# Water Governance in China

**Arguably, China's core water challenge is one of water governance, particularly the deeper political and societal foundations on which day to day decisions and courses of action rest. It is becoming increasingly clear that tough decisions will have to be made if poverty reduction and environmental sustainability are to be addressed effectively. Although some 'win-win' solutions may exist, long-term environmental sustainability and poverty reduction will almost inevitably involve negative tradeoffs.**

## A. What is water governance?

Water governance relates to the range of political, social and 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[1]. Or put more simply, water governance is the set of systems that control decision-making with regard to water resource development and management. Hence, water governance is much more about the way in which decisions are made (i.e. how, by whom and under what conditions decisions are made) than the decisions themselves.

Water governance covers the manner in which allocative and regulatory politics are exercised in the management of water and other natural resources and broadly embraces the formal and informal institutions by which authority is exercised[1]. The relatively new term for discussing this combination of formal and informal institutions is *distributed governance*. There is a profoundly political element to water governance and, as such, systems of water governance usually reflect the political realities at national, provincial and local levels.

### Water governance within Integrated Water Resource Management (IWRM)

In recent years IWRM has been accepted in China as a potential means of ensuring equitable, economically sound and environmentally sustainable management of water resources and provision of water services (Ref BN 1). However, effective adoption of IWRM requires a new framework within which decision-making is made and this is requiring modifications to existing interactions between politics, laws, regulations, civil society and the consumer-voter. The capacity to make these changes depends therefore on changes in water governance.

## B. Why is effective water governance needed?

China is going through a period of rapid economic development and societal change that is putting increasing pressure on water and other natural resources. Scarcity of water, whether absolute or induced, is not, however, the only fundamental change. Water quality and pollution are major, increasingly well-known issues contributing to scarcity. Less publicised, however, are problems of access to water that are as much a product of the social, economic and institutional context as they are of the technical factors governing water resource availability. For people who are able to pay or who belong to elite social groups, water is not scarce, even in situations where the available supply is extremely limited. Since water is a cornerstone for most economic activity, equitable distribution under changing patterns of supply and

**Characteristics of good governance**

Necessary conditions for good governance include: inclusiveness, accountability, participation, transparency, predictability and responsiveness.

demand is often more of a challenge than absolute limitations on the available resource[2]. Stakeholder involvement, political priorities and even issues such as political interference and corrupt practices all have a major bearing on design of infrastructure and the strategic and day to day allocation of water for both domestic and productive purposes. Hence, systems of effective water governance are needed that ensure that all sectors of society have equitable, reliable and sustainable access to water .

Given the above, the challenge facing China is a complex one. Even though desirable, it is not solely linked to the selection of water management strategies that involve greater involvement of the private sector, decentralisations, integration and increasing emphasis on managing demand. The fundamental challenge is to establish systems of water governance that take account of societal, economic and environmental conditions that are characterised by uncertainty, variability and change. It is just not possible to develop water management strategies and plans that will solve all water management problems now and well into the future. Instead, China requires the water governance capacity (i.e. information systems, stakeholder platforms†, legal and regulatory mechanisms, executive capabilities and conflict resolution systems) to enable society to respond to uncertainty, variability and change that could be local or regional, short or long term, political, economic or environmental. This includes approaches to water management planning that are flexible and able to adapt or respond to uncertain future challenges††.

## C. What are the trends in water governance?

There is a growing perception that the governance of water resources and water services functions more effectively with an open social structure which enables broader participation by civil society, private enterprises and the media, all networking to support and influence government. The ideology of a *command and control* or *hierarchical* central State system caring for its citizens was replaced in many countries by *market-led* water governance models. However, the widespread interest in and support for the market led model is more or less over as it is now regarded as being too simplistic and not representative of wider societal values. The trend now is for *distributed water governance* systems to supplement formal authority by an increasing reliance on informal authority, for example, through genuine public-private co-ordination and co-operation. This can avoid governments being caught up in the contradictory roles of being a provider of services and the guaranteed source of accountability for these services.

