PA - Palestinian Authority
CIE - Inter-Ministerial Water Commission	PLC - Palestinian Legislative Council
CNE - National Environmental Council	PMU -Project Management Unit
CNRS - National Council for Scientific Research	PWA - Palestinian Water Authority
CoM - Council of Ministers	RBA - River Basin Authorities
CPPE - Provincial and Prefectural Commissions on Water	SAACB - Bureau of State Audit and Administration Control
CRDAs - Regional Offices for Agricultural Development	Sida -Swedish International Development Cooperation Agency
CRE - Regional Councils of the Environment	SONEDE - Société National d'Exploitation et de Distribution des Eaux
CSB - Civil Service Board	TICPI - Transparency International's Corruption Perception Index
CSEC - Higher Council for Water and Climate	UFM - Union for the Mediterranean
DGGREE - Direction Générale du Génie Rural et Exploitation des Eaux	UGTT - the Union Générale Tunisienne du Travail
DGRE - General Directorate of Water Resources	UN - United Nations
DPA - Provincial Directorate of Agriculture, Morocco	UNCAC - United Nations Convention Against Corruption
EIA - Environmental Impact Assessment	UNDP – United Nations Development Program
EQA - Environment Quality Authority	WAJ - Water Authority in Jordan
GWP-Med - Global Water Partnership – Mediterranean	WE - Water Establishment
INLUCC – National Instance for the Fight Against Corruption	WGF - UNDP Water Governance Facility at SIWI
INNORPI - Institut National de la Normalisation et de la Propriété Industrielle	WSRC - Water Sector Regulatory Council
IUCN ROWA - International Union for Conservation of Nature – Regional Office of Western Asia	WUA - Water User Associations
JUST - Jordan University of Science and Technology	
JVA - Jordan Valley Authority	
JWC - Joint Water Council	
LARI - Lebanese Agricultural Research Institute	
LCWMC - Lebanese Center for Water Management and Conservation	
Leb-PAC - Lebanese Parliamentarians against Corruption	
LGUs - Local Government Units	
LPCD - Litres per Capita per Day	
MDCE - Ministry in Charge of Water	
MENA - Middle East North Africa	
MIA - Ministry of Islamic Affairs	
MoA - Ministry of Agriculture	
MoA - Ministry of Agriculture and Marine Fisheries	
MoAE - Ministry of Agriculture and Environment	
MoE - Ministry of the Environment	



# Background on the Regional Water Integrity Programme

This report was completed as part of the Regional Capacity Building Programme on Water Integrity for the MENA region, a multi-year project supported by the Swedish International Development Cooperation Agency (Sida) and implemented by the UNDP Water Governance Facility at SIWI (WGF) in collaboration with Global Water Partnership – Mediterranean (GWP-Med), and International Union for Conservation of Nature – Regional Office of Western Asia (IUCN ROWA). The Arab Integrated Water Resources Management Network (AWARENET) is a supporting partner of the programme. In December 2014 the programme was politically recognised by the member states of the Union for the Mediterranean (UfM). The programme is implemented in Jordan, Lebanon, Morocco, Palestine, and Tunisia in cooperation with the following national partners in each country: Jordan University of Science and Technology (JUST); Issam Fares Institute for Public Policy and International Affairs (IFI) at the American University of Beirut (AUB), Lebanon; Al-Akhawayn University in Ifrane (AUI), Morocco; Al-Quds University (AQU); Palestine; and the Centre for Water Research and Technologies (CERTE), Tunisia.

The overall objective of the programme is to develop the capacities of water stakeholder groups at different governance levels in the MENA region. It aims to improve transparency and accountability practices in water resources management with focus on achieving the specific objectives shown below with four target stakeholder groups:

- Foster political dialogue and raise awareness on water integrity with **high level decision-makers**.
- Engage **national policy-makers and managers** to increase their knowledge of tools to combat illicit practices e.g. patronage/nepotism/cronyism, improve information flows and communication between decision-makers at different governance levels.
- Enable **mid-level managers and operational staff** and other public workers to apply integrity in their daily work and prevent corruption by promoting good practices and implementing integrity and compliance mechanisms.
- Support **civil society** actors and local leaders to demand transparency and ensure accountability in the management of water resources and services.

In these very broad target groups special efforts are made to engage young professionals and women.

The capacity development is done through consecutive and complementary activities. To date, a total of 374 participants from the five countries have been trained to identify and address integrity risks and supported to develop integrity management action plans. The participants that have developed the 25 most promising action plans now take part in a mentoring programme where they receive continued training and support. The programme further develops capacity through training courses that are held in conjunction with other major regional events as well as by sharing knowledge and experiences at meetings with national level stakeholders. It will advance water integrity on the political agenda of decision-makers and put the issue centre stage at a high-level forum during MENA-region Learning Summit in autumn 2017.

**About the editors and contributors** | This report was edited by Mufleh Al-Alaween, IUCN together with Maria Jacobson, Alice Jaraiseh and Josh Weinberg of SIWI. It includes substantive contributions from James Leten, SIWI, Pilar Avello, SIWI and Anthi Brouma, GWP-Med. Each of the national risk assessments that are synthesized in this report were produced by American University of Beirut, Lebanon; Al-Quds University, Palestine; Jordan University of Science and Technology, Jordan; CERTE-Centre for Water Research and Technologies, Tunisia; and Al Akhawayn University, Morocco. The authors of the national risk assessments are as follows. Jordan: Hani Abu Qdais, Fayez Abdulla, Silva Kerkezian; Lebanon: Nadim Farajalla, Zeinab Farhat; Morocco: Ahmed Legrouri, Jack Kalpakian; Palestine: Amer Marei, Yagob Eyad; Tunisia: Latifa Bousslemi, Sihem Benabdallah and Ahmed Ghrabi Hami Abu Qdais and Fayez Abdulla; Lebanon: Silva Kerkezian; N Farajalla and Z Farhat; Morocco: Ahmed Legrouri and Jack Kalpakian; Palestine: Amer Marei and Y Eyad; Tunisia: Latifa Bousslemi; Sihem Benabdallah and Ahmed Ghrabi.

# Methodology

In order to have a clear understanding of the capacity needs and the training required to meet the programme objectives, rapid water integrity risk assessments were performed in each country by the programme's national partners. These assessments were based on desk reviews of relevant literature followed by one national consultation workshop in each of the countries.

The desk study covered relevant international and national studies, and literature related to integrity and water governance. This provided an up-to-date picture of the national legal and institutional framework governing the water sector, including data on governance indicators such as corruption levels. It also mapped out relevant stakeholders in each country.

The national consultation workshops were conducted either as round tables or focus group discussions. They included key national institutions managing water resources, water users, regulatory and anti-corruption actors, water supply and distribution companies, water users associations, farmers, NGOs, media, students, women's associations, water consultancy companies and academic and research institutions. The objectives of the national consultation workshops were two-fold. First, they informed the participants about the programme, its objectives and activities; and secondly they let the participants identify and rank water integrity risks in their country, as well as identify the necessary capacity and training needs for each of the programme target groups.

Based on the findings of the national consultation workshops, in-depth semi-structured individual interviews were carried out face-to-face with representatives of each programme target group. This exercise validated findings from the workshops and collected further information for the assessments. Integrity risk areas were categorized according to the governance processes they related to, namely:

- Policy-making, legislation and regulation;
- Planning and budgeting;
- Enforcement of regulations;
- Human resources management;
- Procurement and public works;
- Payment for services.

Specific integrity risks were assessed under each of these governance processes, including the actors involved, causes and proposed solutions. Capacity development priorities to address each risk area are provided based upon these. A synthesis of the national water integrity risk assessments are found in the following chapters of this report, and the full reports are available at [www.watergovernance.org](http://www.watergovernance.org)



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# Water Integrity in the Middle East and North Africa Region

Chronic water stress is a problem that most MENA countries have in common. The issue is exacerbated by population growth and the impacts of climate change. However, water scarcity in the region is not only due to physical water shortage. Inadequate governance structures, high demand for water and a lack of trust between those sharing the water resources are also significant contributing factors.

Most MENA countries have developed comprehensive water laws and policies which typically have similar features and goals e.g. decentralization, increased role for the private sector, basin-wide management planning, better coordination of horizontal and vertical decision-making, and multi-stakeholder participation. While the policies are sound on paper, many problems prevent effective implementation. One example is the human right to water. Water as a human right has been acknowledged in many national constitutions. Despite this acknowledgement, poor resource management and insufficient oversight on integrity, transparency, accountability, and participation, impede the realisation of this human right. All these factors undermine effective governance of water in the region.

Effective governance of water resources and services requires broad and well-organized participation. Public and private sectors, civil society, academia and the media need to be meaningfully involved in order to drive change that will improve the lives of people who need it most. The general vision of good water governance is to achieve with equitable and sustained access to water, with structures to limit corruption, greed, dishonesty and wilful malpractice (WGF, 2009). To achieve more effective water governance it is necessary to create an enabling environment, which facilitates private and public sector initiatives that fit within the social, economic and cultural setting of the society (Jacobson et al., 2013). There is no single model for competent water governance. However, some basic principles and desirable features facilitate improved performance. One can describe water governance as competent when it is open and transparent, inclusive and communicative, coherent and integrative, equitable

and ethical, accountable, efficient, responsive, and sustainable (Rogers and Hall, 2003).

**Governance and integrity challenges in the MENA region** | Looking beyond the water sector, while also recognising the wide variations across the region, MENA countries consistently perform below average in international indicator ratings of transparency, voice and accountability, as well as control of corruption. Although the region has limited empirical data on corruption, it is generally agreed that the phenomenon is widespread and deeply rooted in: the political infrastructure of the state the settings infrastructure of the public sector, which is very large, overstaffed and with low wages; and the limited opportunities for public participation. This has caused development efforts in the region to mainly focus on enhancing democratic processes and public participation through broader governance initiatives (Chene, M., Hodess, R., 2007).<sup>1</sup>

Different factors have been highlighted to explain the relatively poor governance and anti-corruption performance of MENA countries (Rachami, 2013 and World Bank, 2003). A selection of them are discussed in some detail below.

**Little transparency and access to information** | MENA countries often have limited a general lack of transparency and availability of information, even within government institutions and the ministries themselves. Information is usually controlled or censored by government. Some countries including Jordan, Tunisia and Yemen, are moving towards greater transparency through freedom of information laws. Still, most governments in the region restrict access to information, control the media or make no effort to publish information widely. The lack of information about procedures, poor levels of publicly available information and limited complaint mechanisms limit the opportunities to contest dishonest behaviour.

**Poor external accountability mechanisms** | In MENA countries civil society organizations, media and professional associations usually exist but their legitimacy and

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<sup>1</sup>This general overview is based on and used with the permission of the U4 Anti-Corruption Resource Centre and Transparency International. Chene, M., Hodess, R. (2007), Overview of Corruption in MENA Countries, U4 Anti-Corruption Resource Centre.





