

THEME PAPER

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**<Information and recommendations to be reviewed and enriched
by countries and stakeholders>**

Water Governance in the Mediterranean

presented by Greece, Lebanon and the Palestinian Authority
with the contribution of the MED EUWI Secretariat

in view of the
Euro-Mediterranean Ministerial Conference on Water
29 October 2008 – Dead Sea, Jordan

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This paper is presented by Greece, Lebanon and the Palestinian Authority, with the contribution of the MED EUWI Secretariat (facilitated by the Global Water Partnership-Mediterranean). The Theme Paper on Water Governance in the Mediterranean is a background document of the Euro-Mediterranean Ministerial Conference on Water, Dead Sea, Jordan, 29 October 2008.

Preface

The Steering Committee of the Euro-Mediterranean Ministerial Conference on Water (29 October 2009, Dead Sea, Jordan) requested the preparation of a Theme Paper on Water Governance in the Mediterranean in view of the forthcoming Conference.

Based on relevant literature, the Paper aims at providing an overview of the main issues, challenges and current approaches with respect to water governance and to fuel reflection on the way forward. It is not intended to be an exhaustive review of all existing policies and mechanisms, but rather a basis for further discussion in view of the Ministerial Conference and a background paper contributing to a future Strategy on Water in the Mediterranean.

The Theme Paper is presented by Greece, Lebanon and the Palestinian Authority whereas the Secretariat of the Mediterranean Component of the EU Water Initiative (MED EUWI) has been instrumental in compiling background information and assisting in the drafting of the document.

Introduction

The Mediterranean, a water scarce area, lies at the crossroads of three continents and it has been the cradle of major civilizations. Though the century-old experiences are largely shared, diverse natural and cultural backgrounds have resulted in uneven levels of economic development and a variety of socio-political systems. The region is encountering a rapid, unbalanced demographic growth and increased urbanization trends, mainly in the coastal areas. At the same time, the Mediterranean region is rich in unique and fragile ecosystems which face direct and indirect development pressures. The emerging conditions of climate change aggravate the situation, particularly for the poorest part of the population.

Water resources in the countries around the Mediterranean are limited and unequally distributed in both space and time - the countries of the South account for about 13 % of the total. The Mediterranean is home to sixty percent (60%) of the world's 'water poor'* and today twenty (20) million Mediterranean have no access to drinking water, particularly in the countries to the South and East of the region ⁽¹⁾.

In certain countries, exploitation indexes of renewable natural fresh water resources have reached 90-100%. The intensive extraction and use of water for domestic, agricultural and industrial purposes, without proper provisions for the protection of the resource, has led to serious water pollution and/or depletion of surface and ground water bodies. Non-renewable water resources are over-exploited, in some cases with exploitation indexes reaching 100%. Agriculture consumes 70-80% of available water resources in the Mediterranean countries.

In the North of the Mediterranean, rather better endowed with water and where demand is falling, resource quality is prevalent, on a par with the interest in maintaining or restoring ecosystems. In the South and East of the region, where countries are facing both the squeeze from limited water resources and the rapidly increasing demand, quantitative aspects are still the main issue ⁽¹⁾.

In addition to varying degrees of water stress, many Mediterranean countries still suffer from:

- lack of effective operational strategies,
- fragmentation of responsibilities between authorities,
- weak policy implementation and law enforcement,
- weak monitoring and assessment at the national and local level;
- limited technical, management and implementation capabilities to address water challenges, and
- financial constraints to implement policies.

* Disposing of less than 1000 m³ of water per inhabitant per year

However, considerable efforts are on-going. Many countries have commenced national programs for providing water and sanitation services to the entire population, enhancing irrigation efficiency, controlling conveyance losses, promoting participatory water management, and protecting and improving water quality. Drought management and climate variability strategies, groundwater management policies, and wastewater reuse plans have also been adopted by some nations. However, a common need and a defined priority across all countries in the region is to make progress on the complex issues of improving water sector governance.

As of the 1990s, most countries in the region started to realize that the 'business as usual' scenario of dealing with water management and water security issues was no longer suitable to cope with future challenges. Following a series of international, regional and national fora, and particularly after the 2nd World Water Forum (The Hague, 2000) and the Bonn Conference (2001), there is consensus that Integrated Water Resources Management (IWRM) is a means towards achieving sustainable development and that it can contribute significantly towards achieving several of the Millennium Development Goals (MDGs, 2000).

At the World Summit on Sustainable Development (WSSD) held in Johannesburg in 2002, the international community took an important step towards more sustainable patterns of water management by including, in the WSSD Plan of Implementation, a call for all countries to "develop integrated water resource management (IWRM) and water efficiency plans by 2005, with support to developing countries".

With water crises recognized primarily as a crisis of governance, effective water governance in an IWRM context, is a critically important prerequisite for meeting current and future water challenges at the regional, national and local levels⁽¹³⁾. Water Governance refers to the range of political, social, economic, and administrative systems that are in place to develop and manage water resources and the delivery of water services at different levels of society. It comprises the mechanisms, processes, and institutions through which all involved stakeholders, including citizens and interest groups, articulate their priorities, exercise their legal rights, meet their obligations and mediate their differences⁽⁸⁾.

Box 1. Why is Water Governance important ?