Overcoming corruption is clearly an important aspect of governance. Until recently the lack of information and political will has made it difficult to discuss corruption openly even though it is rife throughout the world in both the public and private sectors[1]. The law can, for example, address the problem of corruption but it is a heavy and expensive instrument, a measure of last resort, as it is difficult and costly to bring people to court. *Distributed governance*, with more open competition, more accountable public administrations and more transparent processes, may address problems of corruption. There are many measures that can be used without recourse to law, including reduced public sector intervention in the economy, reform of public administration, liberalisation and reduced bureaucracy and fair pay for workers.

† A **stakeholder platform** is commonly defined as a 'decision-making body (voluntary or statutory) comprising different stakeholders who perceive the same resource management problem, realise their interdependence for solving it, and come together to agree on action strategies for solving the problem'.

†† **Adaptive management** is based on an acceptance that in complex situations there may never be sufficient information to come to an 'optimum' decision. It therefore puts the emphasis on flexible planning backed by strong monitoring and information management systems that allow constant adaptation and upgrading of plans and activities.

### Water Resource Demand Management (WRDM)

A key water governance decision, that China has taken as part of relatively new legislation (Ref BN 1), is to put increasing emphasis on WRDM. This involves shifting the focus of water management from the supply side to the demand side and recognising that there are many competing interests in how water is used and allocated. The traditional sectoral top-down role of water professionals is being challenged and the requirement is for integration between sectors, between users (and other stakeholders), and equally importantly across the different components of the water cycle. Groundwater, surface water, upstream, downstream, 'green' water and 'blue'* water are all inextricably linked and management of the water resource must take this into account. 'Traditional' water professional skills and knowledge continue to be essential and may even be strengthened by the introduction of WRDM, but they are not enough. There is an urgent need for additional skills in management, institutional reform, conflict resolution and social and communication skills in the existing and new water managers.

* Blue water is the source of supply. It is equivalent to the natural water resources (surface and groundwater runoff). Green water is the rainwater directly used and evaporated by non-irrigated agriculture, pastures and forests.

### Effective water governance

Actions to make water governance effective include[3]:
- Raising political will to overcome obstacles to change
- Putting IWRM into practice
- Reforming and developing water institutions
- Realigning financial and economic practices

All these measures can help to reduce temptation. Regulators and watchdogs, such as some NGOs, a strong independent media and self governance (e.g. corporate social responsibility, codes of conduct) can produce social sanctions that will deter all but the most unscrupulous.

## D. How to achieve and maintain good water governance?

To establish effective water governance systems and put IWRM into practice there is a range of tools available to policy makers and practitioners. The Global Water Partnership Toolbox for IWRM brings together examples of tools and references that can be used by practitioners to improve water management. Different countries need to identify which management tools or instruments are most relevant to their given circumstances.

Achieving good water governance cannot be undertaken hastily using blueprints from outside any given county or region. Good governance needs to be developed to suit local conditions. Incremental improvement and flexibility are key. New reforms do not have to be implemented in a comprehensive or fully integrated way. However, they do have to workable and doing a few things well to demonstrate that new approaches work is both pragmatic and likely to generate public and political support.

## E. Current situation in China

- Until relatively recently, water governance in China has been hierarchical with some limited involvement of the private sector in the domestic water supply sector. There are only limited indications of a shift towards distributed governance. Some of these have been signalled by the relatively new Water Law (Ref BN 1) and statements from the Ministry of Water Resources which indicate that further reform is planned.
- New institutional structures are emerging. However, awareness of the potential benefits of and the options for change is limited as is the capacity to manage the change process. As the existence and capacity of NGOs and other informal institutions is limited, the current potential for local-level participation in distributed governance is low.
- Stakeholders must have access to reliable water-related information if they are to participate effectively in decision-making. However, systems of sharing good quality information rarely exist within government, let alone between government and civil society.

