



**Water Governance
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Background Note

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GOVERNANCE OF WATER POLICY: KEY ISSUES FOR DISCUSSION

**REGIONAL CONFERENCE ON THE GOVERNANCE OF WATER
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1. This background document presents key issues related to water governance, with a focus on the relationship between stakeholders in the water sector. The purpose is to provide material for the discussions of the regional conference on water governance being held in Tunis, Tunisia on July 8-9, 2009. Another goal is to raise key questions that could help identifying key water governance issues and the way they are addressed in both OECD and MENA countries.
2. The specific objectives of this document are therefore to contextualise integrated water governance within broader governance trends; identify the critical coordination “gaps” that usually characterize the water sector in centralised and decentralised contexts; and think about potential strategies and mechanisms that could address these “gaps”.

Integrated water governance: Key debates and definitions

3. Water is a cornerstone of sustainable development. The availability of sufficient supplies of water of sufficient quality is critical to economic growth, environmental health, and social well-being. The good governance of water is essential to ensuring that these three objectives of sustainability are not just reached but also in balance with one another.
4. By “water governance”, we mean rules and practices for decision-making about water and their implementation. *Governance* is distinct from water *management*, which refers to operational, on-the-ground activity to align water resources, supply, consumption and recycling. Water governance consists of the range of political, institutional, and administrative processes through which stakeholders articulate their interests, their concerns are considered, decisions are taken and implemented, and decision-makers are held accountable in the development and management of water resources and delivery of water services.
5. Because water policy implies several actors and shared responsibilities, it requires a *multi-level governance approach*. By *multi-level governance*, we mean the explicit or implicit sharing of policy-making authority, responsibility, development and implementation at multiple government levels (local, regional, provincial/state, national, international, etc.).
6. Integrated water governance implies several challenges in terms of investment in resources and infrastructure, allocation of uses, price fixing, scarcity of the resource and environmental concerns, notably within the Middle East and North Africa region, taking into consideration the geographic conditions and the effects of climatic change in this area.

7. Most of these challenges relate to broader trends in governance. Watersheds (river basin) are usually the subject of competing claims both upstream and downstream: industrial, tourism, amenity, residential, agricultural, and resource (e.g. hunting and fishing) uses. Thus, water governance is generally characterised by competition between agricultural, industrial and residential users, which respectively account for 70%, 22% and 8% of water use at the global scale (OECD, 2004).

8. In every country, regardless of their institutional structure, the water sector experiences institutional fragmentation due to the allocation of roles and responsibilities across different ministries and levels of government. Very often the lack of vertical coordination (between the multiple scales at which water is used and managed) and horizontal coordination (between different ministries and between subnational authorities) as well as the mismatch between administrative boundaries, on the one hand, and hydrological boundaries on the other, prevent a coherent and integrated water policy approach. In some areas, this lack of coordination may even lead to geopolitical tensions.

9. These issues flow in part from the fact that water is a multi-purpose resource, which implies that multiple sets of users will operate at different scales. This creates diverse views of stakeholders within the policy debate and broader governance conflicts over social well being, and environmental quality. Water also requires a variety of competencies to be produced and delivered, and these are often shared among different ministries and various authorities.

10. One key dimension of governance conflicts is between competing views of water as a resource (and commercial asset) and water as an ecological service (and public good). Indeed, one view, often expressed by industry, is that water is a resource to be exploited, processed, traded and dealt with as any other commercial asset. Another view, often expressed through public interest groups, is that water is an inherently shared “social asset” vital to ecological and human health. The relative degree of power and legitimacy of these groups within the policy-making process is the subject of contestation, over a range of issues such as participation in decision-making, the types of information which decision-makers employ (or discount); and accountability for decision-making. This relatively recent awareness at the global scale had to be responded to within pre-existing institutional and historical contexts and heritage even if at the local scale in many places, some practices had integrated these challenges in a secular way at an earlier time.