(UNDP, 2006)

Four inter-related and poverty-centred dimensions point to the importance of addressing governance issues:

The social dimension points to equitable use of water resources. Apart from being unevenly distributed in time and space, water is also unevenly distributed among various socio-economic strata of society in both rural and urban settlements. How water resources and related services are allocated and distributed have direct impacts on people's health as well as their livelihood opportunities.

The economic dimension draws attention to the efficient use of water resources and the role of water in overall economic growth. Aggressive poverty reduction and economic growth depend highly on water and other natural resources. Studies show that better governance can exert a powerful and positive effect on per capita incomes in many countries.

The political empowerment dimension points at granting water stakeholders and citizens at large equal democratic opportunities to influence and monitor political processes and outcomes. At both the national and international levels, marginalised citizens,

such as indigenous people, women, slum dwellers, etc., are rarely recognised as legitimate stakeholders in water-related decision making, and typically lack voices, institutions and capacities for promoting their water interests.

The environmental sustainability dimension shows that improved governance allows for enhanced sustainable use of water resources and ecosystem integrity. The sufficient flow of water of appropriate quality is critical to maintaining ecosystem functions and services. Unfortunately, water quality appears to have declined worldwide in most regions with intensive agriculture and large urban and industrial areas. Poor people's livelihood opportunities in particular depend directly upon sustained access to natural resources, including water - especially since they tend to live in marginalised areas that are prone to pollution, droughts and floods.

Water governance depends not only on specific institutions that are mandated to govern water but also on the overall governance context in which water issues are placed in a country.

Democratic institutions, access to information, participatory approaches, gender equity, transparency in decision making and accountability are among the key elements for good governance.

The prospects for improved and sustained water reform are also linked to other factors such as macro-economics, demographics, and social and political stability in a country. The prescriptions for improved water management in most sectoral strategies (eg. utility restructuring, enforcement of environmental regulations, resource pricing, cost recovery for services, etc) are important but will only have their desired effects when water reform is planned as part of a more holistic set of economic changes that include agriculture, industrial development, tourism as well as accountability, and public finance.

Chapter 1. Water governance in the Mediterranean: one region, different regimes, same challenges

1.1. Overall regional

In the past decades the countries of the Mediterranean have gone through major changes which had considerable impacts on its water resources. Population growth, economic development, technical transformation, better education, urbanization, excessive development of the coastal areas, environmental degradation, demand by customers for increasingly complex services, have, among others, affected how water is exploited, stored, and delivered.

Focus of investment has been directed toward intense development of water infrastructures, including dams, irrigation, drainage systems, water supply systems, waterpower electricity production, etc. However, institutional and regulatory re-organisation to manage these investments and to plan next steps has not been able to adapt as rapidly. In the Mediterranean region, as on a worldwide scale, many countries are currently in a stage of governance reform, orienting priorities and practices towards an IWRM approach.

In the South and East of the Mediterranean, countries are taking such steps. Until now, a few countries have completed their national IWRM plans or are close to and move towards the implementation phase. Many countries are in the process of developing their national IWRM plans while a smaller group of countries are still in the initial phase of preparation. At the same time, many countries should mainstream IWRM considerations, methodologies and practices in the implementation of their investment programmes and application projects at the national, local and transboundary levels.

In the North of the Mediterranean (EU Member States, EU Accession Countries and other Southeastern European countries), the EU Water Framework Directive (WFD) provides the main policy framework for water management, with varying levels of success in the implementation of its provisions among concerned countries.

Regardless of the level of progress achieved until now it is important to encourage and assist, as appropriate, the countries in need in their processes towards integrated management of water resources, including through improved water governance.

Although IWRM provides a framework of principles and good practices for water governance, it is recognized that there is no 'one-solution-for-all' at national level. This is mostly due to country particularities, the large number of sectors involved and the complexity of managing and balancing diverse needs and often competing interests. The situation gets even more complex when it comes to effective management of shared water resources, particularly since it often involves national sovereignties. Nevertheless, it is widely recognized that there is a wealth of valuable experiences to share at the regional, sub-regional and national levels and ground for a common strategic planning.

Despite country variations, most water reforms typically include components linked to:

- Promoting principles of integrated water resources management including watershed management approaches,
- Clarifying institutional roles and responsibilities,
- Decentralizing of water decision making,
- Increasing stakeholder participation,
- Promoting financing innovations.

In general, though development of strategies, plans and legislation are progressing in most of the countries in the region, policy implementation and law enforcement remains slow in many of them. Moreover, despite the obvious negative impact of corruption on water resources and services, remedial anti-corruption measures are not being adequately addressed in water reform.

1.2. North Africa

North Africa is among the most water scarce areas in the world. Most countries have mobilized almost all available water resources (surface, groundwater, desalination). In the last few decades, countries have responded to the scarcity by investing in infrastructure, also with assistance by international donors. Water supply coverage has increased remarkably particularly in urban areas, though quality service to the urban poor needs to be improved. Considerable part of the rural areas remains poorly served.

During the last years and particularly after Johannesburg, countries of North Africa have been actively reviewing their policies and legislations. Most countries have rationalized and consolidated responsibilities on water aspects and made one Ministry responsible for water planning, legislation, investments, and some water related-services. Water resources management can be the responsibility of Ministries of Irrigation (Egypt), Agriculture (Tunisia) or of a more umbrella Ministry that includes water, environment and other sectors (Morocco). Algeria has a dedicated Ministry of Water. Though water planning, legislation and, often, investment is under one Ministry, other Ministries are in most cases responsible for water supply and sanitation, including service delivery and regulation of the quality of service.