Photo: iStock

effectiveness are hampered by government controls and restrictions. Moreover, they are often accused of acting in line with private interests not to serve for the public good.

**Elitist social structures and pervasive corporatism |**

In the region, ruling groups are favoured over the rest of the population and informal patronage infiltrates government structures. The minority elite usually controls most of the economic resources. Reformist governments may hesitate to regulate economic activities to avoid the risk of upsetting their biggest allies. This leads to widespread corporate misconduct and corruption. The powerful social and cultural norms based on the family nucleus in most Arab societies reinforce this trend and help spread socially accepted forms of nepotism.

**Excessive regulations and barriers to entry |** The region is characterized by excessive regulations and tight control

of competition in the market. This creates dependency on government for basic services. In many countries, the private sector is also largely dependent on public contracts to sustain its activities.

**Low awareness of the impact of corruption |**

The impact of corruption on social, human and economic development has been widely documented. Research compiled in the framework of the UNDP programme on governance in Arab countries indicates that the corruption factor is correlated to most development and governance indicators e.g. economic growth rate, Poverty Index, GDP per Capita, Human Development Index, Foreign Direct Investments and spending on education and health. (Ashour, A.S., 2003). Another study also finds that control of corruption is a major determinant affecting per capita income (Looney, R., 2004). Yet, in the region, there is low awareness and priority placed on resolving corruption in the water sector.



# National Water Integrity Risk Assessments

Water integrity can be defined as “the adherence of water stakeholders and institutions to governance principles of transparency, accountability, and participation, based on core values of honesty, equity and professionalism” (SIWI). Ultimately, water integrity is one of the most important means to achieve a water wise world, one that is resistant to corruption. Promoting water integrity in water resources management leads to improvements in human dignity, health and equitable access to water. It also helps create a fertile ground for economic growth and further investments in the water sector.

Integrity approaches to water are positive, proactive strategies that focus on preventing corruption risks and addressing existing problems if they exist. This includes but is broader than the suite of tools, measures and actions common in anti-corruption activities. Ensuring compliance to legislation, laws, regulations, rules, policies and procedures is a key focus of much anti-corruption work that provides the foundation for any organization to operate effectively and with integrity. This is also best served by wider actions to develop institutional cultures, procedures and capacity for transparency, accountability, and participation, based on core values of honesty, equity and professionalism.

Water integrity risk assessments carried out in the five pilot countries of the Regional Capacity Building Programme on Water Integrity for the MENA are synthesized in the following section. Each provides an outline of the priority challenges faced by each country, a summary of recent actions taken at the national level to address corruption and then offers policy recommendations to improve water integrity and prevent corruption risks in the water sector.



Photo: iStock



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**Institutional and legal framework of the water sector**

Jordan is one of the three most water scarce countries in the world. The per capita share from renewable water resources is less than 100 m<sup>3</sup>/year and the Jordanian government has realized the importance of managing these precious resources. The government in Jordan is currently undergoing a process of governance reform to enhance transparency, accountability and participation.

There are several public and private institutions involved in management of the Jordanian water resources, as shown in Figures 1 and 2. The Ministry of Water and Irrigation (MWI) is the official body responsible for the overall monitoring of the water sector. It was established

in 1992 and includes three main entities; Water Authority in Jordan (WAJ) established in 1983; Jordan Valley Authority (JVA) established in 1973; and the Project Management Unit (PMU). Other institutions include the Ministry of Finance (MoF), Ministry of Planning and International Cooperation (MoPIC), Ministry of Agriculture (MoA), Ministry of Health (MoH), Ministry of the Environment (MoE), Ministry of Islamic Affairs (MIA), Ministry of Tourism (MoT), as well as Water User Associations (WUA), universities, donors, NGOs and public water companies e.g. Aqaba Water Company in the south, Jordan Water Company or Meyahona in the middle, and Yarmouk Water Company in the north.

Figure 1. Main institutions involved in the management of the Jordanian Water Sector (OECD, 2014)

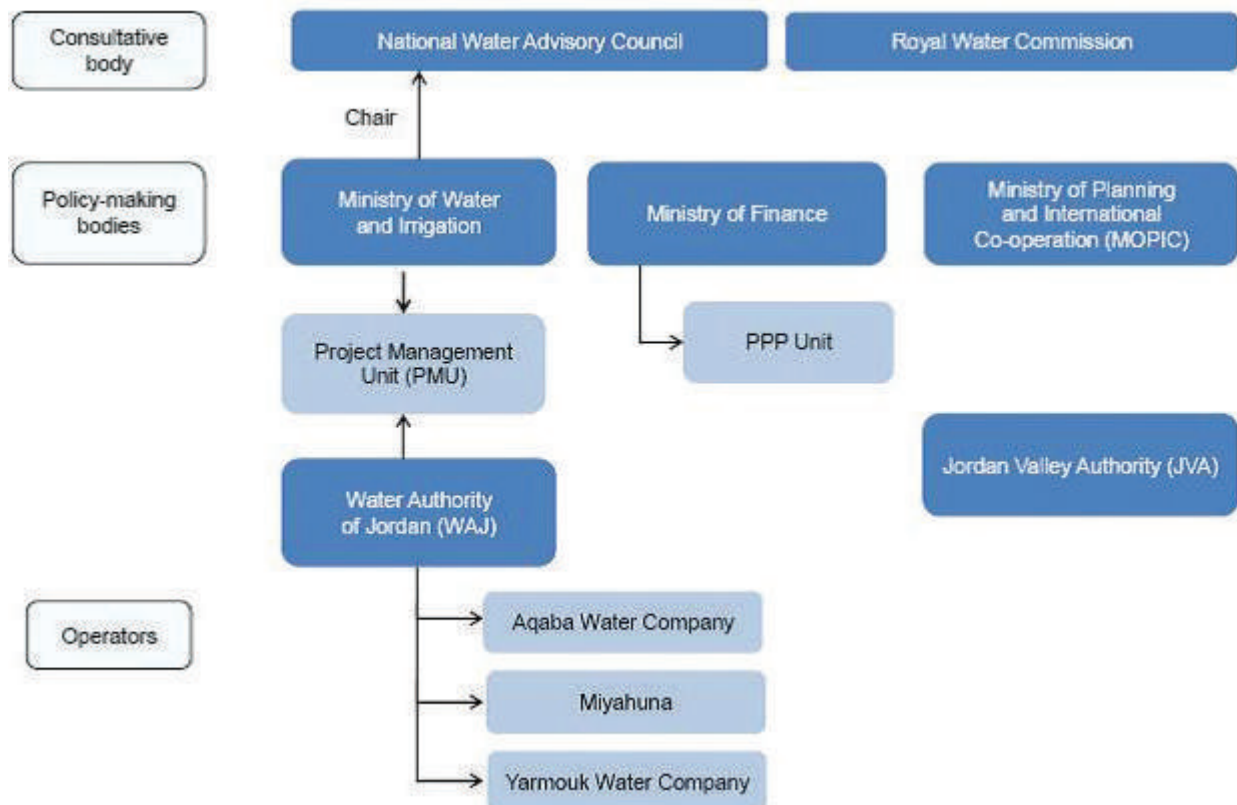


Figure 2. Relative roles of various stakeholders in the governance of water sector in Jordan (USAID, 2010)



The major water laws, policies and regulations include: Jordan's Water Strategy 2008-2022, National Water Demand Management Policy (2006), Drinking Water Resources Protection Guidelines (2006), Irrigation Equipment and System Design Policy (2006), Irrigation Water Allocation and Use Policy (2006), National Water Master Plan (2004), Irrigation Water Policy (1998), Groundwater Management Policy (1997), Wastewater Management Policy (1997), Water Utility Policy (1997), Environment Protection Law (2006), Regulation no 76 for Groundwater Protection and its amendments (2003), Jordanian Standard No. 893 Water- Reclaimed Wastewater (2002), Law 30 Jordan Valley Authority Law (2001), Jordanian Standard No 287, Drinking Water – Method of Sampling (1998), Jordanian Standard No. 286, Drinking Water Standards (1997), Jordanian Standard No. 1145, Using Sludge in Agriculture (1996), Administrative Regulation No. 54 of MWI, Law No. 18 (1992), and Water Authority of Jordan Law and Amendments (1988).

Despite the recent restructuring of its water sector weaknesses and challenges remain and pose a threat to integrity. Notable challenges include: non-revenue water still makes up 50 per cent of supply in some of the country's governorates; tariffs do not cover total costs; accounting systems are weak; the MWI was created by a "bylaw" while WAJ and JVA are created by "laws"; communication among the three entities (MWI, WAJ and JVA) is weak with each functioning in near isolation from the other; there is a lack of cohesiveness, integration of efforts and team work; there is a top-down approach

where stakeholders are not involved in the decision-making process; MWI, WAJ and JVA are overstuffed and there is an exodus of talent to the private sector; conflicts of interest exist in the present set-up of the water sector among MWI, WAJ and JVA; and there is an overlap of responsibilities with other ministries.

**Integrity and anti-corruption** | Jordanian efforts towards good governance and anti-corruption have been significantly enhanced in the last decade. Major initiatives have been taken by the Jordanian government to boost the capacity of monitoring bodies in combatting corruption. Such initiatives include the issuing of the Anti-Corruption Law and the establishment of the Anti-Corruption Commission (ACC) in 2006. The commission is directly linked to the Prime Minister. In December 2012 the government set up a Royal National Committee for Integrity, headed by the Prime Minister. In June 2013 an Anti-Corruption Strategy for 2013-2017 was launched (ACC, 2013). Jordan also participates in the Open Government Partnership (OPG), a multilateral initiative that aims to secure concrete commitments from governments to promote transparency, empower citizens, fight corruption, and harness new technologies to strengthen governance. Other initiatives taken to reinforce integrity and transparency include: starting a national dialogue with the political parties and civil society; accelerating the work on a bylaw which sets the criteria for appointments of senior positions in the civil service to ensure fairness; and ensuring transparency in public tendering process by establishing a website to announce all tenders, conditions, criteria and terms of reference.



At the parliamentary level, an Integrity Committee has been established in the Lower House of the Parliament. At the NGOs level, an Integrity Coalition for Election Observation, which consists of 50 Jordanian civil society organizations, was established in 2012. The main objective of the coalition is to observe both the parliamentary and municipal elections at all stages, starting from registration, through voting and until announcement of the election results.

According to Transparency International's Corruption Perception Index (TICPI), in 2012, Jordan ranked the third least corrupt Arab country, outranked by Qatar and United Arab Emirates. Jordan has also maintained its international ranking in the top third of the 176 countries in the index.

**Overview of main water integrity risks** | In the area of *policy-making, legislation and regulation* one main risk area is related to the legislative process for allocation of water rights between different users. Some actors take advantage of others who do not fully understand the nuances of existing legislation and regulations. A related risk is the weak participation of stakeholders and lack of transparency in formulating policies. This raises concerns that certain powerful actors may have disproportionate influence in formulating policies, which they can use to benefit themselves. Further risks include a lack of oversight and monitoring, which leads to abuse of the system, weak law enforcement and an unclear system of penalties and fees. This creates conditions that encourage illegal actions.