## F. WSDP project experience and lessons for the future

Water governance was not a major focus of the WSDP, however, some relevant experience was gained. This included (not in order of importance):

- The main institutional development in the Shiyang region has been the establishment of a new level of river management agency in the form of the Shiyang River Basin Management Bureau to holistically manage the water resources of the river basin.
- As a legacy of the former centrally planned system, there are continuing rigidities related primarily to agricultural production quotas, irrigation water (timing and amount), and land allocation and usage rights.
- There is a need to pay for water-related data which ideally should be in the public domain. Although planned 'WRDM' pilots did not take place, one pilot activity was the creation of GIS databases that already existed albeit in institutions that were not willing to share data.
- Water management decisions are made according to administrative boundaries rather than hydrological boundaries.
- In urban areas, neighbourhood domestic water supply committees exist but they have no reliable means of communicating with water supply companies.
- Communication links between water supply agencies and communities in rural areas are vague and unreliable; and roles and responsibilities are not clear.
- There is a lack of clarity of institutional responsibilities for managing groundwater.
- The importance of including the water users in decision making was recognised and attempts to develop participatory processes and analysis of who the stakeholders were, and developing best ways of ensuring all were included, were made. Experience can be built upon to develop best practice. (Ref. BN 5, BN 7, BN 9 and BN11)

## References

1 Rogers, P. and Hall,A. 2003. Effective water governance. GWP Technical Committee Report No. 7. Global Water Partnership.
2 Moench, M. et al. 2003. The Fluid Mosaic: Water governance in the context of variability, uncertainty and change. NWCF, Kathmandu, Nepal and ISET, Boulder, USA.
3 GWP. 2000. Towards water security: A framework for action. Global Water Partnership.

## Bibliography

- Relevant WSDP project documents.
- GWP. 2000. Integrated Water Resources Management. GWP Technical Advisory Committee. Background Paper 4. Global Water Partnership.
- GWP. 2003. Sharing knowledge for equitable, efficient and sustainable water resources management. GWP IWRM Toolbox Version 2. Global Water Partnership.
- EU. 1998. Towards sustainable water resources management: A strategic approach. European Commission.
- CAPNET. http://www.cap-net.org/

## The Briefing Note Series

| | |
|---|---|
| Briefing Note 1 | Context Paper for Briefing Notes Series |
| Briefing Note 2 | Constraints to Integrating Water, Sanitation and Hygiene Promotion in China |
| Briefing Note 3 | Lessons Learned in Setting Tariffs |
| Briefing Note 4 | Regulatory Instruments for Improved Water Management in China |
| Briefing Note 5 | Lessons from Baseline Surveys, Data Collection and Analysis |
| Briefing Note 6 | Assessment of Future Water Demands |
| Briefing Note 7 | Pro-poor Approaches in Water Resource Management |
| Briefing Note 8 | Implementing Community Participatory Approaches in Water Supply, and Sanitation |
| Briefing Note 9 | Opportunities and Challenges for Social Development in Rural Water Supply and Sanitation Projects |
| Briefing Note 10 | Assessing Ability and Willingness to Pay |
| Briefing Note 11 | Mainstreaming Gender in Rural Water Supply and Sanitation and Water Resources Demand Management |
| Briefing Note 12 | Monitoring and Evaluation (M&E) |
| Briefing Note 13 | Water Governance in China |

**The Water Sector Development Project (WSDP) attempted to pilot different aspects of IWRM in four Chinese provinces. The project began in 2001 and was a technical cooperation project between the British Government's Department for International Development (DFID) and the Chinese Ministry of Water Resources (MWR).**

**This note was funded by the UK Department for International Development (DFID).** ***Views expressed in this Briefing Note, however, are not necessarily those of DFID or MWR. The primary source of information was project documentation for Phase I of the DFID-supported Water Sector Development Project.***

DFID Department For International Development

Ministry of Water Resources (MWR)

Produced for DFID and MWR by WELL. WELL is a resource centre network providing access to information and support in water, sanitation and environmental health for the Department for International Development (DFID) of the British Government. For further details, contact WELL at WEDC, Loughborough University, Leicestershire, LE11 3TU, UK – or email well@lboro.ac.uk.