Some countries, applying international approaches of delegating water management at the lowest appropriate level, they have established a system of basin management organizations and have decentralized responsibility for water supply and sanitation to water authorities and municipalities. Some countries have established committees or councils charged with inter-ministerial coordination although decision-making powers of these committees are often weak. Legislation on water quality and protection of the environment exists in most of the countries but its enforcement remains a great challenge. Drought management strategies and action plans have been formulated in Morocco and Tunisia responding to climate change and cyclic droughts.

Stakeholder participation has been introduced in many countries. The preparation of water strategies and IWRM plans assisted in a gradual opening of consultation procedures. Participation of Non-Governmental Organisations (NGOs) and Water User Associations (WUAs) is increasing, particularly in local water management consultations. Egypt, Tunisia and Morocco can also demonstrate participatory experiences with irrigation WUAs.

Public Private Partnerships (PPP) have been developed during the last decade in Morocco and Egypt, especially for major agricultural development projects.

Highlighting current status in the countries of North Africa, particularly related to development of policies, plans and law, we could mentioned^(9,11):

Algeria has a National Plan for Water (2005) that was put in place the same year the Water Law was adopted. An Action Plan for implementing the IWRM framework is currently under preparation. A river basin management approach is in place since 1996.

Egypt's National Water Resources Plan (NWRP, 2005) corresponds to an IWRM Plan. The NWRP is a comprehensive document developed over six years with stakeholder involvement. The implementation framework for it is currently under preparation. Moreover, a National Master Plan targeting specifically the Water and Wastewater Sector of Egypt is in the process of getting finalised.

Libya has a National Strategy for Water Resources Management 2000-2025 (1999), which sets the general platform for the national water policy. The legal framework includes an obligation to elaborate an IWRM Action Plan/Strategy.

Mauritania follows a national water policy since 1998 and adopted a Water Act in February 2005. The Water Act makes direct reference to IWRM principles and addresses the ownership of water. An IWRM Action Plan is not in place yet, but its elaboration is clearly foreseen in the on-going Action Plan 2006-2010. Although legislative and institutional frameworks are in place for full IWRM implementation, the country encounters several challenges that hinder it.

Morocco follows a river basin management approach (established by law already since 1995) and has elaborated Master Plans of Integrated Water Resources Development for River Basins (PDAIRE). The country has recently (2007) finalized a National Water Plan to serve as an IWRM Plan, through a national consultation process structured on thematic priorities.

Tunisia adopted a long term Strategy for the Water Sector in 2003 and is currently in the preparation process for producing an IWRM Plan. Responsibility of local water management is decentralized in 23 financially autonomous public provincial (rather than watershed) offices.

1.3. Middle East

Middle East has been suffering for decades by political tensions and conflicts, many of which are armed and without easy solution. These have caused major socio-economic and environmental problems, including growing pressure on already fragile and scarce water resources, important part of which are transboundary. Failure to resolve the situation has been limiting potential for sustainable development in the area, including effective water management. The environmental impacts caused by conflict include physical damage to infrastructure -though prohibited by international agreements- and serious contamination due to release of hazardous substances from destroyed industrial and military infrastructure. Substantial investments are needed for rehabilitation and restoration of such damaged facilities.

As in North Africa, in most countries, key responsibility on water lays in one Ministry like for Irrigation (Syria), Energy and Water (Lebanon), Environment (Turkey), Infrastructure (Israel) or in a Water Authority (Palestine).

Most countries have mainstreamed water and environmental issues in national strategies. Some of them have been devising and gradually implementing mechanisms for cross-sectoral coordination at multiple levels. Only very few countries have been formulating structured capacity building and water target monitoring programmes. However, implementation and enforcement have not kept pace with the increased water demand, water shortage and imbalance with deteriorating water quality and draw-down of groundwater surface. A serious constraint is that, in most countries, the executing agencies have no means to control illegal well construction or groundwater use and pollution.

A number of countries have started to decentralize management and services at the watershed level (Lebanon, Turkey) while stakeholders participation has been introduced in some countries.

PPP, particularly in operation and maintenance of the water supply and sanitation systems, has met some success (Jordan). At the same time, revenue generation and operation efficiencies have increased in only a few countries.

Highlighting current status in the countries of the Middle East, particularly related to development of policies, plans and law, we could mentioned ^(9,11):

Israel has a Water Law in place since 1959, which establishes the framework for the control and protection of the country's water resources. Numerous regulations have been promulgated pursuant to the Water Law. In 2000 Israel decided to act according to the principles of IWRM in order to face and overcome a looming and lasting water crisis, while one year later the water legislation shifted towards privatization with the Water and Sewage Corporation Law of 2001.

Jordan has a Water Strategy (1997) and Water Policy (2003) in place as well as a National Water Master Plan (2003) that corresponds to an IWRM Plan.

Lebanon has a Work Plan 2000-2009 (for the account of the Ministry of Energy and Water, 1999). The Work Plan includes elements of an IWRM Plan, but it is focused on domestic water supply and is lagging behind in implementation. The water administration has been re-organised towards a watershed management (21 water authorities were consolidated into 4) and steps are taken for operationalizing the scheme.