11. Creating such a governance framework is a challenge. The paradigm of *Integrated Water Resources Management (IWRM)* - for which national governments confirmed their support at the 2002 World Summit on Sustainable Development - would ideally integrate a broad array of issues ranging from drinking water protection and human health, to fisheries management and other economic interests based on water systems, to ecosystem sustenance and protection, all on both water quality and water quantity fronts. The challenge of policy coherence thus implies a certain level of centralisation but at the same time must take into account the integration of constraints, competencies and information of other actors and levels of decision-making than the central government, hence the need to think in terms of *multi-level governance of water*.

12. There is no one-size-fits-all model for water governance; however successful models exhibit a good “fit” between local hydrological, environmental, cultural, economic, and political factors. Given that no optimal governance model exists - since it has to adapt to local and

national specificities - it is while actually confronting national experiences that good governance practices can emerge.

13. As water policy increasingly relies on shared responsibilities, these stakes are of utmost importance and will become even higher in the future. The challenges linked to coordination and practices are becoming all the more complex and critical due to two major but apparently contradictory trends: on the one hand increasing delegation of water and on the other hand a re-scaling of government responsibilities in the sector.

14. “*Delegated*” *water responsibilities* is an important trend.. It may be defined as the involvement of subnational and non-public actors in decision-making for water management; this frequently, but not always, implies the delegation of decision-making to lower scales of government (region or municipality) or deconcentrated bodies (territorial representatives of the central government) such as watershed. This trend towards *delegated*, or “shared” or “collaborative”, *water management* is more broadly in line with trends in environmental governance.

15. Another important trend is the *re-scaling of water governance*, and indeed environmental governance more generally, over the past decade, to the supra-national or “international” scale, which takes a multiplicity of forms: creation of supra-national agencies and governments (e.g. the European Commission, the Commission on Environmental Cooperation ...); bi-lateral and multi-lateral trade and cooperation agreements affecting water services (e.g. NAFTA, WTO); as well as international actors (e.g. multilateral development banks, transnational water corporations). The impact that each of these categories will have on local water governance will, of course, depend highly on national and local contexts. In some case, such as within Europe, legislation and regulations may be driven at the supra-national level. In other cases, such as with the CEC, supra-national activity will largely be voluntary and cooperative.

Critical governance and coordination “gaps” in the water sector

16. A framework of “coordination gaps” is a useful approach for categorizing common weaknesses in water governance (Table 1). In practice, many of these “gaps” overlap, as do the solutions intended to address them. The typology offered here is merely intended as a heuristic device, to illustrate the multiple issues at play in weak water governance.

17. The reasons why there are gaps proceed mainly from the multiplicity of actors in the water sector. Knowing that all these actors are interdependent, this plurality of stakeholders has an impact when it comes to implementing an integrated water approach since it is difficult to align roles and responsibilities. The existence of such gaps demonstrates that the interaction between territorial and central levels of government is not always coherent, hence the need for a number of mechanisms to enhance coordination.

Table n°1: A typology of the major coordination gaps in water governance

Administrative gap	Geographical “mismatch” between hydrological boundaries and administrative ones.
Information gap	Asymmetries of information between various authorities in charge of policy making or implementation of water (and between public and non-governmental actors).
Policy gap	Sectoral fragmentation of water-related tasks amongst government ministries and agencies which hinders integrated policy development
Capacity gap	“Local” water management actors have insufficient capacity to effectively apply water policy in terms of scientific and technical competences, size and quality of infrastructure etc.
Funding gap	Unstable or insufficient revenues undermine effective implementation of water responsibilities at sub national levels of government

18. These “gaps” are widespread, and particularly acute and diverse in decentralised (multiple tier) political systems. However, these drawbacks of decentralisation can be balanced by different types of advantages like clear accountability mechanisms, proximity with citizens’ needs, improved ownership of water concerns, and good fit with micro-geographical specificities

