

# Reforming reform:

## Effective approaches to improving policies and institutions

The central message of the Comprehensive Assessment is that we need fundamental changes in how water for agriculture is developed and managed. But how to achieve these changes? The last 30 years of attempts at agricultural water reform have, with few exceptions, shown disappointing results. It seems clear that in order to make progress, we need to reconsider our approach to the reform process itself. Instead of the linear, prescriptive models that have dominated thinking for the past several decades, the Comprehensive Assessment (CA) proposes a more nuanced and organic approach to institutional reform—one that is grounded in the local socioeconomic, political, and physical environment and that recognizes the dynamic nature of institutions (see Fig. 1).

### Box 1: Challenges for today's agricultural water management

**Getting technical water bureaucracies to see water management as a social and political as well as a technical issue** and therefore to prioritize meeting the multiple water needs of poor men and women—for growing food; for drinking, hygiene, and sanitation; and for generating income through a range of activities.

**Supporting more integrated approaches to agricultural water management**, for example, managing water to enhance ecosystem services in addition to crop production; incorporating livestock and fisheries into irrigation management; improving rainwater management and encouraging investments to upgrade rainfed production; and supporting systems and services that encompass multiple water uses, safe reuse of waste water, and conjunctive use of surface water and groundwater.

**Creating incentives** for both water users and government agency staff to improve the equity, efficiency, and sustainability of water use.

**Improving the effectiveness of the state itself**, particularly in its regulatory role, and finding the right balance between state action and other institutional actors.

**Developing effective coordination and negotiation mechanisms** among the various state, civil society, and private sector organizations involved in water development and management and related sectors.

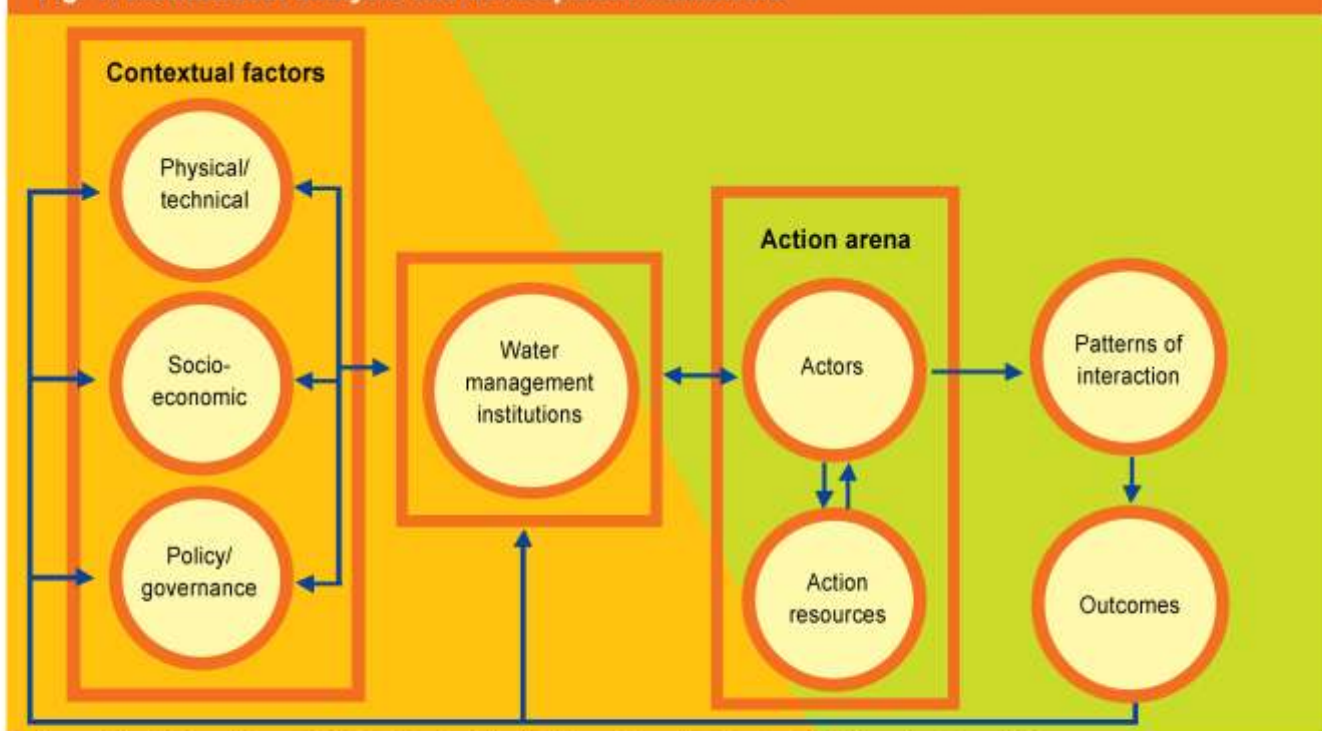
**Empowering marginalized groups, including women, who have a stake, but currently not a voice, in water management.**