Palestinian Authority has a National Water Plan (2000) and an Integrated Water Management Plan for West Bank and Gaza (2003) that corresponds to an IWRM Plan. Water regulation is under further development.

Syria has Water Strategy (2003) in place, following a 2000 Water Sector Analysis, prepared by the Ministry for Irrigation. The Water Strategy entails provision for elaborating an IWRM Plan. A Water Law was ratified in 2007 introducing consolidation of the water-related public entities. Independent water directorates at the basin level have been established and responsibility for water supply and sanitation has been decentralized to water authorities and municipalities.

Turkey has a number of laws and plans though there is no evidence of an IWRM plan in place. Turkey is an EU Candidate Country and gradually tries to abide to principles and conditions of the EU Water Framework Directive.

1.4. European Union

Water and water pollution were among the first environmental concerns in the EU. The first pieces of EU water legislation were accepted by the European Council as early as 1973. Since then, European water legislation has taken a leading and innovative role in the design of national water policy in many EU Member States.

The current EU water policy recognises the following over-arching principles: High level of protection, taking into account the diversity of situations in the various regions of the Community; Precautionary principle; Preventative action; Rectification of pollution at source; Polluter-pays principle; Integration of environmental protection into other Community policies e.g. agriculture, transport and energy; Promotion of sustainable development.

These principles are reflected in the EU Water Framework Directive. Placing these principles at the centre of water policy has major implications for further policy development and implementation, including:

- the development of integrated policies for the long-term sustainable use of water, and its application in accordance with the principle of subsidiarity;
- expanding the scope of water protection to all waters: surface waters, including coastal waters, and groundwater;
- achieving "good status" for all waters by a certain deadline, and preserving such a status where it already exists;
- water management based on river basins, with appropriate co-ordination provisions for international river basin districts;

- setting prices for water use, taking into account the principle of cost recovery and in accordance with the polluter pays principle;
- encouraging greater participation by citizens; and
- streamlining legislation.

Box 2 lists all main pieces of EU water and related legislation.

Box 2. EU Water and Related Legislation

(European Commission, October 2007)

The Framework Legislation

- Water Framework Directive (WFD) (2000/60/EC).

Water Quality Objective oriented

- Bathing Water Directive (76/160/EEC; to be repealed and replaced by the new Bathing Directive 2006/7/EC at the latest by 2014).
- Drinking Water Directive (98/83/EC).
- Directive on Surface for Drinking Water Abstraction (75/440/EEC; integrated into the WFD, to be repealed under the WFD 2000/60/EC as from 22.12.07).
- Freshwater Fish Directive (78/659/EEC); integrated into the WFD, to be repealed under the WFD 2000/60/EC as from 22.12.13).
- Shellfish Water Directive (79/923/EEC; integrated into the WFD, to be repealed under the WFD 2000/60/EC as from 22.12.13).

Emission-Control oriented

- Urban Waste Water Treatment Directive (91/271/EEC) and related Decision 93/481/EEC.
- Nitrates Directive (91/676/EEC).
- Ground Water Directive (80/68/EEC; integrated into the WFD, to be repealed under the WFD 2000/60/EC as from 22.12.13; after 2013 the protection regime should be continued through the WFD and the new Groundwater Daughter Directive (2006/118/EC) adopted on 12/12/2006).
- Dangerous Substances Directive (76/464/EEC; to be repealed under the WFD 2000/60/EC as from 22.12.2013;

proposal for a new Directive setting limits for 41 substances was adopted on 17/07/2006 (COM(2006)397 final)).

- Daughter Directives of the Dangerous Substances Directive (to be replaced and repealed under the Directive proposed 17/07/2006).
- Integrated Pollution Prevention and Control Directive (96/61/EC).

Diffuse source emission controls

- Plant Protection Products (91/414/EC).
- Marketing and Use of Dangerous Substances and Preparations (76/769/EEC).
- Biocides (98/8/EC).

Monitoring and Reporting

- Directive on the Measurement of Surface (Drinking) Water (79/869/EEC; to be repealed under the WFD 2000/60/EC as from 22.12.07).
- Common Procedures for Exchange of Information (Decision 77/795/EEC).

Moreover,

- a Communication on Water Scarcity and Droughts was launched in July 2007
 - a new Directive on Flood Risk Management was adopted on 18.11.07
 - a Marine Strategy Directive to save Europe's seas and oceans is under adoption.
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The WFD sets deadlines for individual requirements. For instance, River Basin Districts and authorities had to be identified by 2003, in 2006 the monitoring network had to be established and public consultation to be started, River Basin Management Plans have to be presented by the end of 2009, pricing policies need to be implemented by 2010, and Programmes of Measures are to be made operational by 2012. Ministries for Environment, in most countries also responsible for other issues (infrastructure, sustainable development, agriculture, etc) are responsible for water management.

The implementation of the WFD raises a number of shared technical challenges for the EU Member States (MS). In addition, many of the European river basins are international, crossing administrative and territorial borders; therefore, a common understanding and approach is crucial to successful and effective implementation of the Directive. For this reason, the MS, Norway and the Commission agreed on a Common Implementation Strategy (CIS) for the WFD only five months after the entry into force of the Directive. The main aim of the CIS is to allow a coherent and harmonious implementation of the WFD with a focus on methodological questions promoting a common understanding of the technical and scientific implications of the WFD.