The causes attributed to these risks include: lack of staff knowledge of the legislation governing the sector; low public awareness of their rights to participate and to access information; absence of an independent regulatory body to monitor the sector; scattered responsibilities of water resources management among different agencies as per bylaws and regulations; weak incorporation of principles related to Integrated Water Resources Management (IWRM) in the formulating and implementing of policies; social tension and the feeling of injustice caused by nepotism and favouritism.

Also in *planning and budgeting*, several integrity risks were identified. One such risk is the distortion of the decision-making process by politicians, high-ranking officials and powerful people who can influence the planning processes for their own benefit. This can lead to certain geographical areas being left behind even if the development needs are greater, exacerbating water shortages and inequity. In budgeting, risks include poor budget allocation between projects and districts due to: undue influence of politicians, high officials, and powerful people; collusion between public officials; and deliberate over-budgeting by consultants and contractors to increase the value of planned projects. Management of existing funds may be distributed inequitably in terms

of geography and population distribution. Funds may also be misused to overpay or hire completely unneeded consultants and staff who are supported by those with power. Another related risk is the absence of good technical and financial feasibility studies of planned projects. In some cases, such studies are conducted in a biased way to favour certain regions, consultants or companies.

The risks related to planning and budgeting are primarily caused by a lack of transparency and a lack of access to information during the planning process. Most information is concealed from the main stakeholders. Other causes include the absence of accountability systems, undue influence of official staff and powerful actors, weak implementation of laws and the lack of deterrent penalties.

For *enforcement of regulations* the main integrity risk is related to water licencing. This includes the licencing process, the content of the licence, well rental and trading procedures as well as enforcement of conditions for the licence. Water licencing in Jordan is a complicated process, which requires a large number of documents and involves many steps. First, field inspection to ascertain distance from other wells, area to be cultivated etc., then submission of a report to the well licencing committee for review and approval, and finally a decision taken by the WAJ Board of Directors which is chaired by the Minister of MWI.

Although the procedures are clear, there are risks of biased decisions and inequity during the process. During the application process there is a risk of bribery to facilitate and speed up the processing of paper work. Powerful actors can influence the licence awarding process. Applicants may also try to influence the content of the licence. The regulations state that a water license allows for annual extraction of 150,000 m<sup>3</sup> of water. Any extra is subject to a tariff. Applicants may still try to exceed the limit of abstractions, deliberately damage the water meter or use the water for other purposes than approved e.g. selling water to other users. Reporting of these violations are reported depends on the honesty of the inspector and the power of the "well owner". Civil society is not yet proactive on these issues.

There are also integrity risks in the trading mechanisms and well rental procedures. Wells are allocated by the state agency and can be traded when the landowners change. This is allowed subject to WAJ approval. In practice, some of these private wells can be rented by WAJ for public supply during shortages. The absence of clear rental procedures means integrity risks e.g. rental from well owners who are related to WAJ employees. There is also a possibility of pumping more water from the well than the amount stipulated and paid for in the rental agreement. Finally, integrity risks also exist in enforcement of water licences. Inspection and monitoring staff may not pay attention to, or may be encouraged to



ignore, illegal actions taking place around the wells. The causes of integrity risks in water licensing include complex institutional set-ups; lack of authority of staff at licencing agencies; local controllers not having the power to cut off supply if a licensee is not meeting the requirements, which can be used as an excuse to demand bribes; absence of a formal complaint mechanism for licence applicants; insufficient resources for enforcement; low salaries for inspection/monitoring staff, creating vulnerability to bribes to delay reporting, or ignore, illegal actions; powerful well owners; and limited social pressure to enforce licences.

*Human resources management* is another area with many integrity risks e.g. overstaffing. The MWI and water utilities have large numbers of employees, some who are unqualified and unnecessary but are recruited as a result of political interference, favouritism and nepotism. The presence of staff that lack sufficient technical knowledge and awareness on internal processes and procedures can be an integrity risk in itself. Those who want to circumvent procedures can exploit their lack of knowledge. Lack of transparency in recruitment processes may also deter qualified persons from applying for jobs, or make it difficult to retain them due to low job satisfaction, poor working environment and absence of incentives for good performance.

Unethical behaviour of staff is another major integrity risk which can take many forms: theft of money, goods and equipment from the workplace; cover up of under-performance by falsifying documents; using utility assets for private purposes; collusion between meter readers and customers to undercharge or ignore illegal connections; collusion with clients to submit false or inflated invoices. Absence of clear job descriptions creates another risk. Job descriptions serve as basis for the employees to be held accountable if they act outside their competencies or responsibilities.

The main causes of integrity risks related to human resources management include lack of transparency and fairness in recruitment processes; absence of clear firing procedures; no clear guidelines or criteria for promotion; political interference in recruitment and promotions; disproportionate influence of particular people within the agency; low salaries in the public sector compared to the private sector; lack of a sense of belonging and loyalty; unfair awarding of salaries and bonuses. These all create inadequate employment conditions that can foster low motivation and corrupt behaviour among staff.

In *procurement and tendering* integrity can be undermined both when awarding contracts and during contract management. The procurement and tendering procedures in MWI have sufficient rules for transparency, accountability and high professionalism in all stages of the contracting cycle. A number of integrity risks still exist however. These include: skewed bid specifications and

standards which favour particular contractors and reduce competition; inaccurate estimations of bills of quantities; conflict of interest and corruption in the tender evaluation and awarding process; external pressures to influence the contract award; weak supervision; substantial changes in contract conditions to allow more time or increase the contract value for the contractor; the use of false or duplicate invoicing for works executed or services offered. Major contributing factors to these risks are: inadequate expertise and lack of professionalism among contracting staff; interference of powerful and influential persons in awarding decisions; personal/family relationships between bidders and contracting staff; lack of expertise of clients and/or consultant staff, poor accountability procedures; the general nature of water projects having many of buried assets e.g. pipes and valves; and corrupt consultants or contractor.

### **Recommendations for improving national water governance**

The following are the general recommendations collected during the assessment:

1. Assess optimal solutions to increase citizen access to policy documents and regulations and materials to support improved understanding of their implications.
2. Actively work to raise awareness of all stakeholders, especially the private sector and general public, of their rights to participate in the policy making process, planning, monitoring and evaluation of water related projects.
3. Form independent agencies to regulate, monitor and oversee water institutions in terms of integrity, transparency and accountability.
4. Take action to improve harmonization of legal frameworks that pertain to water management.
5. Review and assess current division of roles and responsibilities between different agencies, identify accountability gaps or unclear mandates between authorities.
6. Ensure clear descriptions for all agencies responsibilities and mechanisms for communication and coordination as needed.
7. Strengthen and improve linkages between the integrity institutions, water sector organizations and external auditing organizations institutions.
8. Build capacity in water sector organizations in accountability and transparency during policy making, planning, budget allocation and management, feasibility studies, recruitment, licensing, etc.
9. Assess regulation and oversight of procurement and contract management, and use of codes of conduct and/or integrity clauses in contracts within water sector organizations. Where absent or non-functioning, install mechanisms for improved oversight.
10. Develop and enforce incentive systems for staff performance in water sector, and enforce penalties for violators of laws and regulations.



Photo: iStock

**Institutional and legal framework of the water sector**

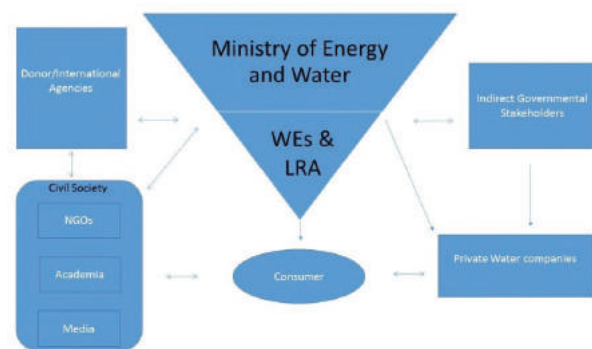
Lebanon’s water resources are under stress due to increasing demand and pollution that results from a growing population, rapid urbanization, and economic growth, as well as the impacts of changing climate.

Water related issues in Lebanon are mainly handled by the Ministry of Energy and Water (MoEW). Other major stakeholders responsible for providing and ensuring proper water governance and management are: the Water Establishments (WEs) in North Lebanon, South Lebanon, Bekaa Valley, and Beirut and Mount Lebanon; and the Litani River Authority, (Figure 3).

Other stakeholders are the Ministry of Agriculture, Ministry of Environment, Ministry of Finance, Ministry of Economy and Trade, Ministry of Public Health, Office of the Minister of State for Administrative Reform, Council for Development and Reconstruction, Parliament Committee for Public Works, Transport, Energy and Water, Lebanese Court of Account, Special Investigation Commission of the Central Bank, Lebanese Parliamentarians Against Corruption (Leb-PAC), Council of the South, Central Fund for the Displaced, International Funding Agencies, civil society, academia, private water companies, industry and media.

The Lebanese water sector is governed by Law 221/2000 that stipulates that the MoEW is the main authority dealing with water. Still, water management problems can only partially be attributed to MoEW. Lebanon has taken some initiatives aimed at increasing transparency, accountability and participation in the water sector. It has put in place new regulations, laws e.g. Environment law 444/2002, and strategies e.g. MoEW 2000-2009 Ten Year Water Plan and National Water Sector Strategy (2010). However these plans have never been fully implemented due more political issues rather than technical problems. Most other laws and regulations derive from the French colonial period, a majority of which should be reformed, eliminated or replaced as they are insufficient to address the current scale of challenges that are meant to regulate.

Figure 3: Stakeholders' Setting of the Water Sector In Lebanon



The lack of targeted or precise regulations and reliance on the existing laws has enabled a “culture of corruption” both in daily practices and in the management of the water sector. Corruption in Lebanon has seeped into all branches of government and is found in many forms: bribery, nepotism, patronage, vote buying, etc. Although corruption always has been present in the Lebanese political system, it increased after the civil war. The post-war structure led to competition for state-resources. Patronage networks dominate the public sector, particularly the recruitment processes. The Civil Service Board (CSB) usually handles the hiring process in the public sector. It is responsible for the appointment, promotion, compensation, transfer, discipline and dismissal of public service employees. This process is often disrupted by political leaders who appoint their supporters as government officials and civil servants, regardless of their qualifications. Additionally, the Illicit Wealth Law, a law dating back to 1953 which was supposed to allow monitoring of assets of officials, to prevent corrupt activities such as bribery or illegal embezzlement, was never implemented.

**Integrity and anti-corruption** | Political turmoil and on-going security concerns in Lebanon have led to a paralyzed political system and inability to set up a functioning anti-corruption institutional and legal framework. The political paralysis has delayed the process

of ratification of the United Nations Convention Against Corruption (UNCAC) and the establishment of a National Anti-Corruption Agency. Furthermore, the Public Budget law has rarely been implemented since the end of the civil war so there has been no parliamentary authority overseeing revenue collection and expenditures.