19. Firstly, one of the primary policy arguments for *central government involvement* in water governance is based on the trans-jurisdictional character of surface and ground water bodies. According to this argument, sub-national governments and agencies are simply functionally unable to adequately manage such water bodies, particularly as they are generally not operational at the watershed scale (creating an “administrative gap”). Yet, sometimes a distinction can be made between local and regional authorities since hydrological considerations can fit with the regional scale. Another justification for central government of water governance is based on the national and international character of aquatic and terrestrial species (e.g. global biological diversity, and waterfowl and other migratory species). Indeed, virtually all water could be argued to possess a supra-local character because of the regional or global nature of hydrologic cycles, and the fundamental importance of water for human existence. Subnational governments, from this perspective, lack sufficient interest and expertise in national (and local) issues in order to govern water effectively (an example of a “capacity gap”).

20. However, important arguments can also be made in favour of *local water governance*. Not all issues and concerns raised by water management are national and international in character; many are local in nature. Given the ubiquitous nature of water sources, central governments lack the resources and expertise to adequately identify, monitor, and solve the myriad water problems that occur at local levels (one example of “information gaps”). In addition, top-down management arguably precludes the kind of local political legitimacy that is often necessary in order to implement management decisions. To put it in a nutshell, water is a ubiquitously local resource, with important extra-local (indeed global) characteristics. The interesting policy question, then, is not whether multiple scales of government should be involved, but how and on what basis.

21. In practice, a consequence of the multi-scalar nature of water under multiple-tier political systems has been the proliferation of *public institutions, authorities and agencies*. This

massive development entails a complicated sharing of responsibilities in water management. This situation has led to the many coordination gaps previously defined (policy gap, administrative gap, information gap, capacity gap and funding gap).

Sample mechanisms and strategies to address “gaps” in the water sector

22. The objective of this section is to provide an initial presentation of some of the mechanisms that OECD and non OECD countries use to address coordination gaps. It is important to note from the outset that there is not one single mechanism which addresses one single gap as the different instruments hereinafter described can each help in addressing a variety of gaps.

Water Agencies

23. The low priority that has been given to water issues has meant that few governing bodies are organized on a watershed basis. But Integrated Water Resources Management (IWRM) implies that effective horizontal and vertical coordination are necessary for sustainable water management.

24. The creation of basin-wide *watershed management agencies* is frequently advocated by water policy-makers. This justification has underpinned, in many parts of the world, the creation of basin-wide water agencies with sometimes strong planning powers. The need to coordinate horizontally and vertically implies the need, in other words, for a new governance model: some countries have opted for centralised and powerful watershed agencies, but this model however presents pros and cons

25. In actuality, watershed agencies are not a panacea, and have potential limits with respect to the goals of IWRM. The ecological mismatch between groundwater and surface water boundaries on the one hand, and between hydrological boundaries and other ecologically meaningful boundaries on the other, imply that watersheds are not the only, and not necessarily the best level at which water resources should be managed. Moreover, recent studies have suggested that the large watersheds favoured by water planners are not politically meaningful to stakeholders—particularly agricultural users—whose water and land use behaviours are so critical to water security (Fischhendler and Feitelson 2005). The top-down, expert-driven, and not always transparent approach of watershed agencies has been the subject of much criticism, one of these being that they have different mandates and may be motivated by vested interests, which are difficult to align when agreement is needed.

26. These agencies however present advantages from an integrated water resources management point of view. Indeed, very often they are key actors in monitoring, investigating, coordinating and regulating water resources. They help to collect and communicate data regarding water availability, water demand (including environmental requirements) and water quality to support different basin functions. They are also very important when it comes to preventing and controlling water pollution, salinity levels and groundwater extraction to ensure

that they remain within accepted limits. They enforce necessary laws and regulations which prevent degradation and over exploitation as well as restore ecosystems. They help in harmonising policies and actions undertaken in the basin by state and non-state actors relevant to water management. Some agencies can also provide mechanisms for negotiation and litigation when it comes to resolving conflicts. Finally, as far as financing and planning are concerned, agencies define mechanisms by which water is allocated among user sectors; they formulate medium to long term plans for developing and managing water resources in the basin; they mobilise resources for instance by collecting water user fees or water taxes; they can also design and construct, operate and manage facilities and infrastructure.