The main costs (apart from administrative costs) for implementing the WFD relate to an appropriate monitoring system, wastewater treatment beyond the provisions of the Urban Waste Water Treatment Directive, compliance with the Integrated Pollution Prevention and Control Directive and compliance with new standards and requirements on the priority substances list. Moreover, the real cost impact of the WFD depends on the extent to which a country has already

embarked on the charging of water costs in alignment with the financial costs, or even taking into account true environmental and resource costs.

The first stage in the implementation of the WFD was concluded in 2007 with mixed results. On the positive side, all MS have made significant progress since the Directive came into force and most of them were able to report in time. The implementation has also brought new impetus to water management and significant progress e.g. restructuring of administrations, compilation of information and assessments, public awareness raising campaigns is observed in most MS. A good starting point for preparing river basin management plans was also provided. Finally, some international cooperation on implementing the WFD between MS and also with some neighbouring countries is inspiring and encouraging⁽⁵⁾.

On the negative side, there are a number of significant shortcomings in the implementation. In particular the legal transposition of the Directive into national law is still poor and in some cases inadequate. Moreover, in general, insufficient data has prevented MS to present a conclusive risk assessment for a large percentage of water bodies. Still, a significant number of water bodies have been identified as at risk in all MS. Furthermore, there are some MS where there appears to be a problem with the WFD implementation resulting in significant delays. Effort is made by all countries to fully abide and respond to the provisions of the WFD with the next important target been the preparation of river basin management plans by the end of 2009⁽⁵⁾.

1.5. Southeastern Europe

The legal and institutional frameworks in many SEE countries are currently under revision. A major driving force is the prospect of EU accession. In that context, the WFD provides a suitable framework for water management for many countries of the SEE. Major difficulties and gaps still exist, mostly in implementation of policies and enforcement of legislation. Full approximation to EU standards will need further major reforms, time, and extraordinary efforts by national and local administrations, along with adequate resources. In addition, the EU *acquis communautaire* does not affect all SEE countries at present and definitely not at the same level and with the same urgency. Cooperation leading to shared benefits in the SEE is linked to the reform processes at the national level that are needed to provide the basis for integrated and sustainable management of water resources.

Challenges at the national level that need to be addressed include:

- A more effective approach by legal frameworks for the management of natural resources consistent with EU standards;
- The design and adoption of a combined nexus of management instruments, integrated with development and economic policies, and coupled with efficient monitoring and enforcement mechanisms;
- The development of clear and applicable procedures that will ensure public awareness and balanced participation in decision making;
- The establishment of rational and operational decentralization that will allow efficient involvement of local communities, as well as enhance the possibility for cross-border cooperation at the local level;
- The establishment of appropriately-scaled management institutions with clear competencies over natural resources management, along with continuous improvement of their capacities and coordination;
- The improvement of the human capacity to plan and implement Integrated Water Resources Management at basin level;
- The development of mechanisms that will facilitate sustainable financing of natural resources management in accordance with the “user” and “polluter pays” principle, consistent also with socio-economic realities at the local level.

Highlighting current status in the countries of Southeastern Europe, particularly related to development of policies, plans and law, we could mentioned^(9,11):

Albania has a Water Strategy (2004). Albania has signed the Stabilization and Association Agreement with the EU (2006), is a Potential EU Candidate Country.

Bosnia and Herzegovina has an outdated Water Management Master Plan (1994) and is in progress of drafting a Water Protection Strategy. Bosnia and Herzegovina has started negotiations for Stabilization and Association Agreement with the EU (2005), is a Potential EU Candidate Country.

Croatia has a National Water Protection Plan (1999) and is preparing a Water Management Master Plan. Croatia has signed the Stabilization and Association Agreement with the EU (2005), is an EU Candidate Country.

Montenegro has become an independent country in May 2006. The country has a new Water law (2006). It is a Potential EU Candidate Country.

Serbia has a Water Resources Master Plan (2002). Serbia has started negotiations for a Stabilization and Association Agreement with the EU (2005), is a Potential EU Candidate Country.

Chapter 2. Main issues with respect to water governance in the Mediterranean

Without meaning to be exhaustive, main issues pertaining to water governance in many of the countries of the region are discussed herewith. They are addressing different but inter-linked fields of challenges, with varying levels of difficulty in achieving change.

1) Policies are developed, but they face considerable obstacles in their implementation while monitoring tools are missing

Policies have been and will continue to develop, with different pace in each country and with various levels of comprehensiveness. Social and economic dimensions in water policies e.g. alleviating poverty and reducing unemployment are often poorly reflected. Moreover, it is not rare that by the time all parts of a policy, including financing strategies, have been developed it is realized that tools are not convenient for the new challenges, or that new knowledge or better understanding of issues are introducing new realities. Sometimes, even the concepts that are developed through international processes, change so fast that only a relatively small group in each country with high-level knowledge and access to forward-thinking concepts, can follow these.

Regarding implementation of IWRM policies, though efforts in most of the countries are on-going, the way is long and challenging. An important obstacle is that the required investments are too high and not affordable by many governments in the region. Obstacles encountered in implementation are discussed also under other points.