In Lebanon's democratic system, the state supports the mechanisms of integrity and administrative reform, at least on a theoretical level. In practice however, each of the pillars of integrity i.e. transparency, accountability, public participation and anti-corruption, faces significant challenges that threaten good governance. Currently no anti-corruption laws and regulation exist. There are four laws being reviewed: Law for the Establishment of a National Anti-corruption Committee, which would be responsible for receiving complaints and sending them to the judiciary system; Law for the Right to Receive Information, which would force every single institution to publish its expenses; Law for the Protection of Whistle-blowers, which would encourage whistle-blowers to present complaints and evidence on corruption; and Reformulation of the Illicit Wealth Law.

The political stalemate in Lebanon is a major reason why anti-corruption reforms have not been developed and implemented, and why Lebanon scores among the lowest on the TICPI. According to the TICPI 2014, Lebanon ranked 136 out of the 174 countries listed, with a score of 27 on a scale of 0 (highly corrupt) to 100 (very clean) (Transparency International, 2014).

Several integrity risks were identified in the area of governance. These include a weak legislative process for allocation of water rights for different uses; low participation by stakeholders in formulation of water sector policies, legislation and regulations; unclear roles and responsibilities among agencies leading to ambiguity in accountability e.g. the presence of more than one enforcement body and the lack of coordination between these bodies; lack of data sharing between institutions; and lack of data in general.

Another risk in this area is inequitable distribution of water. This refers to inequity both in distribution of water between the different economic sectors e.g. industry, tourism, households, and between households in different geographical areas. Some areas are supported politically or have more resources than others, which allows delivery of more water to their residents. At the household level the problem is compounded by non-compliance with laws and regulations by citizens, coupled with a lack of government monitoring of water usage by consumers and low levels of trust between citizens and government.

Generally, the main consequences of corruption in Lebanon can be summarized as: low public participation in public services for various branches of the government;

low social responsibility; the lack of accountability and monitoring; interventions in the "Judicial System"; and unqualified civil servants. The decrease in the quality of public services is also due to budgets and grant money being diverted for personal gain.

**Overview of main water integrity risks** | *In Policy-making, legislation and regulation* the main actors are the Council of Ministers (CoM), Members of Parliament (MPs), experts in Lebanon's legal framework and legalities of water issues, Ministries of Energy and Water (MoEW), Agriculture (MoA), Environment (MoE), Tourism (MoT), Industry (MoI), Research centres such as the Lebanese Agricultural Research Institute (LARI), National Council for Scientific Research (CNRS), universities, water establishments and end-users. Other stakeholders include: Ministry of Interior and Municipalities (MoIM), the media, Ministry of Public Health, Ministry of Economics and Trade, the judiciary system and Experts in the Lebanese Legal Framework and Legal Water Issues.

The main integrity risks related to policy making, legislation and regulation are: lack of participatory processes in policy making; absence of legislation regulating distribution of water and of studies on water requirements for users; weak enforcement of existing laws regulating the water sector; out-dated laws and lack of operational decrees for the implementation of existing laws e.g. law 221 which states the roles and responsibilities of the water managing entities; understaffed ministries; inequality in law enforcement where some users are considered above the law; weak legal prosecution; lack of accountability mechanisms; lack of fining mechanisms; and interference by politicians in water projects in order to improve their image among their constituencies.

In the process of *planning and budgeting* the main actors are MoEW, MoF, MoA, MoE, WEs, LRA, CoM, MPs and international funding agencies. The Council of the South and the Council for Development and Reconstruction play a more limited role.

A main risk area is the allocation of funds both between projects and between national and local governments. Specific risks include: a lack of political will to implement plans; no clear vision regarding water resources management, which is represented in modifications and amendments in the legislative texts; exclusion of some institutions with monitoring roles; lack of continuity i.e. in some cases plans are set according to each minister's priorities, irrespective of the national strategies; and ministries working on old budgets which do not reflect inflation and increases in prices i.e. the last budget presented to the government was in 2005.

Other risks relate to funding. International funds can restrict projects to certain geographic and technical areas of work. NGOs can give a higher priority to the funding

than to its values and mission, which can lead to unsustainable projects i.e. projects are discontinued when the funds are depleted. Allocation of funds to projects that are donor driven rather than driven by government demand is often wasteful and fruitless. Low collection rates of water fees in some regions have led to the poor maintenance of networks. This in turn has encouraged consumers to find “alternate” or illegal means of securing water delivery e.g. the bribery of WE workers to ensure that water reaches a certain residence while other residences in the area may not receive water.

These risks are caused by several factors such as: a high turnover of ministers leading to a shift in project plans and of priorities. An example of this is when big infrastructure projects such as dams are planned or stopped due to the political influence of ministers. Other risks include: political standoffs over the national budget; lack of scientific data/reliance on old data; low levels of participatory approach; a slow bureaucratic system which encourages people to resort to bribery to speed up the process; lack of transparency in obtaining and using funds; and lack of accountability.

In the process of *enforcement of regulations* related to pollution legislation the main actors are the MoEW, MoA, MoE, MoT, MoI, MoIM, the Research Center for Water Quality, experts, consumers, civil society, and WEs. The associated risks in enforcement are: lack of enforcement and implementation decrees of the environmental laws; lack of inspections and control of water resources; and poor coordination between relevant ministries, which could lead to deadlock and halting crucial water-resource related projects. These risks are caused by: a long process for laws to be passed by the council of MPs and the cabinet; weak legal prosecution, especially in the environmental field; lack of human and financial resources in order to enforce regulations; political influence in enforcement; politically based cover-up of pollution e.g. by industry; and lack of public awareness.

A specific area of risk concerns issuing of well drilling permits. The MoEW and the MoIM control this. Risks include the ever-increasing number of illegal wells, often resulting from bribery. The number of illegal wells is three times the number of legal wells. Laws on wells are out-dated and existing wells are not monitored. Relevant guidelines are ignored when issuing permits. These risks are caused by a lack of coordination between stakeholders and/or public institutions responsible for monitoring wells, and the nonexistence of one enforcement and monitoring unit.

Another specific area of concern is over-abstraction of water. The MoEW, MoIM, and WEs control this. Risks include: drying out of communal springs traditionally used by communities due to over-abstraction i.e. more groundwater used than allowed in private wells; over-abstraction by unlicensed water suppliers e.g. tankers; and bribery of officials responsible for distributing water to

obtain more water. These risks are caused by a lack of monitoring of the existing legal and illegal wells, lack of accountability, political influence of well owners, selling of water without required permits, and the perception of water as a right rather than a service that needs to be paid for.

The *human resources management* process in Lebanon’s water sector is primarily controlled by the Civil Service Board and line ministries. The main integrity risks are associated with either nepotism in recruitments or payments for promotions and transfers. These are both common in the administrations of all ministries. Nepotism in recruitments results in appointment of personnel based on the request of decision-makers, instead of their qualifications. Although the responsibility for recruitment lies with the Civil Service Board, political decision-makers influence the board. This also results in demotivated employees, inefficiency/low quality work and poor growth in human capital. These risks are exacerbated by low salaries and benefits especially compared to international organizations and private companies. Few qualified personnel applying to the public service vacancies as there are better paid jobs elsewhere. There is a lack of training, of specific job description and of financial resources for capacity development.

In *procurement and tendering* the main actors are ministries and contractors. The main integrity risks include bribery to influence awarding of contracts. This is made possible by a lack of transparency in the bidding process. Bribery or kickbacks also conceal poor performance of contractors and substandard work. Standardized and tailored criteria specifically can be selected to favour a particular contractor.

The main causes of these risks are: political influence; lack of monitoring of the bidding process including contract execution; lack of accountability mechanisms such as codes of conducts and reward/punishment system for public servants; commissions i.e. financial interests secured through implementing a project with a certain contractor; and the fact that the law is very general and leaves room for personal interpretation.

The main actors in relation to *payment for services* in Lebanon are water consumers, citizens, ministries, and the security forces, which are tasked to cut off illegal connections. The primary integrity risk here is illegal water connections. Employees in water management bodies are bribed to connect customers without billing them or having them appear on the official network. Illegal connections are made both by citizens and water tankers in rural and urban areas alike.

These risks are caused by selective enforcement of laws i.e. certain people being held to account and not others. There are no accountability mechanisms for citizens or public employees e.g. a penalty system in case of violations. Political connections and protection and the



power of the tribal systems in some rural areas do not allow the security forces to cut off the water. There is also a lack of knowledge among citizens of their rights and responsibilities.

**Policy recommendations for improving national water governance** |

There are several general and specific recommendations for improving national water governance in Lebanon. Key concerns raised during the assessment focused on: (1) educating media regarding environmental issues, specifically water integrity (2) the role of media in educating the public towards a common water culture (3) civic education on environmental issues (4) decentralization of public management to increase public participation (5) involvement of specialized professionals in decision-making (6) proper division of tasks between the public sector and civil society e.g. the Lebanese Center for Water Management and Conservation (LCWMC) working on public awareness on water conservation while this may be done more effectively by civil society, and (7) providing proper accountability tools and methods, such as monitoring entities, involvement of the higher court, and the citizen's contribution in reporting any illegal/irresponsible act.

The following are the general recommendations collected during the assessment:

1. Create mechanisms for stakeholder participation, such as consultation-, town- and site-meetings.
2. Reduce the bureaucratic chain of processes in decision-making.
3. Engage lower level staff members in decision-making and planning to promote sense of professional responsibility, and provide avenues for staff to promote and advocate change where needed.
4. Develop a common language and communication within and between institutions and systems for information exchange.
5. Evaluate the capacity of current legal frameworks to limit corruption, promote reforms, resolutions or methods for improving compliance where needed.
6. Create mechanisms to monitor and evaluate the function and work of water sector organizations.
7. Delineate responsibilities of ministries and government bodies clearly to avoid any overlap of roles and responsibilities related to different areas of water management and service provision.

