

Discussion Paper Theme 3: The Enabling Environment

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Theme 3 of the E-Forum will focus on which policies and institutional arrangements enable stakeholders to manage water in a sustainable manner, accommodating the multiple users and uses of water. Involving multiple stakeholders across scales and sectors is often difficult to realize because of coordination problems and conflicts in perceptions, needs and desirable solutions. Consequently, water management is a complex social problem that is inevitably highly political and interlinked with ethical questions and moral dilemmas. Despite such realities and increasing rhetoric about the need for more integrated, multi-disciplinary, and participatory approaches, it often proves difficult to move beyond a limited technocratic approach to water management. To focus the E-Forum discussion on how to deal with these issues, this discussion paper poses several questions concerning the enabling (institutional) environment for water for food and ecosystems. The paper consists of five parts, one part for each day of the E-Forum. By raising these questions, we hope to encourage a debate about how the politics, culture and capacities of different actors impinge on the collective ability to bring about ethically defensible, ecologically sound and technically viable reforms of water management institutions.

1. Introducing the issues

Institutional reform to achieve sustainable water management is complex. The term 'institution' comprises a wide variety of arrangements and include:

- Legislation detailing rights and responsibilities over water
- Public policies setting objectives and mechanisms for water management
- Decision-making and/or consulting institutions
- Public agencies to carry out mandated functions
- Cultural norms and values underlying the way different actors think and act
- Informal/traditional institutions underpinning historical water management practices
- Financial arrangements for water charging, taxation, water markets, sanctions, etc.

Reforms are currently taking place in an international environment stimulating decentralization, privatization and liberalization. At the same time, new policies and institutional arrangements are implemented to promote sustainable development and protect the environment. The confluence of these trends gives rise to many questions regarding the institutional framework needed to create an enabling environment for sustainable water management. There is wide consensus that, as competition for water intensifies, profound changes in water governance are needed to reconcile the water needs for food production and ecosystems, and to move towards an ecosystem approach for agriculture and a services approach for ecosystems. Compounding this challenge is the widespread poverty in developing countries, and the pressure this creates to reallocate water to the poor for productive uses. The following issues stand out:

- The overexploitation of primary water sources (waters tapped from rivers, lakes and aquifers) leads to environmental degradation through the destruction of aquatic ecosystems, the depletion of aquifers and the generation of wastewater flows. The only way to reverse these trends is to consume less primary water and to make judicious use of derivative water (industrial/urban effluents and agricultural return flows).

- Alleviating poverty through the creation of new water infrastructure becomes very difficult if primary water sources are already fully committed, and frequently under the control of the relatively better-off. Creating new water entitlements for the poor must then be sought in renegotiating water rights to primary water, and in increasing the productivity of “green water” (water stored in the soil profile).
- Increasing the productivity of green water by poor farmers in upper catchments may have significant impacts on runoff and water availability in lower catchment areas.
- Without recognized water rights and impartial enforcement, the danger exists that the poor and the environment will continue to lose out, threatening social stability and ecological sustainability.
- The integrity of the water cycle is threatened if the environment is seen as just another sector that needs water. As nature is the source of water, restoring and maintaining the integrity of the water cycle should be at the heart of all water policies and programs.

These issues show that water governance involves often contradictory and complex, or ‘wicked’, problems. Wicked problems are clusters of interrelated problems, characterized by high levels of uncertainty and a diversity of competing values and decision stakes. Crucially, wicked problems cannot be solved by any single organization acting alone and are intractable, since what constitutes a solution for one group of individuals entails the generation of a new problem for another.

To deal with the uncertainty and complexity characteristic of wicked water problems, there is an international trend towards collaborative water management, away from the command-and-control administration characteristic of centralized management by a single authority. This is occurring under the banner of Integrated Water Resources Management (IWRM), defined as: “a process which promotes the coordinated development and management of water, land and related resources, in order to maximize the resultant economic and social welfare in an equitable manner without compromising the sustainability of vital ecosystems” (GWP 2000:15). Although this definition of IWRM places emphasis on coordination, in practice IWRM is all too frequently interpreted to mean setting up a single, technocratic water agency to combat fragmentation in water management. It may be more fruitful to stop talking about IWRM altogether, and rather to focus on how to achieve collaborative water management that is democratic and ecologically sound. This leads to the following questions for day one of the E-Forum:

What are the critical constraints that have emerged from practice to realizing collaborative water management that is democratic and ecologically sound?

What are the key strategies for overcoming these constraints and is there evidence of success?

2. The role of the state in polycentric water governance

Because the state is central to the discussion of Theme 3 it is important to look more specifically at its changing roles in water governance. It can be argued that through economic globalization and increasing power of civil society and private sector actors the state is becoming increasingly disempowered to deal with complex issues such as IWRM. What passes off as “stakeholder participation” is at times simply abrogation of state responsibilities. This is perhaps tied up with increasing confusion about what the role of the

state can or should be, and the degree of stakeholder participation in the *what* and *how* of water policy. At heart, this raises questions about the basic patterns of water governance.