Other possible mechanisms for vertical and horizontal coordination

27. Apart from agencies, different types of mechanisms can address vertical and horizontal coordination challenges. For instance, different types of contracts can be established between local and national levels, or between municipalities in order to optimise the scale of implementation of water policies. Such *arrangements* may help address overlaps and gaps in governance.

28. Other complementary strategies should also be considered such as the use of indicators of performance and the establishment by the central government (or at the supra-national level) of *minimum water quality standards*. Furthermore, *regional strategies* for limiting the “ecological footprint” of supply chains (i.e. limiting water use, controlling water quality, and spatial planning strategies that limit impacts on water resources) could be developed. This would imply, for example, the consideration of the water-related synergies associated with urban densification and industrial clustering (e.g. industrial zones where complementary production processes foster water re-use) as well as the needed urban-rural linkages for water uses and concerns.

29. Some mechanisms for collaboration include water in their objectives and shared responsibilities such as inter-municipal cooperation or regional development contracts between levels of government. However some mechanisms are entirely devoted to the water issue, such as water partnerships or water performance-based contracts.

30. In the water sector, distributed responsibilities, participatory development and citizen engagement are umbrella terms for sharing – to varying degrees – of responsibility, decision-making and accountability. But certain forms of shared governance predominate in the water sector. *Delegated water governance partnerships* involve delegation by government or the relevant authority of water governance to a lower level. It also involves a wide variety of non-state actors and collaborative decision-making processes which often emphasize consensus, as well as trust-building and science-based decision-making which often require extensive fact-finding. Perhaps the most novel aspect of delegated water governance partnerships is the involvement of a large number of stakeholders who represent diverse interests and who treat each other more or less as equals and the principle that decision-making should not be left solely to government experts.

31. The academic literature suggests that there are numerous factors critical to the success of delegated water governance initiatives: sustainable funding; effective leadership and management; interpersonal trust amongst participants; and committed, cooperative participants. Additional factors can include broad and inclusive membership; adequate time; well-defined process rules; formal enforcement mechanisms; effective communication; adequate scientific and technical information; adequate monitoring; low or medium levels of conflict; limited (manageable) temporal and geographical scope of activities; training in collaborative skills; and adequate community resources.

32. To address the informational gap, common information resources exist in some areas. They can favour capacity building and sharing assessment of the situation at all levels of government. For example, the European Union has developed tools such as WISE (Water Information System for Europe) or the Eurobarometer on Water of the European Commission.

Different approaches of water service delivery

33. Some horizontal and vertical coordination tools may be more appropriate or be required in tandem with alternative service delivery approaches. An initial typology for classifying these tools is based on the way public services are organised. These tend to fall into two categories: instruments which are applied on a geographical basis (e.g. the watershed, the nation-state) or a functional basis, depending on types of resources or types of problems (e.g. drinking water quality).

34. On the one hand, *geographically-based tools* are particularly important for limiting jurisdictional overlaps and gaps, and encouraging collaboration between different policy makers. These approaches tend to integrate a wide range of water functions across a geographical area. The most obvious example is that of *watershed agencies, partnerships or committees*. In the United States, for example, multi-stakeholder water governance partnerships receive financial support from federal agencies in at least six states: Massachusetts, Oregon, Washington, Wisconsin, Pennsylvania, and California (with Washington and California respectively having approximately 60 and 150 collaborative watershed partnerships) (Sabatier et al 2005). Geographically-based coordination tools may also be used at the national scale. In Morocco for instance, they have a “Conseil National Supérieur de l’Eau” in charge of coordinating all governmental actions in the water sector. And in France, central government representatives (préfets maritimes etc.) are responsible for coordinating the actions of different water-related administrations involved in aspects of coastal and seawater use and governance, over large regions of the country.