Regarding monitoring, achievements are still limited and there is consensus that water indicators should be established as part of the IWRM planning process. Each country should adapt indicators in its own realities, however establishing an international system of monitoring could contribute in better understanding problems and promoting solutions. Indicators in each country could assess (i) the extent to which key enabling conditions for the implementation of priorities have been addressed already – current stage, (ii) the progress of specific IWRM change processes and (iii) the extent to which improved water management through IWRM has successfully contributed to the achievement of the MDGs. As it relates to assessment of current stage (i) and the progress of IWRM change (ii), indicators could be structured to monitor the enabling environment, the institutional frameworks and the management instruments. As it related to MDGs (iii), indicators could primarily focus on MDG1 on Poverty and Hunger, MDG-6 on Health and MDG7 Environmental Sustainability⁽¹³⁾.

2) Legislation and regulation have to be strengthened and enforced

Legislation and regulation has to advance to meet current and future challenges. Among issues that need urgent action are the introduction of environmental standards and setting of water rights. Good water status is the clear ultimate goal of water legislation in the North of the Mediterranean. Though, with the current population and development pressures, adaptation to similar standards in the South and East of the Mediterranean is a difficult endeavor, clear targets should be set and all effort should be made to be implemented for the benefit of the present and future generations. Among others, in many countries the legal and regulatory framework is still inadequate to apply economic instruments such as the “polluter pays principle”, fines associated with excess pollution loads, incentives for good practices, etc. Moreover, laws need to be updated especially with regard to standards of discharging industrial effluents to waterways.

Regarding water rights, setting of legal instruments to regulate water allocation among water using sectors and within the same sector, is lagging behind in many countries. Moreover, the establishment of a reliable legal permitting system for drilling water wells is essential, also for integrated groundwater management. Yet, often these are issued based on rules such as a pre-fixed distance between wells without any scientific approach. Introduction of water rights also support the development of water markets and set the rules for trading these rights which is often practiced unofficially among various users.

Incompliance with and inability to enforce water laws are mainly due to lack of inspection and monitoring capabilities of water institutions, lack of procedures and rules for investigating violations and assessing penalties and lack of empowerment and authority by the water and environmental inspectors to compel violations through court actions. There is a need to establish an effective law compliance and enforcement system for water issues and to provide the necessary financial and technical support required to water institutions with inspection and penalty responsibilities.

3) Overlapping and multiplicity of water institutions continue

Water institutions take several forms: agencies that manage the quantity and quality of water resources and promote inter-sectoral planning; those that provide service or regulate service providers; and those that manage the financing of water investments. Considerable progress has been made in reforming institutional settings, particularly as regards consolidating responsibilities on water planning and legislation. However, in many countries authorities responsible for the wider water sector (supply, sanitation, irrigation, environment, etc) are characterized by overlapping and conflicting functions. This constitutes a major impediment to achieving appropriate balance between the water supplies from the various sources and the demands for the various users.

4) Water demand management needs even more effort

Reviews show that there is a considerable shift of policies and action in almost all countries towards Water Demand Management (WDM), including emphasis on non-conventional water resources (desalination, reuse of waste water, etc). However, these are still without the strength that is required to deal with the increasingly difficult water situation nor are supported by consistent policies. WDM remains in several countries secondary to supply management. There is scope for further programmatic work on WDM and even greater scope for action on the ground. A special Theme Paper of the Ministerial Conference elaborates on the subject.

5) Establishing and maintaining good water governance is expensive and, at the same time, cheap

A consistent and serious water sector reform is a long and costly process. Development of national and local plans, establishment and operation of coordination mechanisms and new institutions at the national and local / watershed level, training and capacity building,

stakeholders consultation, etc easily reach millions of euros. However, all reviews show that benefits from such an investment pay back to the country and, when shared waters are involved, to its neighbors too.

On the side of policy implementation, the weakness of financial resources, the increase of foreign debts and low investment opportunities impede the development and management of water resources. Additionally, many governments face difficulties to allocate the necessary budget to finance the operation and maintenance programmes for the water infrastructures.

The international donor community provides assistance though bilateral and multilateral aid, but this has to be enhanced and coupled with national financing. Public resistance, lack of political will and lack of an enabling environment are often encountered when attempts are made to initiate and develop economic instruments such as metering water use, pricing of irrigation water, cost sharing on operation and maintenance of water resources infrastructures, and applying polluters pay principle on all polluters, both governmental and private sector entities. Moreover, there are no clear modalities to involve private sector to invest in water and its role remains limited, particularly compared to economic sectors (eg. energy, telecommunication). In general there is a lack of motivation and incentive systems for private sector and investors' participation in water. A special Theme Paper of the Ministerial Conference elaborates on the subject.

6) Corruption remains one of the least addressed challenges in relation to water

Corruption is a symptom of governance deficiencies in both the private and public spheres. In many countries, enforcement of legislation is weak and judicial systems are inadequate. When these are combined with, for example, low wages, huge income disparities (both within and between countries) and accountability and transparency shortcomings, personal economic gain is more attractive than concern for the well-being of citizens.

Anti-corruption measures are now perceived as central to equitable and sustainable development. New research and case studies increasingly show how corrupt practices are detrimental to sustainable water use and service provision. Corruption ultimately limits the scope for improving poor people's livelihood opportunities since it cuts off scarce monetary resources and diminishes countries' prospects for providing water and sanitation for all and sound water resources management.