# Morocco



Photo: iStock

### Institutional and legal framework of the water sector

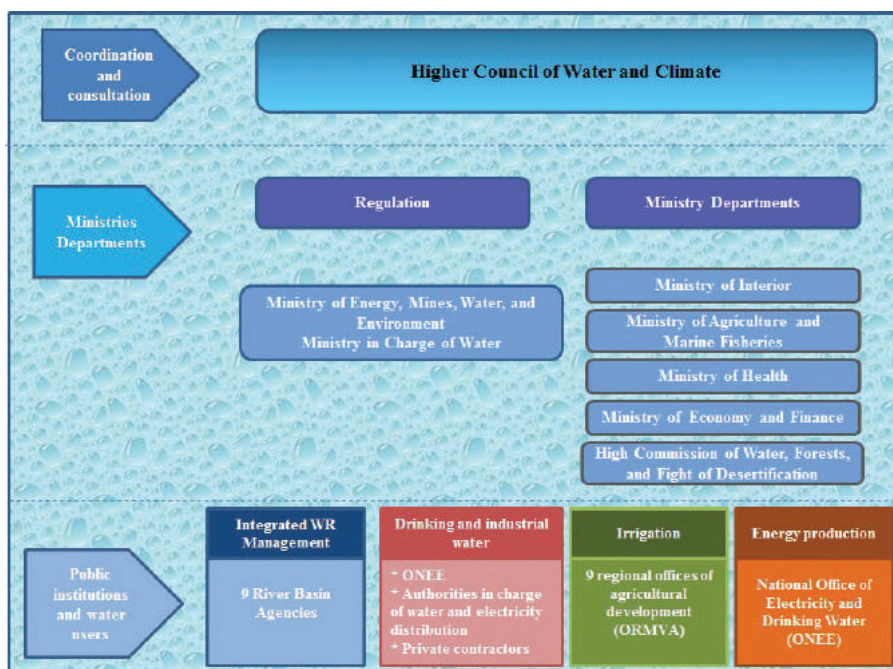
Although Morocco is endowed on average with relatively more water resources than most other MENA countries, it still faces challenges developing and managing these vital resource sustainably. Each year, precipitation delivers an average of 140 billion m<sup>3</sup> of water. Only 23 billion m<sup>3</sup>/year is currently made use of in the due to the current technical and economic conditions.

The Moroccan water sector is very complex, both in terms of the physical environment and patterns of use. This complexity is reflected in the structures of water governance and stakeholders. Water stakeholders in Morocco can be categorized into four distinct levels: main advisory, executive, public and private operators, and local water users (Figure 4). These can be subdivided into three main groups: consultative and coordination, ministry departments, and public institutions plus water users (Figure 5).

The overall coordination responsibility lies with the Ministry in Charge of Water (MDCE) within the Ministry of Mines, Energy, Water and Environment. Other important institutions include the Higher Council for Water and Climate (CSEC); Inter-Ministerial Water Commission (CIE); Economic, Social, and Environmental Council (CESE); Ministry of Interior (MoI), Ministry of Agriculture and Marine Fisheries (MoA), Ministries of Environment, Health, Economy and Finance; High Commission of Water, Forests, and Fight against Desertification; National Environmental Council (CNE); Regional Councils of the Environment (CRE), and Provincial and Prefectural Commissions on Water (CPPE); local authorities including regions, prefectural assemblies, provincial and municipal councils; public and private institutions; and private operators.

There are around 30 major operators in the areas of water production and distribution for drinking purposes and

Figure 4 : Main Water Actors in Morocco (MDCE, 2013)



### MAIN ADVISORY AUTHORITIES

Superior Council for Water and Climate (SCWC)  
National Council for Environment (NCE)  
Council for Agricultural Development (GCAD)  
Permanent Inter-Ministerial Council for Rural Development (PICRD)  
National Drought Observatory (NDO)

### EXECUTIVE ADMINISTRATION AUTHORITIES

Ministry of Territorial Administration, Water & Environment (MTAWE)  
- Secretariat of SCWC  
- Directorate General of Hydraulics (DGH)  
- National Meteorological Office  
Ministry of Agriculture and Rural Development (MARD)  
- Water & Ag – Engineering Administration (AGR)  
High Commissariat of Water, Forest and Fight against Desertification  
Ministry of Interior (MI)  
- Directorate General of Local Collectivities  
- Directorate of Régies & Conceded Services  
Ministry of Finance (MF)  
Ministry of Health (MH)  
Ministry of Energy and Mines (MEM)  
Ministry of General Affairs (Prices Directorate) (MGA)

### PUBLIC OFFICES, AGENCIES & PRIVATE OPERATORS

River Basin Agencies (MTAWE)  
Directorate General of Hydraulics (MTAWE)  
National Water Drinking Office (ONEP - MTAWE)  
Regional Office for Agricultural Development (ORMVA - MARD)  
Autonomous companies and private operators (REGIES - MI)  
National Office of Electricity (ONE - MEM)

### WATER LOCAL

Water Provincial Commission  
Local Collectivity Representatives  
Water Users Associations (AUJA)

irrigation. In addition, thousands of user associations operate in rural areas and some communities manage the distribution of water in their localities. Drinking water distribution is allocated to the communities under the municipal charter of 2002. The communities manage these services either directly or through an independent administration, the National Office of Electricity and Water (ONEE); the leading producer of drinking water, or by concession to a private operator.

In the 1990s Morocco's water sector underwent reorganization when RBAs were set up to regulate the water sector in each of the country's nine river basins.

**Integrity and anti-corruption** | Recognising the importance of integrity in governance and management, the Moroccan government has multiplied efforts to counteract mismanagement and corrupt practices, including in the water sector. Examples include the establishment of a Central Authority for Corruption Prevention (CACP) and Council of Competitiveness in 2007 and 2008, respectively. In 2010, the government produced a plan with 40 measures aimed at increasing transparency and counteracting corruption. Furthermore, an anti-corruption campaign targeting the administration and the public, which involved media and civil society, was launched in 2012.

Civil society and the media play an important role in the fight against corruption. The private sector has also taken

action, through the General Confederation of Moroccan Enterprises (CGEM), which formed an anti-corruption committee in 2006. CGEM, together with public authorities, the CACP and other partners, produced a Moroccan Code of Good Practice for Corporate Governance. They also created a web portal to enable whistle-blowers to anonymously report abuses. Several other mechanisms are in place to enforce transparency and integrity including: use of information technology in administration and management or e-government; a public procurement system which establishes transparency in transactions and includes measures to reduce fraud and corruption; the General Inspection of Finance which oversees and audits the financial activities of public institutions; the Higher Audit Court which assesses local, regional and national accounts and publishes annual reports about them; and the Office of the Ombudsman, which safeguards the rule of law.

Despite these efforts, resources lost to corruption is sufficient to fund the entire Moroccan military. Structural problems i.e. transparency, reachability, communication and capacity, are more problematic than wilful corruption. The agencies with the legal mandate to license water use and to coordinate with stakeholders lack the personnel/physical presence and capacity to carry out their mission. A case in point is the RBAs who were given vast responsibilities under the 1995 water law without the necessary funding and structures to carry out their regulatory mandate.

The division of responsibility for enforcement between the RBAs and MoI is unclear and must be resolved. At present, their relationship with law enforcement organs is neither clear nor systematic. Internally within the RBAs, there are issues with the way tenders are written leading at times to favouritism in the tendering process. There is a perceived bias towards certain firms and individuals, which reduces the standing and credibility of the RBAs. Some private sector firms have also noted the presence of unlicensed firms in the water sector that neither pay taxes nor treat their employees within the confines of the law.

Other risks to integrity include unsettled and disputed tribal claims on water sources, which often pit the state against traditional users. While there is an on-going, and well-organized, national conversation about land titles, including for tribal and communal land, the same conversation has not yet taken place about water rights. There has been friction between tribal and communal stakeholders about water, particularly concerning projects that involve bottled water or agribusiness users.

The Moroccan water sector also faces a structural problem in terms of language. Administrators tasked with water management often use French but their constituency is more often than not Arabic and Tamazight speaking. This leads to problems with communication and participation, as well as with transparency.



Another issue is the presence of middlemen between farmers and the government, with regard to paperwork needed for subsidies and assistance with technological purchases. This opens opportunities for manipulation by middlemen such as overcharging and other abuse of the farmers.

Finally, the absence of formal channels of communication between water companies supplying cities and farmers' WUAs, leads to misunderstandings about the rights and obligations of each party. It encourages behaviour such as illegal tapping of canal waters and water being moved to the cities.

**Overview of main water integrity risks** | *Policy-making, legislation and regulation* in Morocco is managed by the following actors; MoA, MoI, RBAs, WUA, communities, and ONEE. One main risk areas in terms of integrity concerns the water law of 1995, which did not address traditional uses of water. Stakeholders were not fully consulted in its making. The relationship between the current law and tribal and communal rights has thus not been resolved. Another risk area is that RBAs do not have the physical capability to enforce the law and lack a presence outside the cities. The problem is exacerbated by contradictions in terms of mandates of the RBAs and the MoA, which represents the leading water users, and a lack of coordination and communication between the RBAs and actors at the field level such as e.g. farmers and WUAs.

These risks are caused by: lack of training for RBA staff in constituent services as well as the general institutional culture. The traditional role of the RBA has been primarily focused on hydrological engineering. This, in turn, has meant that the organizations and their staff have had relatively little experience in engaging with farmers as clients. This is made worse by a common fear among bureaucrats of going beyond what is explicitly in their mandate.

The process of *planning and budgeting* in Morocco is managed by RBAs, the MDCE, MoA and the WUAs. The main risks related to planning include the lack of inter-RBA planning leading to suboptimal outcomes in terms of water management. The lack of field presence and insufficient capacity of the RBAs mean they cannot enforce the law. This means local conditions are conducive to excessive aquifer tapping and the pollution of Sebou West of the city of Fez. The root problem is that water deficits in one place cannot be met by surpluses elsewhere. At the same time very few inter-RBA studies take place. There is a lack of resources and there is a lot of pressure on farmers to dig illegal wells.

In terms of budgeting, there is a perceived lack of transparency in terms of the implementation of the Green Morocco Plan (Maroc Vert Plan). This is the main agricultural policy programme in effect in Morocco today. The vision of the plan is to modernize and

commercialize Moroccan agriculture, while providing subsidies and grants to small farmers. Although its funds can be used to install drip irrigation systems and wells, it was not developed in coordination with the RBAs or the delegated ministry responsible for water. As a result, the subsidies are not reaching small farmers, many who face a labyrinth of regulations they do not understand in order to secure this aid. They therefore see the programme as non-transparent. Since the MoA plans were not coordinated with the MDCE and other stakeholders, the attempt to bring corporate agriculture and its efficiencies to the agriculture sector has left farmers unclear about the funds accessible to them. Several causes can be attributed to this risk: mistrust between the MoA and the RBAs, a lack of buy-in by stakeholders outside the MoA structures, and resistance to the plan inside the MoA itself.

The main actors involved in *enforcement of regulations* in Morocco are WUAs, RBAs, the MoA, MoI and the locally elected councils. Similarly to several other countries in the region, a major integrity risk is excessive digging of illegal wells, which ultimately threatens to deplete the aquifers. This is mainly done by farmers who are unaware of the laws governing wells. Again, this is linked to the low capacity of the RBAs both in terms of physical presence as well as ability to coordinate enforcement of the law with the police and the MoI, who also lack funding for enforcement. There is a lack of understanding among farmers of the role of the RBAs and the fact that well digging firms are often unlicensed and do not know the procedure for applying for water licenses. As surface water disappears, digging of illegal wells increases and the depth of the wells also increases.