Water institutions are embedded in, indeed are the product of, a specific social context. Reform efforts have often ignored this reality and assumed a blank slate as their starting point. Frequently, they have also made the mistake of focusing on a single type of institutional or policy reform, when, in fact, agricultural water management is determined by a whole host of formal and informal institutions. This institutional pluralism must

be taken into account in reform efforts, but this does not mean that it should be supplanted by new, more streamlined institutional models. Instead, reforms need to start by identifying the conditions under which existing organizations and institutions can play an effective role, understanding what can be done to strengthen them, and ensuring effective coordination and negotiation mechanisms among them.

**Fig. 1. Institutional analysis and development framework**



Source: Adapted from Ostrom, E. 2005. *Understanding Institutional Diversity*. Princeton, N.J.: Princeton University Press.

### Why have previous approaches failed?

What many reforms have not taken into account is that history, culture, environment, and vested interests shape the scope for institutional change. Previous reform efforts have often been based on "blueprint" solutions—solutions that follow a particular model that may have been successful elsewhere. These approaches have generally been characterized by a rigid, linear process. Instead what is needed is an adaptive, iterative approach based on a critical evaluation of the institutional systems already in place—including the prevailing power dynamics, formal and informal rights systems, and gender differences.

Another reason reforms have often fallen short is that they focused on a single type of institution instead of looking at the larger institutional context. Most reforms have focused on formal irrigation or water management policies and organizations and have ignored the many other factors that affect water use in agriculture—policies and government agencies in other sectors, informal user institutions, as well as the macroeconomic environment and broader social institutions.

### Other common stumbling blocks include:

- Inadequate support for reform at required levels: Change requires support at the policy/decision-making level and at the implementing level. Leaders or strong coalitions of actors committed to the reform who are able to mobilize broader support can be a determining factor in whether or not reforms are implemented.
- Inadequate capacity building and incentives for change: For individuals and organizations to change their way of doing things, they often need new skills and knowledge. They also need to understand the benefits of changing—in terms of their own self-interest as well as the greater good—which requires an investment in communication. Historically, there has been a bias towards investing in infrastructure to the neglect of communication, institutional strengthening, and capacity building. As a result of this type of lopsided investment policy, the maximum benefits from infrastructure have often not been attained.
- Repeated underestimation of the time, effort, and investment required to change: Particularly in the case of reforms tied to time-bound, donor-funded projects, there is a tendency to expect too much too quickly with the result that reforms are prematurely judged unsuccessful and are left incomplete or abandoned entirely.

## Box 2: Examples of prescriptive reforms that have often failed to deliver expected benefits

**Irrigation management transfer (IMT)** – In an effort to reduce government expenditure and improve irrigation performance, many countries have pursued a policy of transferring irrigation management from the state to user groups (water users associations or farmer organizations). Results have been mixed. IMT has worked fairly well in high-income and middle-income countries with good access to international markets (e.g., Mexico and Turkey). Its success in low-income countries has been much more limited and erratic. In some cases, it has made the situation of already struggling farmers worse and has exacerbated rather than alleviated inequity. IMT does have demonstrated potential, but only if certain preconditions are met and only if governments are willing to restructure their bureaucracies and transfer real decision-making power and authority—and not just the costs and hard work of irrigation operations and maintenance—to water users.