7) Capacity building, training and development of skills needs to meet current and prepare for coping with future challenges

Despite the increasing interest on water management over the past decade and the many and diverse activities to develop skills, the growing challenges require a much greater volume of more structured and better targeted capacity building, supported by related materials and follow-on actions. Such activities should tackle all possible issues, address all stakeholder groups and at all levels (national, local and regional).

Further attention should be given to technical capacity building of the institutions participating in the drafting and monitoring of national and local IWRM plans. Multi-discipline efforts need to be mobilized for the mainstreaming of environmental, economic, social, and legal dimensions in the developed IWRM policies, plans and laws and their monitoring. Involved personnel are commonly engineers, environmentalists and agronomists while there is a shortage of other professions (economists, sociologists, lawyers, health experts, etc). Moreover, institutions have to upgrade to become able to retain its trained staff, keeping them motivated and active.

At the local level, there is a serious shortage of capacities, knowledge, know-how and other capabilities needed to participate in and implement water policies and projects. This can be attributed to the centralized approach (i.e. top-down approach) of water policy development and the shortage of advanced training and capacity building campaigns on the new emerging IWRM issues and approaches.

8) More and reliable data and exchange of information

Lack of reliable and validated data in many countries of the region is an important constraint that impedes proper preparation, implementation and effective monitoring of policies and plans. In most cases, data collection and monitoring programmes are carried out by a variety of authorities (water, environment, health, interior, statistical service etc) without coordination and integration. There is a need to harmonize terminology, norms, methodologies and formats and to secure continuity of data collection and analysis. The latter advocates for a centralized, accredited and shared database at national level that include all data and information related to water through advanced information systems and powerful communication tools and networks.

Access to data and information sharing also needs to be advanced. In some countries, water data are considered of strategic importance and access is prohibited or is limited. Even in that case, the responsible authorities should elaborate ways, at least, to share info on status, trends and forecasts and provide the needed background information for promoting assessment and research work.

9) Operational linkages between research and management remain poor

Though there is a variety of scientific institutions working on water issues and research is producing important results, these are poorly linked with policy makers and management authorities. Their influence and contribution to planning development and management activities implementation remains weak. A more action oriented approach is needed by the academia and research institutes, along with enhancing of cooperation with policy makers and stakeholders.

10) Awareness and then more awareness

Awareness is the first step for sensitization, participation and action and, therefore, a foundation for good water governance. Though awareness raising activities are on-going in most of the countries, they have not been approached in an organized way and with a long-term plan. As a result, though people know about the importance of water by tradition and everyday reality, they may not practice any water saving measure and they consider that authorities will make sure of their water needs. Awareness is lower in the rural areas.

NGOs are a traditional broker of information and a key actor in raising awareness. They have to be further supported to effectively deliver that role. The media (press, radio, television, web) is an increasingly active player in water awareness. Recently, the media have placed particular attention to climate change and environment, with obvious benefits for communicating water issues linked to adaptation and needed protection measures, respectively. A more strategic and operational partnering with the media need to be made.

11) Stakeholder participation is a prerequisite

It is widely recognized that unless authorities and all stakeholders get involved in a structured and meaningful participatory processes to elaborate and monitor national policies and plans, sustainable water management will not be succeeded. Participation helps to ensure that stakeholders support the measures taken to address water problems, to find the most effective and efficient solutions by drawing on local experience and knowledge, and to solve potential conflicts between different interests before decisions are taken.

However, in many countries, existing participation mechanisms have no institutional format and are often related to projects that lack continuity and replicability, therefore, having limited contribution to stakeholders' empowerment. More support has to be provided to NGOs, WUAs, Domestic Users Associations and other civil society organizations in order to become able to contribute in a meaningful and constructive way to the needed change.

Though the local level is widely recognized as the level to manage water, local authorities are still poorly involved in developments. Lack of decentralization (i.e. bottom-up approaches) and absence of communication channels and public consultation are obstacles that limit the ability of local governments to formulate or implement local and operational plans or to participate in decision making.

Moreover, even actors from the government, that should have had an important role in policy and plan formulation, are not involved. This often includes ministries responsible for planning, finance, interior, etc.

A more prominent role of parliamentarians in the water resources management agenda has emerged over recent years, being both representatives of the citizens and legislators.

12) Education is about investing to our future

Through decades, a steadily increasing level of education of the citizens is documented in the Mediterranean countries. More educated population is better able to understand the impacts of water issues on their health and livelihoods, is better able to find effective ways to communicate their concerns to policy makers and can participate in a meaningful and constructive way in consultation processes. A system of continuous formal and informal education on water issues that focuses on the management challenges and highlights the options available as well as the need for personal action, should be supported in the countries of the region.

Efforts are on-going around the Mediterranean mostly under the framework of education for sustainable development, but it is recognized that the needs for more and better targeted education on water issues are great and require central planning, a functional network of educators as well as resources and political commitment to this long-term objective.

13) More attention to gender issues

Gender refers to the roles and responsibilities of men and women and the relationship between them. These socially determined roles are influenced by historical, religious, economic, cultural and ethnic factors.