The actual process of applying for water licenses is not clear enough to the beneficiaries. Most farmers do not know that they need a license or what the licensing process involves. This is both due to poor communication as well as structural factors e.g. illiteracy and innumeracy, which are exploited by some middle staff in the administration. Finally, many farmers, particularly those holding tribal title, fear that metering of aquifer water will deny them the traditional water rights they have historically enjoyed.

In the process of *human resources management* the main actors are RBAs, MoA, DPA, RBAs, MoI, locally elected councils and private firms. The low presence of the RBAs at the farm level is in most cases due to an over-emphasis on engineering and hydrology skill sets. There is also a cultural gap between RBA personnel and the communities they serve, class and lineage issues, both real and perceived. Simply put, while the RBAs possess the ethics needed for their profession and while they are accountable to their administrative superiors and ultimately to elected politicians, they lack the social dimension to address populations and their needs.

The main integrity risk area related to human resource management is the practice of favouritism among the MoA, local officials and agricultural supply firms, in the provision of farming education and training to some farmers. This manifests through preferential arrangements with associates, allies and friends and is caused by political party capture of some local DPA offices. At present, the farmers being served by the DPA cannot evaluate the service. There is no ombudsman service and there is no political oversight through constituency services by parliamentarians on the DPA, so the level of accountability is still weak. However, farmers are becoming increasingly empowered by their associations, NGOs, and the growing freedom of speech in the country.

In the process of *procurement and public works* a common risk area in all water related agencies is the tendering process and the writing of tenders to favour certain bidders over others. Bid specifications are skewed to disadvantage certain firms in favour of others in water related contracting. A related risk is overpayment for public goods by the contracting agency through negotiation with service providers. These risks are caused by economic and structural links between power and wealth, and an unsatisfactory level of accountability to those negatively affected by the corruption. It is worth mentioning that the legal frameworks are good and clear. The problem lies with enforcement and follow up.

In the area of *payment for services* the main actors involved in are the WUAs, RBAs, MoI and MoA. The main integrity risks relate to sabotage of canals and pipes and associated water theft by some farmers. These risks are caused by: lack of law enforcement; lack of stakeholder participation in maintenance of infrastructure; lack of finance to pay for efficient irrigation systems; and the lack of understanding among citizens of the negative consequences of private appropriation of water. Other causes include legal conflict between stakeholders, the need to pay for repairs and retaliation for water diversion upstream. Farmers on the lower reaches of irrigation canals may also damage the systems to protest against absence of their water allotments. These acts of vandalism feed inter-tribal conflict, and reduce state legitimacy.

**Recommendations for improving national water governance** | The following are the general recommendations collected during the assessment:

1. Conduct awareness raising campaigns for institutions and the general public on water integrity in all related governance processes.
2. Facilitate communication and coordination between MoA/RBAs and WUAs to develop improved personal relationships between the RBA representatives and water users.

3. Create transparent online procedures for all water governance processes, especially provision of well licenses.
4. Evaluate the institutional culture of all RBAs and implement response measures where needed.
5. Investigate barriers to law enforcement, and means to improve involvement of MoI.
6. Utilize WUAs as information conduits for tribal communities and enable them to direct their concerns to RBAs, MoA and MoI officials.
7. Conduct studies on inter-basin transfers to enable maximized returns on water.
8. Carry out a GIS survey of all illegal wells and provide a possibility for amnesty, registration and regulation for existing illegal wells where prudent.
9. Consider adding a field service and action unit in the RBAs.
10. Create forums that allow DPA-TC officials to express issues directly to WUA representatives.



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### **Institutional and legal framework of the water sector**

The water sector development in Palestine differs from other countries in the region, largely due to the influence of Israeli occupation. The management, development, and protection of water resources is not possible without Israeli permission. The Palestinian institutions are therefore only able to manage the supply of these limited water resources. Water shortage, a high population growth of three per cent, increasing demand, weak infrastructure, fragmentation of water institutions, and different interest groups are all factors that increase risks of corruption in the water sector.

Lack of access to safe and sufficient drinking water in Palestine is a critical problem. The average daily water consumption is about 82 Litres per Capita per Day (LPCD), and in many rural areas less than 72 LPCD. The total annual water supply for domestic purposes is about 85 million m<sup>3</sup> for the West Bank (excluding East Jerusalem) and 96 million m<sup>3</sup> for Gaza. Out of the 85 million m<sup>3</sup>, about 56 million m<sup>3</sup> are purchased from the Israeli water company Mekerot. The annual supply for the agricultural sector is about 69 million m<sup>3</sup> for the West Bank and 81 million m<sup>3</sup> for Gaza. Water losses from the distribution network range between 20 and 35 per cent (PWA, 2012).

In recent years, the legislative framework of the water sector in Palestine has witnessed changes. In particular, after the Presidential Decree No. 90 (1995), the establishment the Water Authority Law No. 2 (1996), Law No. 3 (2002) and Law No.4 (2014), which identified the legal framework for the water sector and the right of Palestinian Water Authority (PWA) to supervise and control/regulate regional utilities. The legislation was put in place with the transitional period due to end in 1999 so it remains limited, having not moved from the authority to the state. This has resulted in challenges. Namely, the water sources have remained under Israeli control and the plans are subject to Palestinian political agreements, especially in work area C. There is also institutional duplication of legal terms i.e. the presence of West Bank Water Department, which is under the Israeli mandate,

and the Palestinian Water Authority (AMAN, 2009). The weak capacity of Palestinians to efficiently manage their water resources, coupled with the fact that there is no overall and inclusive strategy to increase resilience in the governance of the water sector, can jeopardize integrity. Until recently there has been a challenging situation for water governance with an overlap of responsibilities between the different key stakeholders. This situation has been resolved following the presidential decree dated June 14, 2014 that charted the new Palestinian Water Law.

According to (UNDP, 2012), the water sector in Palestine is threatened by the following risks:

There is weak enforcement of related water legislation endorsed by the Palestinian Legislative Council (PLC). This has negatively impacted formulation and adaptation of new laws. There is also insufficient clear description of the roles of the Palestinian competent authorities, including the PWA, in water policies. A lack of control over water sources for regulating water licensing creates high potential for corruption risks.

In national planning and budgeting it is important to maintain a national master plan for water and to allocate sufficient budget to cover administrative and running costs, along with a budget for contingencies.

The PWA has different roles related to water governance including: allocation of use; quality standards; economic regulations i.e. tariffs; environmental regulations; all related water resources management i.e. water supply for domestic, agricultural, and industrial purposes; and wastewater treatment. The PWA's role is restricted when it comes to water management at the local level. Here the PWA is limited to licensing water project programs and to approval of the pricing and system for fees collection. Under the Water Law, the PWA has no responsibility in water service provision at the operational level.

**Integrity and anti-corruption** | Attention has been given to corruption in public service delivery.



Since 2006, with the establishment of Anti-Corruption Commission (ACC), more information has been produced on large-scale corruption. The Palestinian Authority (PA) has taken steps to improve performance, transparency and accountability in the public sector and has joined national and international conventions to fight corruption. In 2013, the United Nations (UN)

approved the request of Palestine to join UNCAC. Current government policies are building institutions with a basis of fairness and transparency, by adopting regulations and legislations that prevent corruption. This includes work to strengthen citizen confidence in national institutions (Hamdallah, 2014). The main partners involved include: the Bureau of State Audit and

Stakeholder's Roles		
Group	Name	Role
High level decision-makers	Anti-Corruption Commission (ACC)	Monitoring
	Bureau of State Audit and Administration Control (SAACB)	<ul style="list-style-type: none"> <li>Legislation, Policy, National planning, infrastructure and Budgeting</li> <li>Deciding water service provider mechanism/s</li> <li>Reticulation of water to the consumers</li> </ul>
	Palestinian Legislations Council	
	Ministry Council	
	Water Sector Regulatory Council (WSRC)	
	Palestinian Water Authority (PWA)	
	Ministry of Local Government (MoLG)	
	MDLF- Municipal Development & Lending Fund	
	Ministry of Health (MoH)	
	Ministry of Planning and Administrative Development (MoPAD)	
	Ministry of Agriculture (MoA)	
	Environment Quality Authority (EQA)	
	Ministry of Finance (MoF)	
	Energy Authority	
MoPWH		
Mid-level water managers (controlling & planning)	Bulk Utilities (West Bank Water dep. & Costal Bulk Utility-Gaza)	<ul style="list-style-type: none"> <li>Produce and supply water for domestic, agricultural and industrial consumers</li> </ul>
	LGUs and JCs wells and springs	<ul style="list-style-type: none"> <li>Raw water abstraction, bulk water treatment (purification) and bulk potable water distribution</li> <li>Waste water and effluent collection and treatment and returning the treated effluent to the environment</li> </ul>
	Private agricultural wells	
	Jerusalem Water Undertaking (JWU)	
	Bethlehem, Beit Jala, and Beit Sahour Water and Waste water Undertaking	
	Joint service councils for water	
	Local Government Units (LGUs) & Joint Councils (JCs)	
	Private tanks	
Donors	Japan International Cooperation Agency (JICA)	<ul style="list-style-type: none"> <li>Funding for infrastructure, Capacity building, and equipment</li> <li>Provision of loans to public sector service providers i.e. World Bank</li> </ul>
	Global communities	
	Swedish International Development Cooperation Agency (SIDA)	
	United Nations Development Programme (UNDP)	
	Food and Agriculture Organization of the United Nations (FAO)	
	German Development Bank (KfW)	
	German Agency for International Cooperation (GIZ)	
	US Agency for International Development (USAID)	
	World Bank	

Civil Society (including, NGOs and universities)	ARIJ - The Applied Research Institute (Jerusalem)	Funding, implementation, experts, capacity building and research
	PHG – Palestinian Hydrology Group	Experts, education, Joiners students
	PARC – Palestinian Agricultural Development Association	<ul style="list-style-type: none"> <li>• Monitoring</li> <li>• Increase awareness</li> <li>• Mobilize public participation</li> <li>• Awareness-raising, advocacy and building synergies for sustainable water financing</li> </ul>
	An-Najah University	
	Bir Zeit University (BZU)	
	Al-Quds University (AQU)	
	Coalition for Accountability and Integrity (AMAN)	
	Women's unions	
	Farmers associations	
	Media	

Administration Control (SAACB), Anti-Corruption Commission (ACC) and some civil society organizations e.g. Coalition for Accountability and Integrity (AMAN). At the same time, there is an absence of a comprehensive national plan to combat corruption (AMAN, 2013a and 2013b).

**Overview of main water integrity risks** | The main integrity risks include: lack of communication among actors; weak monitoring of legislation implementation; intermittent financial support; weak law enforcement for related integrity measures; lack of confidence in water quality; vague vision regarding capacity strengthening requirements, which underestimate the capacity building needed at the operational level; and uncertain forecasts for water needs.