There are two basic organizational patterns for water governance. The first is the centralized or monocentric model, in which a single public organization is mandated to make decisions regarding water management. While conceivable under monocentric water governance, there is not much room for democracy and multi-stakeholder deliberation. Underlying calls for integration in water management is usually the drive to establish a unified agency, preferably at the river basin level, to sort things out. While possibly appropriate for the construction of water infrastructure, the monocentric model has serious deficiencies when it comes to dealing with the uncertainty, vulnerability and complexity characteristic of water management.

The second model for water governance is the decentralized or polycentric model, in which the actions of existing user and community organizations, layers of government, and stakeholder initiatives are complementary to each other. While new structures may be created, the bulk of routine work is done by existing organizations. Polycentric governance literally means having many centers, especially of authority and control. It consists of many small-, medium- and large-scale democratic units that each have considerable independence in making and enforcing rules for their specific sphere of operation. Composed of multiple units at multiple scales of organization, polycentric governance arrangements are less vulnerable to shocks (both biophysical such as floods and droughts, and social political upheavals), and more open to experimentation and learning than more centralized systems.

With the institutional reforms towards liberalization, privatization and decentralization in water management, there is a clear move towards polycentric governance arrangements. New water management arrangements are emerging, ranging from decentralization to provinces and municipalities to the transfer of tasks and responsibilities to civil society organizations, water user associations, and river basin agencies. These new institutional arrangements imply changing roles and responsibilities for state organizations, such as informing, stimulating, coordinating, monitoring, legislating, regulating and/or enforcing. It also requires the development of a coherent and robust regulatory and legal framework at the national level, which enables and stimulates polycentric governance. To date very little thought has been given in the water world to the conscious design of polycentric water governance, and the role of the state in enabling this. Polycentric governance requires a shift in focus from outputs/effects to process (procedures, communication, decision-making, participation, etc). However, this assumes that countries have functioning states that are committed to democracy and polycentricity. In reality, many countries have weak states, and even in countries with strong states, IWRM is proving a difficult dream to turn into reality. This leads to several interconnected questions to be discussed on day two of the Theme 3 E-Forum:

Have states become disempowered to act effectively in relation to polycentric water governance and IWRM?

Which real world examples exist of national governments that have established robust and coherent regulatory and legal frameworks that enable polycentric water governance?

What do state and non-state actors need to do differently to move towards polycentric water governance?

3. Deepening democracy in polycentric water governance

A key challenge in water governance is ensuring that all stakeholders and sectors have a voice in water decisions. Although frequently advocated as a key to achieving sustainable water management, stakeholder participation is not straightforward and substantive stakeholder representation has proven difficult in practice. The purpose and mechanisms of stakeholder participation processes are often simplistically conceived, leading to inevitable failure. In many IWRM discussions, participation often emerges as an add-on activity to on-going processes, with stakeholders invited to participate in consultations and dialogues that have no real bearing on issues on the ground. The challenge in IWRM is how to create, design or inspire more intelligent political processes in which stakeholders can bring about institutional change through collaboration.

The multitude of actors involved in water governance brings with it a great diversity of interests, norms and institutions. In the monocentric model, governance attempts are geared towards commensurating all these actors and their diverse perspectives and interests in one, or just a few, organizations – usually through levels of representation moving from the ordinary user at the bottom to the expert hydrocrat at the top. According to this model, the complexity of water problems, as it were, *requires* integration, technocracy and centralization. Such models are intrinsically based on the assumption of accurate information, both about the quantities and qualities of available water as about the ways water is used and distributed. The realization that this assumption is not realistic informs the plea for different, polycentric, modes of governance.

Polycentricity involves a distribution and sharing of powers, information, and decisions. It also implies a shift in thinking about water users, stakeholders and other actors. Rather than attempting to ‘involve’ them, or giving them a voice in water decisions, such thinking starts with the realization that all actors somehow already are involved, in different ways; roles, rights, technologies and infrastructures for controlling water often are already in place and functioning. Thus, polycentric governance arrangements are inherently more cost effective and more flexible than “business as usual” monocentric governance, as they build on existing forms of organization, and allow room for self-governance. If designed smartly, polycentric governance is largely self-financing, as water users and other stakeholders are actively involved in providing goods that yield concrete results and benefits to them.

Because different actors have different interests, norms and institutional backgrounds (and backing) the issue is not just one of participation but rather one of creating effective processes and procedures of learning and reflexive decision making by the engaged actors. Such processes need to lead to underlying value positions becoming explicit, assumptions being questioned and particular positions being tested against the best knowledge and experience available. It also means going past more traditional modes of “negotiated agreement” where groups do not necessarily learn about the long term consequences of their positions and are not challenged / supported to “reframe” their perspectives. This may lead to the questioning of existing economic power structures and will require very different approaches to the engagement of science with society. Bringing about institutional change requires a fundamentally different conception of knowledge processes. What becomes important is not knowledge itself, as some sort of commodity that can be easily transmitted, but rather the ability of particular groups of actors to conceptualize problematic situations and come to an informed agreement about the best ways to act. The points raised above lead to the following questions for day three of the E-Forum:

If there are no practical alternatives to multi-stakeholder engagement in resolving water dilemmas, which mechanisms and processes are necessary to enable this engagement?