For several countries of the Mediterranean, gender mainstreaming in water resources is not well defined and is characterized with certain weakness, including lack of clear objectives on gender equality, gender analysis, resources and capacity, monitoring and reporting, tools and dialogue of gender equality. The socio-economic disparities between men and woman, the absence of women views in planning and implementation of water aspects, the non-systematic incorporation of women into water resources management, the limited involvement of women in water decision making and maintenance, the deficiencies in gender among water organizations in particular and society in general, all are problems seeking appropriate solutions.

Local capacity of women, including through their organisations, to be effective users and active contributors in planning and application of policy, should be built. At the rural areas where much of the problem exists, very few women are active in WUAs and water cooperatives. This is particularly a consequence of the restricted land ownership of women in many Mediterranean countries. Water sector activities, such as irrigation, can generate direct income for women and help them save, capitalize and own local assets. Strengthening of women representation in stakeholder processes will be a driver of improved water services and water management.

14) Water governance has to effectively tackle 'new' challenges, including shared waters management and climate change adaptation

With changing physical and socio-economic conditions that put more pressures on water resources, water governance has to effectively address arising challenges. The need for urgent action to manage 'new', through always present, issues is introducing important elements in

water management. This includes adaptation to climate change, management of groundwater and management of shared water resources.

The consequences of climate change are forecasted to be particularly severe in the Mediterranean. Phenomena such as recurrent and persistent droughts, high variability in precipitation, serious decrease of soil moisture, river flow decrease, extreme weather events, desertification, etc. are expected to increase significantly in the region and will impact on freshwater availability in terms of quantity and quality. Other serious effects of warming in the Mediterranean could be sea level rise resulting *inter alia* in land erosion and salt water intrusion in coastal areas, thus in the loss of inhabitable and arable land as well as serious alterations of natural habitats and damages in important ecosystems. Climate change implications have to be examined in depth and to be taken seriously into account in all policies and legislation. Key players have to be engaged in action and people have to be informed not only about the problem but also of the possible solutions and individual contribution. A special Theme Paper of the Ministerial Conference elaborates on the subject.

There is an increasing consensus in the region that the benefits from shared waters should also be shared. The high degree of transboundary water resources in the region has led to several water-sharing agreements and cooperative programs. Experience has proved that cooperative actions, partnerships for management and investment, or just technical cooperation on a fair and equitable basis can improve benefits for all countries concerned and contribute to a peaceful environment on a broader scale. Nevertheless, there are still numerous obstacles in achieving this objective that derive from the interdependence and conflict that exist among different uses, coupled with the various levels of infrastructure, legal and institutional frameworks, policies, priorities and interests of each country. Importantly, in some cases, conflict between countries has brought to a dead-end any such collaboration or coordination efforts. Improving capacities of countries on issues related to management of shared water resources (international laws and agreements, negotiation skills, conflict resolution, etc.) and harmonizing the national laws within a possible overall regional approach would be among helpful tools for sustainable water management.

Chapter 3. The way forward: Some further considerations towards effective water governance

New realities call for integration of water management, at all levels and as part of the overall governance system. In that respect, it is recognized that water is not an isolated “sector” but a part of a wider economic system that includes agriculture, trade, energy, real estate, finance, social protection etc. Changes in that wider system may even have more impact on water management than actions within the sector and water reforms must be designed and implemented with full understanding of the changing realities of the political economy. Involving non-water decision makers in water policy reform may increase comprehension and open new grounds for partnerships and action.

Reform planning, implementation and monitoring involve various political and technical processes. Understanding of the factors that drive the political dynamics of reform, analyzing where those drivers might be changing and sequencing of reform activities accordingly, are key in all steps of the process. For these, reforms will need political as well as technical champions that will introduce and drive the new water paradigm.

Practice has showed that gradual change would generally produce more sustainable results than attempts to completely overhaul a whole system at one go. Moreover, approaches that have achieved the most tangible results have started by focusing on specific water challenges at the national and local levels. In addition, pragmatic approaches, which take into account contextual realities, seem to have the greatest chance of working in practice. Compromises, tradeoffs, including second best solutions have been the norm rather than the exception.

Improving accountability of government agencies and water service providers to the public has to become a central objective in policy development and implementation. Transparency is essential so that the public knows why decisions are made, what outcomes they can expect, and what is actually achieved.

Complementary to national efforts, multilateral and bilateral donors as well as regional organizations assist considerably the process. They provide funding and technical assistance as well as expertise and sharing of experiences on a variety of issues.

While countries gradually respond to the MDGs and the WSSD targets, the national water strategies and IWRM plans must describe the updated national framework of improved water governance. In order for that to be applied, the plans have to be supported by competent and capacitated institutions, legal and regulatory tools, monitoring and evaluation systems, sustainable financing strategies and adequate funding. Actions should respond to real needs and be more coordinated, coherent and output oriented. Plans have to be developed or finalized in all countries through participatory processes. Local / watershed plans have to gradually be elaborated in a similar manner.

Conclusions

While each country of the region is attempting to tackle its water problems according to its local needs, strategies and policies are not always consistent from country to country, or even within countries, nor should they be, since the situations vary greatly. Nevertheless, benefits would be significant from a common understanding, a shared vision and a Mediterranean strategy on water resources management that would explicitly include water governance in its focus areas.

The Euro-Mediterranean Ministerial Conference on Water, 29 October 2008, in Jordan, provides a unique opportunity to launch such a Strategy on Water in the Mediterranean and to outline its objectives and mechanisms of delivery.

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