In the area of *policy-making, legislation and regulation*, a majority of integrity risks result from the lack of communication between different actors especially the PWA, Water Sector Regulatory Council (WSRC), Environment Quality Authority (EQA), Ministry of Agriculture (MoA) and Ministry of Local Government (MoLG). This has resulted in weak allocation of responsibilities on water resources and inconsistency between actors in licensing procedures, due to favouritism, especially in the issuance of new licenses for agricultural wells in the main areas controlled by Palestinians.

In *planning and budgeting* the main actors are PWA, Joint Water Council (JWC), donor community, water service providers, Local Government Units (LGUs), media, civil society organizations, Engineers Association, PWA and planning departments within line ministries. As discussed previously, most water resources are under the Israeli control, which makes it quite difficult to plan for socially equitable distribution of water. Israeli authorities also restrict the development of water and wastewater projects, especially in Area C of the West Bank, which is 60 per cent of the West Bank. This creates an environment characterized by a lack of trust and unwillingness to cooperate with national policies, and presents risks and challenges to ensure integrity principles guide institutions with authority over water.

Another integrity risk area is the uncertainty in forecasts of water needs because of the unexpected water losses resulting from illegal connections e.g. when the water share made available by the Israeli authorities to the users in Hebron Governorate is less than the needed amount, the users resort to illegal means to satisfy their water needs. This is actually caused by lack of control of the geo-political environment, lack of community water needs assessment and lack of an endorsed national water sector master plan that includes integrity measures.

A third risk area related to planning concerns the socio-economic risks. Insufficient internal controls and lack of integrity within civil society organizations, farmers associations and line ministries have led to weak accountability. Furthermore, the lack of monitoring of the treated wastewater quality, coupled with lack of incentives to use treated wastewater, has created a feeling of resentment among water users.

In the governance process *enforcement of regulations* the main actors are the (PLC), WSRC, bulk utility, water service providers, line ministries, civil courts i.e. justice system, the police, civil society organizations and end users. However, the PLC has been frozen since 2006. The WSRC was not active until 2014, weakening the execution and monitoring of related water policies. This is mainly due to political disputes and Israeli occupation practices i.e. the Israeli army has detained many of the PLC's members.

Law enforcement is weak, especially of the Water Law (2014). This law was passed by the president to resolve the conflicting functions of the PWA, regulation, planning and implementation. Risks are high because more time is needed for the effects to materialize. In other words; the status quo seems set to continue. The following factors contribute to this: (1) the WSRC is not yet active, (2) the proposed bulk utility might not materialize, and (3) the PLC remains frozen.

Indicators of weak law enforcement include increasing numbers of illegal water wells and illegal connections to the water network, weak revenues collections, water

pollution and over-extraction of water resources especially in Area A. The level of Dissatisfaction is high among the general population and there is a lack of trust between the public and water officials. Weak law enforcement can be partly attributed to the geo-political context but also to unclear responsibilities for line ministries, nepotism and the protracted length of time needed to resolve related cases.

Other risks are the lack of clarity in taxes, issuance of permits and provided services. This is because the articles on water taxation system are unclear and creates a sense of dissatisfaction among different users e.g. when farmers use fresh water resources for agricultural purposes they do not pay taxes, while domestic water users pay.

In the *human resources management* the main actors are MC, PWA, line ministers (e.g. MoA, MoH, EQA, MoLG; bulk utility); Ministry of Women Affairs, water service providers (e.g. LGUs, JCs, utilities), Union of Service Providers, donor community, civil society organizations, and women's associations.

One risk area concerns the vague vision on capacity strengthening requirements. This results in duplication of efforts and wastage of time and money. Crucial aspects for training e.g. water integrity, are not on the agenda. At the operational level a lack of sufficient technical skills might also affect the overall performance of integrity of water sector. The problems related to capacity development are caused by weak implementation of the strategic plans, the presence of donor driven projects that dictate capacity strengthening programs and a lack of financial resources for capacity development, including training budgets for water service providers. The lack of funding is due to dwindling donor support, and overdependence on specific channels for donors support.

A second risk area concerns unbalanced gender composition and lack of equal career opportunities in the water sector. There are experienced and competent women whose expertise is not being used and there are no high-ranking positions for female employees. This is caused mainly by incoherent legislation and related administrative directives, and by socio-cultural constraints and traditions.

A third area of risk concerns the lack of rewards or incentives for employees working in governmental water institutions such as LGUs, bulk utilities and water providers, as opposed to staff of NGOs. This led to a feeling of frustration or dissatisfaction among government employees and a lack of trust both between more junior staff and senior staff, and also between government and non-governmental actors.

Finally, nepotism and favouritism in the recruitment processes has led to conflict of interest and corruption in the working environment. One example is in recruitment of new staff, where there is no unified system or procedure for evaluation or for giving appropriate weight

to selection criteria. This makes the system vulnerable to manipulation.

**Procurement and public works** | In the governance process *payment for services* related to the tariff system, the main actors are the PWA, WSRC, bulk utilities, service water providers, farmer associations and the media. One major area of integrity risk is the lack of clarity in the tariff system for domestic and agricultural water use. For domestic use there should be a fixed administrative ratio in the tariff system for the different administrative regions.

For wastewater treatment, the procedure for fee calculation is not clear, and there are no incentive measures in place to encourage farmers to use treated wastewater. Regarding water for agriculture use, there is no endorsed tariff system for agriculture groundwater usage. The current applied license fee is fixed for a groundwater borehole with an annual abstraction volume but the actual amounts abstracted are not monitored. This leads to misuse of the license and causes a variation in agricultural water pricing. The integrity of the tariff system is therefore undermined because domestic water users who have to pay for their water perceive it as unfair.

Recent statistics also show that the price per m<sup>3</sup> varies from one city to another across the country. This is mainly attributed to the lack of law enforcement and the unwillingness of end users to pay e.g. users in Asira town pay less than the users in Nablus city. Both use the same source but due to the high number of violations and lack of commitment in Nablus to paying the fees, especially in the refugee camps, the users in Nablus who are not in refugee camps have to pay more than those in Asira. Moreover, some urban zones pay more than others. This could be interpreted as being due to the distribution of refugee camps, which normally do not pay their water dues. The major causes for this lack of enforcement is the absence of comprehensive planning related to pricing, and water and wastewater management. This indirectly undermines the trust between the service providers and end users.



**Policy recommendations for improving national water governance** | The following are the general recommendations collected during the assessment:

1. Encourage all relevant water sector organizations to develop integrity management action plans, as well as the capacity of their staff for proper plan implementation. The needs-assessment for capacity development should be done with staff participation and decided through interactive deliberations with leadership.
2. Increase support to capacity development for civil society organizations and media in water integrity.
3. Initiate mandatory training for relevant jurists and legislators on related integrity risks in the water/ environmental sector.
4. Specify quotas for high-ranking female employees for the water sector.
5. Take measures to increase inclusion of women in the decision-making process and provide targeted programmes to develop professional capacity of female staff.
6. Establish incentive mechanisms to uphold professional integrity and provide recognition or reward for high performing staff.
7. Create voluntary, peer-support networks for employees to act on and establish integrity principles in a safe space.
8. Initiate active complaint systems with unified procedures for evaluation.
9. Maximize access and transparency of relevant financial documents and budgets to the public.
10. Ensure open-access datasets on water quality are updated regularly and as accurate as possible.
11. Enlist a task force of experts on water integrity to review the penalty and enforcement systems for corruption and environmental infractions and recommend actions to improve enforcement and compliance.
12. Conduct a comprehensive review of relevant water law articles to assess overlaps, deficiencies or irregularities that prevent their implementation and enforcement.
13. Initiate public awareness campaigns in conjunction with reforms, measures and actions to improve integrity in water management.
14. Develop harmonized and fair financial procedures for the pricing and tariff allocation for water purchased and extracted from different sources, and make information on this process and its results available to the public.
15. Increase support to develop household rainwater harvesting systems to meet the expected water crisis. This would enable accountable citizenship measures.
16. Increase frequency of stakeholder consultation workshops on water rights and integrity to a fortnightly basis.
17. Carry out comprehensive accountability assessments periodically.



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### **Institutional and legal framework of the water sector**

Tunisia is facing aridity and local water shortages and has low quality available resources, especially in south. There is therefore high pressure on water issues. The threats posed to water security by climate change are already visible in the form of severe droughts, extreme flooding, salinization of coastal aquifers, degradation of fertile soils and increasing desertification due to unsustainable water management practices. Furthermore, the high number of refugees could increase current projections of future population development and thus the demand for water in Tunisia.

The need for more participative water governance has been underlined by local communities and reinforced by events like the Arab spring. The situation exists against a backdrop of: complex water management structures; insufficient coordination and staff capacity, which may obstruct transparency and accountability in the implementation of water projects; and tensions between water institutions and users. These factors could easily pave the way for unethical practices in the Tunisian water sector and, in turn, increase opportunities for corruption.

Water governance in Tunisia is jointly managed by the ministries in charge of agriculture and environment, infrastructure, development and health (Figure 6). The responsibility for the water supply systems in urban areas and large rural agglomerations is assigned to the Société Nationale d'Exploitation et de Distribution des Eaux (SONEDE), a national water supply authority that is an autonomous public entity under the Ministry of Agriculture and Environment (MoAE). Planning, design and supervision of small and medium water supplies and irrigation works in the remaining rural areas is the responsibility of the Direction Générale du Génie Rural et Exploitation des Eaux (DGGREE) under the MoAE. Investment, planning and implementation of water and agriculture projects is conducted by the Regional Offices for Agricultural Development (CRDAs) located in each Wilaya, or regional department.

The legal and regulatory framework of the Tunisian water sector is well developed and defined by a series of laws,

decrees, and standards for water use, protection and quality.

**Integrity and anti-corruption** | The reasons that led to the Tunisian revolution in January 2011, which was the starting point of the Arab spring, were unemployment, political repression and corruption, including abuse of power and the use of public resources for personal interests at the expense of the national interest. At the same time the social situation deteriorated and the economic regional imbalance intensified. After the revolution, questions of integrity, accountability, human rights and transparency have become increasingly important in the national dialogue.

After the revolution, a dynamic process took place, led by new institutions and actors, mainly NGOs. New laws were created, linked to integrity e.g. access to information, public procurement and corruption. Local communities and NGOs are playing an important role in improving transparency and accountability and in holding the authorities to account over, among others, water related issues. A national framework of integrity and corruption prevention is not yet in place but important steps to enhance transparency and accountability have been initiated e.g. an Open Government Partnership and the creation of the National Commission for the Investigation of Cases of Corruption and Embezzlement.

The Commission recommended setting up "a" permanent mechanism to fight against corruption in order to ensure that abuses of the past are not repeated." This recommendation resulted in the creation of a permanent authority to fight corruption after the elections of October 2011 (National Instance for the Fight Against Corruption (INLUCC)). The authority has been reinforced with the appointment of a Minister of Governance and Anti-corruption, attached to the Head of Government, who defines the strategies and coordinates the public sector.