35. On the other hand, *functionally-based tools* tend to be used for ensuring effective and harmonized policy implementation, monitoring, and enforcement. These might include *cooperation agreements* and *power-sharing instruments*, which tend to be used at the national level for *inter-ministerial coordination* and are particularly important in three-tier (federal) systems. For example, in Canada, drinking water supply is a provincial responsibility, but the establishment of national guidelines is coordinated through a Federal-Provincial-Territorial Committee on Drinking Water. These tools also appear at the supra-national level, for example through *transboundary water treaties* governing, for example, flow levels in shared

watercourses. At the regional or local level, multi-purpose inter-municipal bodies (such as Vancouver's Greater Vancouver Regional District) tend to be used at the metropolitan scale, to provide metropolitan-wide services (such as water and sewerage).

Private sector participation

36. Due to the intrinsic characteristics of the sector (natural monopolies, technological needs and expertise, high distribution and transportation costs, network infrastructure and large sunk investments as well as local scale of delivery), water management involves tremendous financial resources that very often exceed the capacity of local governments, hence the funding gap. This is due to the fact that full cost recovery is generally not applied to most users; therefore tariffs do not cover the total costs of water service delivery, water treatment and maintenance of water infrastructures.

37. Indeed, several types of resources are required for water and wastewater treatment and service delivery to be efficient at local level. These resources relate to the scale and quality of infrastructure, the financial aspects and the organisational and technological know-how and so forth. As a result, this raises both the issue of transfers between different levels of government in order to allow proper investments, as well as the role of private sector participation as a complement to resources and a support to key actors in water management. Within this context, public-private partnerships can be considered as one instrument among others to bridge the funding gap as well as the capacity gap.

38. Over the past two decades, much attention has been given to the issue of business models for water supply management, particularly in the context of the growth of private sector participation. Municipal governments will have different reasons for restructuring, but three main goals are frequently cited: improving performance; sourcing finance; and meeting new legislative requirements. The range of business models is broad (ranging from public utility – direct management to private utility) and the debate over the costs and benefits, advantages and disadvantages of each model remains heated.

39. The critical issue with respect to business models is their interrelationship with governance. Together, governance and business models determine the distribution of risks and responsibilities for all aspects of water supply management. When considering whether or not to make a transition from one business model to another, governments must carefully consider the implications of changes in incentives, sanctions, goals, accountability structures, and the role of consumers in decision-making (OECD checklist for public action, 2009).

40. In addition, the “fit” between the governance model and business model should be considered, as problems are likely to arise when the models are incoherent. For example, a disjuncture between (shorter) political time cycles and (longer) infrastructure life cycles can compromise sustainability of decision-making about financing.

41. Therefore, one key strategy for governments in this regard is the adoption of *principles for public action* with respect to water supply, as well as business model restructuring (which may or may not involved private sector actors). A good governance strategy implies the prior

adoption of a “vision” (or a set of prioritized principles for decision-making about water) which should help frame decision-making. Ideally, this good governance model would be adopted prior to business model restructuring.

Key questions for water governance discussion

42. Three critical questions emerge from the previous elements of background :

1. To what extent do the different coordination gaps identified as challenges for governance (information gap, capacity gap, funding gap, administrative gap, and policy gap) characterise the water sector in the different OECD and MENA countries?
2. How might these “gaps” hinder integrated water resources management?
3. Which mechanisms have been used for addressing these gaps? What are their pros and cons?

43. Experts in the Governance of Water Regional Conference in Tunis are invited to address these questions in four different sessions dedicated to the challenges of water governance in OECD and MENA countries (session 1), the role and nature of agencies in promoting sustainable water management approach (session 2), the establishment of partnerships with the private sector (sessions 3A and 3B) and the development of mechanisms at the local level.