Are there examples of multi-stakeholder processes for water governance that have led to more inclusive political decision-making and durable institutional change?

4. Water rights for the poor

While stakeholder processes and representation in water management are important, they need to be twinned with a focus on securing water entitlements for the poor. This points to an important role for government, both in drawing up and enforcing water laws that explicitly safeguard customary water rights and contain provisions for reallocating water rights to the poor. All too often, access and rights to water, and to the benefits of its use are captured by the more powerful and well-off, without consideration for poor women and men. The degree of water deprivation of the poor is well-documented, with more than one billion people lacking access to water of sufficient quality and quantity to meet minimum standards of living, let alone for productive purposes. While freshwater supplies are clearly limited, for most people water scarcity is caused by political, technological and economic barriers that limit their access to water, and by competition between water use(r)s. Water scarcity is not only a naturally occurring phenomena, but has also been created through the development of water resources in the past, the selective granting of water rights and resource capture by the better off. These processes make it very difficult to increase and protect the water security of the poor, or change existing uses for the survival of critical ecosystems.

Access to water for productive uses is crucial for the poor to build sustainable livelihoods. The challenge this poses is balancing the allocation of water for poverty reduction with allocations designed to meet the needs of proven productive capacity (i.e., industry, commercial agriculture, mining) and the environment. The introduction of market principles in water allocation tends to favour proven productive use. Thus questions may be raised with respect to the usefulness of market based solutions in attempts to redress existing inequities in access to water. This may make it necessary to redistribute water rights in favor of the poor, but also calls for a judicious use of water and innovations in land and water management technologies.

To craft pro-poor water policies an understanding of the processes that create poverty is needed. While individuals experience poverty and can work their way out of poverty, there is also truth in the statement that societies produce poverty through processes of exclusion. The deprivation commonly associated with exclusion is not only related to a lack of economic resources but also a lack of recognition and entitlements. In this sense, access to water can be viewed as a potential vehicle to achieve economic and political rights. These are prerequisites for full citizenship, which in turn open opportunities for political participation. This interpretation brings out the state's role in exclusion. Through their structures, procedures and legal frameworks, governments can exclude some groups from fully attaining their economic rights, while including others.

A defining feature of poverty is that that the poor have very little influence on the ways in which governments and economies allocate rights and resources in society. Pro-poor and ecologically integrated water policies that focus on redressing imbalances through the reallocation of water rights will challenge the existing distribution of rights and resources.

This creates the political dilemma of confronting vested interests in society, and requires that governments have both the organizational and political ability to overcome resistance to redistribution. However, pro-poor redistributive changes can not be achieved through government action alone, and require a sandwich strategy in which social action and struggles from below both challenge and mesh with government policies to achieve change. Some of the case studies submitted to the E-Forum highlight how, based on social struggle, mechanisms have been devised that strengthen the representation of marginal groups in water management (Bolivia) and that raise the awareness of environmental enforcement problems (Philippines). In South Africa the government has enacted water legislation that sets out procedures for the creation of a reserve of water for basic human needs and the environment, after lengthy consultations with society. However, examples of changes in water policies, regulations and management practices that are pro-poor and geared towards the sustainable management of ecosystems are rare. Such changes would focus on recognizing and protecting the derivation of livelihood services from aquatic ecosystems, and capitalizing on marketable environmental services within the limits of ecosystem resilience.

Are there promising real world examples of changes in water policies, legislation and governance arrangements through which governments challenge the status quo in favour of the poor and the environment?

Which implementation strategies exist to improve the access of the poor to water for food production that also maintain and improve the integrity of the water cycle?

Are rights-based approaches the best way to ensure equitable access to water by the poor?

5. Conclusions

Reflecting on the challenges facing water for food and ecosystems it becomes clear that where poverty is widespread, water management needs to have a strong developmental dimension. At the minimum, strategies for water management should detail mechanisms for redressing imbalances in access to water and establishing recognized and secure water rights for the poor. The latter involves a political process and is not well served by defining a universally valid rationality (whether economic, technical, efficiency oriented or otherwise) that whisks the political nature of this process off the table.

While much can be learned from institutional arrangements for water management in affluent countries, it is crucial to understand that these do not operate in the conditions of low-income countries: dominance of smallholder agriculture, weak institutions, insufficient financial and human resources, marked social inequity and extreme poverty. While water management can only partly address these issues, they must explicitly form the points of departure in the reform of institutional arrangements for water in developing countries. If the E-Forum yields promising real world examples of reforms addressing these issues, it will have served its purpose.