The Minister of Governance and Anti-corruption has recently introduced reforms to improve governance of

public institutions. These include a roadmap for Open Government until 2016, the obligation to publish reports and increasing the accountability of the contract programme. This includes a four-year plan for activities of the operating institution. A code of ethical conduct for public officials is also being developed (Decree 4030-2014 of 2 October, 2014) and an access to information law (Decree-Law No. 2011-41 of 26 May, 2011). Another new law is dedicated to the public procurement process (Decree-Law No. 1039 of 13 March, 2014) and implementation of an e-platform for tendering, aimed at increasing transparency and clarifying procurement rules. ‘Cells’ of good governance have been created in all ministries, governorates, municipalities, institutions, public institutions and public enterprises. These cells will have a role in coordinating, monitoring and implementing national policy in the field of governance, and fighting against corruption in their respective institutions. A national strategy on governance and an anti-corruption action plan have been developed and agreed by the constituent assembly in 2013. The department has started to establish a clear approach, consisting of standardisation of sound governance in partnership with Institut National de la Normalisation et de la Propriété Industrielle (INNORPI), the institute in charge of standardisation. This is based on ISO26000 and the specific Tunisian context and has a work program which includes, among other measures, planned training of auditors of certification.

Public procurement is one of the sectors most vulnerable to corruption in Tunisia. This is due to a lack of: transparency, political leadership, specialized skills to investigate corruption cases and appropriate penalties (OECD, 2012). There is no specific legislation to define expected standards of conduct for public officials or specific measures in place to promote integrity of officials. Improved awareness on the potential to create standards of conduct and action to combat risks and punish abuses is needed, and may be benefitted by public campaigns.

There are several water governance initiatives aimed at increasing transparency, accountability and participation. These include a project entitled “Sustainable Domestic Water use in Mediterranean Regions (SWMED)” funded by the European Union. It focuses on local water governance involving the main actors in the water sector and deals also with two water integrity aspects; the right of participation in decision-making, and of access to information. Another project, the Regional Good Governance Programme - Maghreb (BGM), is focused on strengthening exchanges, networking and cooperation between civil society and state institutions in the Maghreb, to promote reforms on good governance. Euro-Mediterranean Information System on know-how in the Water sector (SEMIDEI) is a tool for cooperation between Euro-Mediterranean countries to access existing information on water. In addition, OECD/GWP UNDP/Union for the Mediterranean (UfM) provide governance and financing for the Mediterranean water sector to improve mecha-

nisms for transparency and strengthen the commitment of stakeholders to build support, while ensuring financial viability and fiscal sustainability of private sector participation (PSP) in the water sector. Finally, a UNDP project aims to support the establishment of a national system of integrity in Tunisia (2013-2016) by developing a national strategy and an action plan for the fight against corruption, based on a participatory approach.

**Overview of main water integrity risks** | In *policy-making, legislation and regulation* the main actors are the Prime Ministry, Ministries in charge of agriculture, planning, interior and municipalities, and NGOs. One risk area relates to the lack of a strategic vision for the water sector, including the nexus between water and sectors e.g. energy. This is caused by a fragmentation of decision-making between several actors, lack of efficiency of the Council of Water, lack of institutional mechanisms for coordination/communication among the institutions and limited integration of research results. Another risk area relates to the implementation of the new decentralisation scheme for water governance, set out in the constitution, which will lead to major changes at the institutional and legislative levels. Tunisia has a centralized system and low involvement of local communities and users associations. This has led to limited expertise on water management, few resources and a weak impact of the local authority on water management.

In *planning and budgeting* the main actors involved are the Prime Ministry, and Ministries in charge of planning, agriculture, equipment, and development/international cooperation, along with public water companies and water users. One risk area concerns the allocation of funds between projects at national and local levels. Fund raising, planning and management are done at the central level. This can decrease the impact at local level and lead to tension and inequitable distribution. To counter this, transparency processes, efficiency indicators and assessment/evaluation processes need to be put in place. Causes include the centralized system of governance, inefficient management, political support to specific regions, limited access to information and transparency, lack of clear accountability procedures for the citizens and lack of trust and confidence in the justice system. A second risk area concerns the allocation of water between users, with a process oriented mainly towards satisfying one sector and can result sub-optimal distribution of resources and failure to utilize water of different qualities for their most effective use. The dominance of a centralized system and the ministry of agriculture in particular, as well as a lack of participative approaches are primary contributing factors to this.

In the *enforcement of regulations* the main actors involved are: ministries in charge of agriculture, environment, industry, interior, municipalities, General Directorate of Water Resources (DGRE), DGGREE, CRDA, L’Office national de l’assainissement (ONAS), National Agency



of Environmental Protection (ANPE) and Agency for the Protection and Management of Coastal Areas (APAL). Weak enforcement of anti-pollution legislation and the polluter pays principle results in poor water and environmental quality. Causes can be traced back to a lack of political will to implement the laws, corruption, lack of trust in the justice system, lack of information on accountability procedures and rights, environmental standards not well adapted to the Tunisian context, limited environmental awareness/responsibility, Environmental Impact Assessment (EIA) studies with variable qualities and limited implementation by the National Agency of Environment Protection (ANPE).

A second risk is the lack of transparency and clear planning for the permits, including requirements for monitoring, auditing, water saving and reuse. Low costs for permits and limited law enforcement result in over-exploitation of water resources by farmers and industries, including in vulnerable or protected areas, water shortages, salinity, pollution, high energy consumption, and tension between users and regions. Weak enforcement of regulation is aggravated by nepotism and poor coordination between departments, lack of deterrent penalties and high dependency on the groundwater resource.

In *human resources management* the main actors involved are the Union Générale Tunisienne du Travail (UGTT), ministries and NGOs. One main risk area concerns nepotism in recruitment. When employees are recruited based on connections instead of merit they do not have the necessary skills. This leads to low absorption and knowledge capitalisation/management, a hierarchy not based on expertise and careers that decrease the efficiency of organizations. This all undermines trust in expertise and increases internal tension. Causes of nepotism are the culture of favouritism, centralized hiring system and a lack of transparency, as well as lack of management skills including communication and team building

In *procurement and public works* the main actors are the prime ministry, all other ministries and public/private enterprises. The main risk area relates to bribery during the tendering process to influence how contracts are awarded. This is facilitated by: complicated administrative and financial procedures; lack of expertise in enterprises, leading to delays; improper contract execution increasing technical risks; and low capacity in financial management of public funds. Causes are political favouritism, heavy administrative procedures and the fact that low cost is the most important criteria when awarding contracts.

**Recommendations for improving water governance and integrity** | The following are the general recommendations collected during the assessment:

1. Empower the role of the Water Council role to further support implementation of new regulation, improve horizontal coordination between decision-making authorities, water users and other related sectors, such as energy, food, climate change etc.
2. Assess existing local water management schemes to map priorities, challenges and potential local solutions in each region that consider all actors and users.
3. Ensure priorities are planned, according to agreed national and local level strategies, when implementing projects and that they specify how they will include systems for accountability, transparency and access to information.
4. Improve monitoring of groundwater extraction and closing of operation of illegal wells
5. Support local authorities to develop a clear strategic framework for water management that sustainably utilizes available water resources, such as rainwater, treated water and well water and demand management.
6. Develop transparent procedures for merit based hiring and promotion in water institutions and expand use of online application and multi-criteria analysis for job applicants
7. Establish knowledge management processes and positions in relevant water institutions.
8. Develop continuous training procedures of human resource management staff on tendering procedures, adhering to legislation, equitable treatment of applicants, and transparency.

# Conclusion

This report provides an overview of water integrity risks in Jordan, Lebanon, Morocco, Palestine and Tunisia. It highlighted the potential value that targeted capacity development could provide to improve transparency, accountability and participation in the governance of water. Capacity needs were determined for each country, based on each risk associated with specific governance processes and selected target stakeholder groups. The detailed capacity needs per country and target group can be found in the full national reports, which are available at [www.watergovernance.org](http://www.watergovernance.org). The assessment show that although the degree and manifestations vary among countries, each face serious integrity risks at all levels of water governance.

This risk assessments will further inform the development of water integrity activities in the regions. Priority areas for capacity building to reduce corruption risk and enhance integrity include: policy making; legislation and regulation; planning and budgeting; enforcement of regulations; human resources management; procurement and public works and payment for services. The recommendations brought forward by this report and by the entire programme will inform policy processes through

national high-level meetings. It will advance regional policy processes by providing input to the water and governance agendas of the Union for the Mediterranean and the League of Arab States. A High-level Learning Summit, scheduled to take place towards the end of the project, aspires to bring the findings and recommendations in a regional forum that will raise further awareness on the issue and promote action. Furthermore, synergies and operational collaborations with MENA partners that are active and committed to integrity principles, enhances impact and safeguards sustainability of results. At regional level, linkages and targeted input to the water and governance agendas of the Union for the Mediterranean and the League of Arab States, the key regional political processes for the MENA, is expected to attribute the needed political impetus for bringing water integrity further on the foreground and for urging much-needed action.

The Programme's timeframe extends until the end of 2017, however, requests to continue and upscale the conducted work due to its added value, have encouraged the Programme partners to start exploring potential continuation of the Programme with a second phase.

## Key recommendations

1. Evaluate water governance processes at the national level to identify inefficiencies, excessive bureaucracy and accountability gaps.
2. Propose measures to streamline bureaucracy to improve efficiency, reduce accountability gaps and improve definition of roles between authorities.
3. Form independent agencies to regulate, monitor and oversee integrity, transparency and accountability in water institutions.
4. Harmonize legal frameworks to clearly delineate roles and mandates of the different agencies, ministries and government bodies in the implementation of laws to avoid overlap and clarify any confusion over responsibilities.
5. Carry out comprehensive accountability assessments periodically to provide the basis for action plans at the local and national level.
6. Invest in capacity building with the proper institutions to establish and oversee fair, transparent and robust tendering procedures in the water sector. This includes special training courses for jurists and legislators on water related integrity risks.
7. Focus on corporate governance development of water managing institutions. Integrity Management Plans aiming at ensuring impartiality as a core value in all management processes should be enacted inline with capacity development interventions. Impartiality and fair treatment should cover external relations (e.g. with water users and service customers) and internal staff management (e.g. recruitment and promotion)
8. Build functional systems to incentivize integrity of leadership and register complaints for violations in water sector institutions. Voluntary peer-support networks for employees may be a component in this.
9. Create transparent web-based procedures for water governance processes where applicable, especially for licensing of wells and groundwater abstraction. Open-access datasets about water quality should be established and updated.
10. Promote measurable actions to increase access to high-ranking positions for female employees in the water sector (through mechanisms such as quotas) and measures to expand the role of women in decision-making in government and water organizations.

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### About the report

This report synthesizes the findings of detailed national water integrity assessments performed in Jordan, Lebanon, Morocco, Palestine and Tunisia and identifies capacity gaps that must be addressed to reduce these risks. A set of policy recommendations to improve national water governance and integrity in the sector across the region are presented.

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