**River basin organizations (RBOs)** – Centralized basin-level organizations have been widely touted as the ideal organizational model for managing competition for water and for implementing Integrated Water Resources Management (IWRM). If water management were only about hydrology this might make sense, but numerous social and political systems, whose boundaries do not correspond to basins, also impact water management. Reasons why attempts to create efficiently functioning RBOs in developing countries have failed include: (1) resistance from existing institutions, e.g. line agencies and state and provincial governments; (2) inability to address the problems affecting water management in river basins, since the source of the problems and the solutions often lie beyond the basins themselves or at much more local levels; and (3) precarious financing. Rather than assuming that the creation of an RBO will result in sustainable river basin management, countries would do well to place more emphasis on developing, managing, and maintaining collaborative relationships for basin governance—building on existing organizations, customary practices, and administrative structures.

**Pricing and tradable water rights** – Pricing irrigation water has been promoted as the way to achieve water use efficiency and to cover the costs of construction and/or operations and maintenance of infrastructure. However, actual implementation of this policy has frequently foundered on political opposition, compounded by difficulties in measuring water deliveries and collecting fees from large numbers of small users. Applied as a blanket measure, pricing—at the level necessary to be effective as a demand-management mechanism—risks aggravating water deprivation and poverty. The other aspect of pricing that has attracted attention is that related to water markets. In countries where water rights exist and are separate from land rights, markets can, in theory, ensure efficient re-allocation of water among sectors. In practice, water trading has, so far, only re-allocated small volumes of the resource (less than 1% per year of permanent entitlements in the Western USA and Australia). Based on experience thus far, water markets are unlikely to have a big impact on agricultural water use in Asia or sub-Saharan Africa in the coming 20 to 30 years.

## ●● Developing more effective approaches to reform: The three Ps

The problems and challenges facing water management in agriculture manifest at different levels—local, basin, provincial, national, international—and their causes and solutions are equally multi-leveled and often embedded partly in processes and forces in other, non-water domains. However, most reform processes are determined by sector

or, more recently, hydrologic boundaries. When looking at this mismatch between the scope of the problem and the scope of proposed solutions, it becomes clearer why water management reforms have such a poor success record.

To ensure more effective reforms, CA findings suggest a pragmatic, participatory, problem-focused approach (the three Ps). In essence, this means starting with a concrete problem, identifying root causes, and then negotiating solutions with stakeholders—those who are contributing to the problem or have the potential to contribute to solving it and those who are negatively impacted by it or potentially will be by its solution. It sounds simple, but, of course, implementing it is not—what is proposed here is not necessarily a faster, cheaper or easier approach to reform, only a more effective and sustainable one.

**Pragmatic:** A pragmatic approach is one that considers what's working and what's not—rather than starting with an ideal model—and then where change is possible given the context—the constraints, the governing power dynamics, the need to build coalitions and mobilize support. It also recognizes that change rarely happens overnight; it requires a long-term commitment and a step-by-step plan of implementation that is responsive to new knowledge, opportunities, and changing political, social and economic conditions.

**Participatory:** The state cannot make changes alone. Writing new laws or passing administrative orders achieve little by themselves. Investments of time and other resources in open, transparent and participatory processes for defining the problem and negotiating a solution pay off by creating knowledge, legitimacy, and understanding of the reasons for change, which increase the likelihood of implementation. In South Africa, for example, the extensive consultation that culminated in the National Water Act created widespread understanding of the reforms and increased the government's accountability in ensuring implementation

Of course, if participatory processes are to be effective and equitable, they need to recognize differences among stakeholders—rural and urban, rich and poor, women and men, farmers and fishers—their interests, and their power to push those interests. Key areas for action here include gathering and communicating reliable data to empower stakeholders through greater awareness and understanding, building platforms for negotiation and conflict resolution, and improving coordination and cooperation among different types of organizations at different levels and in different sectors.

**Problem-focused:** Taking a problem-focused approach to reform means considering water governance, management, and use within a problem analysis context that looks at "problemsheds"—the boundaries of a particular problem as defined by a network of issues rather than by hydrologic or sectoral boundaries. Grounding reform processes in the need to solve concrete problems, for example chronic rural poverty or the regular loss of life and property due to flooding, has a number of advantages: 1) it helps mobilize people and organizations around common goals—giving

them the incentive to participate in reform processes, bridge sectoral and other institutional divides, and enact necessary changes; 2) it helps keep reforms pragmatic and action-oriented, largely avoiding the tendency to map out broad, sweeping reforms that ultimately prove unimplementable; and 3) it results in more integrated, holistic solutions to development problems that capitalize on synergies among development investments.

