

## Future directions in water and sanitation



Roger Calow

‘Water sector professionals often have a vision of the perfect water resources system ... the problem is implementation’

This is an important year for those of us working in water and sanitation. First, 2008 is the International Year of Sanitation – a chance to give this neglected topic the attention it deserves. Second, the UK Department for International Development (DFID) launches a new Water and Sanitation Policy, amid signs that DFID is taking the subject seriously again. And third, preparations are underway for the 5th World Water Forum in March 2009 under the theme *Bridging Divides for Water*. Climate change figures prominently on the agenda.

Where are water and sanitation policies heading, and are they heading in the right directions? Now is a good time to review progress.

### Bridging the water and sanitation gaps

The recent Millennium Development Goal (MDG) assessment report from WHO/UNICEF (2008) confirms the need to accelerate progress towards the sanitation target, especially in sub-Saharan Africa (SSA) and South Asia. But why is it that sanitation and hygiene policies, backed by sound evidence, have not been adopted by many governments? Research by ODI and its partners in the Ripples Programme in Ethiopia highlights the importance of promoting sanitation in non-technical language when communicating with government officials and health extension workers, moving beyond the traditional cues of epidemiological data and technical choices (Newborne, 2008). Women also need a greater voice and stronger allies in pressing for greater investment.

Progress on water supply has been more rapid, particularly where commitment from the top is backed by strong policies and public expenditure. Broad improvements to livelihoods are more likely, however, where progress is made across a number of mutually reinforcing goals. For example, the experience of drought and seasonal stress in SSA demonstrates the importance of combining water and food interventions to improve water security,

prevent the migration caused by hardship, and support income and production.

Thinking ahead, there are concerns about the Millennium Development targets themselves. Few would question the need for benchmarking. Nonetheless, current approaches to measuring progress are largely equity and gender blind, and tell us little about whether investments in water and sanitation are reaching those most in need, or are sustainable beyond the immediate coverage assessment.

There is also growing concern over the impact of climate change on water resources. Here, however, there is a danger that debates become detached from local realities. First, water security is not determined by water availability; extending access and affordability remain key, particularly to the natural storage provided by groundwater aquifers in SSA. Second, other pressures on water resources will, in many cases, dwarf the impacts of climate change. In SSA, for example, population growth, urbanisation and the push for irrigation development will shape demand, at least until mid-century. Finally, governance issues relating to flooding (in contrast to scarcity) have yet to receive the attention they deserve.

### Challenging the consensus

Sector professionals often have a vision of the perfect water resources system, with water allocated to its most valuable uses and priced to reflect scarcity value, everyone supplied with their basic needs, water use and waste disposal integrated to account for interdependencies, and so on. The problem is, implementation remains elusive in many countries. Where are the bottlenecks?

On pricing, *The Economist* recently hosted an online debate on whether water should be ‘market-priced’ or viewed as a basic right – an old argument, and something of a red herring. Globally, most water will continue to be used by farmers and, at the farm gate at least, the infrastructure is not in place to measure and charge for flows. This is not to say that cost recovery

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### Box 1: Water and sanitation priorities – four key priorities

1. Make the case for sanitation – but do so in non-technical and politically ‘savvy’ terms that will resonate with policy-makers.
2. Extend access to affordable water and sanitation to address current climatic variability and build resilience.
3. Tailor water resources management to local conditions and capacities, and invest in water resource assessment and monitoring as a priority.
4. Ensure that new climate funds do not undermine aid effectiveness, and that investment in adaptation is pro-poor and environmentally sustainable.

cannot be achieved in agriculture, or, at least partially, in rural water supply. Rather, that pricing for demand management is a different objective, and the means to achieve it also differ.

The wider issue is one of feasibility. Approaches to water resources management predicated on hydraulic control, pricing and regulation are effective where institutional, legal and technical preconditions are in place. Building these capacities is a long term endeavour, and alternatives need to be explored. Lessons can be learned from China, where economic dynamism has been built on a willingness to experiment with new reforms in a pragmatic and flexible way. In irrigation, for example, this translates into the pilot testing of different approaches to improve efficiency and equity, including contracting, support for user groups and the allocation of water rights. There are no blueprints, but there is, instead, a focus on results.

### Emerging tensions

Research by the Water Policy Programme at ODI is looking at the development and implementation of National Adaptation Programmes of Action (NAPAs) in Least Developed Countries (LDCs) – those least able to cope with existing climate variability and most vulnerable to future climate change. NAPAs provide good entry points for identifying and pri-

oritising adaptation options, but there are concerns about how this is done.

First, there are questions around the translation of science into policy, particularly at the national and sub-national levels where climate predictions are uncertain, and water and crop modelling becomes shaky. Better data would help, but model resolution is unlikely to improve much in the short term, leaving policy-makers with difficult choices. As the Stern Report notes, the best remedies may lie in strengthening normal development and existing resilience, but ‘no regrets’ measures, such as irrigation development, need to be planned carefully for equity and sustainability. Even without the prospect of climate change, an expansion of groundwater-based irrigation needs to be informed by a much better understanding of geology and recharge processes, and a sharper appreciation of who the beneficiaries should be.

Second, the financing of adaptation strategies raises questions on the Paris Agenda on Aid Effectiveness and the additionality of adaptation funds. The Ethiopian NAPA, for instance, prioritises a number of projects to build local resilience. Though means to finance these are still being discussed, the exclusive use of a ‘projectised’ approach and the creation of vertical international funds will undermine aid effectiveness and hinder cross-sectoral planning. If, on the other hand, adaptation finances are aligned to national systems, there is a danger that new funding will lead to budget cuts from central sources.

As for future directions in water and sanitation, Box 1 summarises four key priorities. Working across these will require genuine multi-disciplinarity, and much greater engagement between those working on water science and water policy.

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