## ●●● Crafting reform strategies

Successfully moving forward requires strategies for institutional and policy reform that take into account reform as an inherently political process; the state as the primary, but not the only, driver in reform; the pluralism and social embeddedness of institutions impacting water development, management and use; the importance of capacity-building, information-sharing, and public debate; and implementation plans that are responsive to new knowledge and opportunities.

### Box 3: Key questions to ask when crafting a reform strategy

- What will be the benefits of institutional and policy reform, and how will these benefits be distributed? What will be the costs, and who will bear them?
- Which actors (or coalitions of actors) will push forward and implement the change?
- What can realistically be done to address constraining conditions and create an enabling environment for institutional transformation?
- How can knowledge producers and processors—academics, consultants, and practitioners—play a more active role in supporting reform processes?
- How can lessons learned during the course of implementing the strategy feed back into and be used to guide the process?

### Box 4: An example of reforms that worked

Twenty years ago the Office du Niger in Mali seemed like a hopeless case. This large-scale irrigation scheme was suffering from low productivity, dissatisfied farmers, and bankruptcy. Today, the World Bank and others showcase Office du Niger as an example of what major policy, organizational, and institutional reforms can achieve. Between 1982 and 2002 rice yields increased by a factor of four, total production increased six fold, incomes increased dramatically even as population exploded, women gained opportunities in farming and business, and new businesses were created. The Office du Niger experience offers several key lessons:

- Irrigation reforms are most successful when they are an integral part of a broader reform process. Here reforms were not just focused on the restructuring of water management institutions, but also addressed the need for better access to input and output markets.
- Timing and a supportive macroeconomic environment matter. Around the time of the reforms, market prices for rice became attractive after a 50% devaluation of the West African franc. Farmers were ready to take advantage of the ensuing market opportunities once institutional reforms were in place.
- Reforms need to be negotiated with stakeholders and require support at multiple levels—in the case of the Office du Niger, reforms were enabled by support of the ruling political parties, donors, the business community, field staff, and the farmers themselves.
- Consider how existing organizations can play a role before attempting to create new, purpose-made water users organizations. Farmers became a negotiating partner in the Office du Niger reforms and day-to-day management of the scheme through village associations that had an economic basis (rice milling).
- Beginning with small politically feasible reforms that lead to clear benefits and linking reform to infrastructure improvements can create a platform for coalition building to support further reform. The Office du Niger reform started with small steps towards more participatory management—tied to infrastructure upgrades and provision of credit for farmers.
- Learning by doing, rather than following a normatively defined “best practice” model, is effective and can be facilitated through monitoring results and sharing them widely.
- Reform processes are long-term—in the Mali case, some 20 years—gradual, and need to be responsive to changing conditions.



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The Comprehensive Assessment of Water Management in Agriculture (CA) is a five-year initiative to analyze the benefits, costs, and impacts of the past 50 years of water development and management in agriculture, to identify present and future challenges, and to evaluate possible solutions. The main Assessment report *Water for Food, Water for Life: A Comprehensive Assessment of Water Management in Agriculture* is published by Earthscan (forthcoming). More on the CA donors, co-sponsors (CBD, CGIAR, FAO, Ramsar), process and publications can be found at: <http://www.iwmi.cgiar.org/assessment>.

The Global Water Partnership (GWP) is a worldwide network to support sustainable management of water resources. This Brief complements the GWP's *Catalyzing Change* publications series. The series, developed by the GWP Technical Committee, assists countries in taking a strategic approach to reforming their water-related policies and institutions through the creation of national IWRM and water efficiency plans, as advocated by the Plan of Implementation from the 2002 World Summit. More information about the GWP and access to the *Catalyzing Change* handbook and briefs are available at [www.gwpforum.org](http://www.gwpforum.org).

This Brief is based on the chapter “Policy and Institutional Reform Processes for Sustainable Agricultural Water Management: The art of the possible,” by Douglas J. Merrey, Ruth Meinzen-Dick, Peter P. Mollinga, and Eiman Karar in the book *Water for Food, Water for Life: A Comprehensive Assessment of Water Management in Agriculture*, 2007. It also draws on the chapters, “River basin development and management” by F. Molle, P. Wester and P. Hirsch and others, and “Reinventing irrigation” by J.-M. Faurès, M. Svendsen, H. Turrall and others.

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