CLEAN WATER, SAFE SANITATION:

AN AGENDA FOR THE KYOTO WORLD WATER FORUM AND BEYOND

Edited by David Mepham

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Contents

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IPPR Policy Recommendations

Resources

- Developing country governments should give greater priority to the water and sanitation needs of the poor, allocating increased resources to meet these needs within national development plans and Poverty Reduction Strategy Papers (PRSPs).
- Developed country donors need to set a clear timetable for reaching the UN 0.7 per cent overseas aid/GNP target, and commit to increasing significantly the proportion of aid allocated to the water, sanitation and hygiene needs of the poorest communities in developing countries, especially in rural areas and in urban slum districts.
- Donors must focus in particular on Africa, south Asia and Latin America, the regions where poverty is most entrenched and where the largest number of people lack access to clean water and safe sanitation.
- Development donors should agree that no developing country government seriously committed to securing clean water, safe sanitation and hygiene for all should fail in the achievement of this goal through lack of resources.
- Developing country governments need to consider a wide variety of different forms of funding for water and sanitation – general taxation, water tariffs and charges, external assistance and domestic and international private investment – to bridge the gap between current and required levels of expenditure.
- The International Financial Institutions (IFIs) should explore new ways to leverage additional finance into water and sanitation provision, including the recommendations in the forthcoming report of the Global Panel on Financing Water Infrastructure. In general, IFI policies on water and sanitation should be in support of nationally agreed development strategies, be equitable and sustainable, and should strengthen institutional capacity and community involvement.

Water charging: equity and sustainability

- Developing country governments and development donors need to ensure that pricing policies for water and sanitation are sustainable and equitable, with nobody denied access to clean water and safe sanitation because they lack the capacity to pay for it.
- Water must also be recognised as an economic good: unless an economic value is placed on water it is unlikely to be well managed or conserved and it will not be possible to improve the quality of the service provided.

Conditionality, governance and regulation

- The technical, managerial and financial resources of the domestic and international private sector have an important contribution to make to better water and wastewater services, but support for water sector reform from the IFIs and donor countries should not be made conditional on private sector participation or on the adoption of a public/private partnership.
- International trade rules and investment rules should not be used to weaken the capacity of governments to regulate inward investors to secure public policy objectives.
- Where developing country governments choose to involve the international private sector in water and wastewater provision, this needs to be on the basis of an open and fair contractual process.
- Development donors should use some of their resources to help strengthen institutional and regulatory capacity in the water and sanitation sector.
- Developing country governments and donors need to do more to tackle corruption, by introducing and enforcing anti-corruption laws in relation to procurement projects, and by supporting civil society's efforts to counter or expose corruption.
- Development donors and IFIs must help to strengthen the capacity of developing countries to monitor progress towards

national targets on water and sanitation: good statistical data can help to galvanise political and community action by showing which policy interventions work best and why.

Local ownership and participation, technology and education

- Wherever possible, developing countries ought to devolve the management and decision-making for water and sanitation services down to the level of the municipal and local government or user communities themselves, as opposed to the top-down approach too often adopted by government providers.
- Donors and developing country governments need to involve women fully in decision-making: most of the burden of water collection falls on women and girls and yet they are currently least likely to be consulted about improving water and sanitation services or waste disposal systems.
- Developing country governments and development donors should make greater use of appropriate, low-cost technologies that local communities can afford to maintain and manage.
- Developed country donors should commit to completely untying their aid budgets, so developing country governments can purchase technology from the most cost-effective source. Tied aid (where aid resources have to be used to purchase goods and services from the donor country) reduces the value of that aid, and it means that developing countries are often encouraged to accept costly and inappropriate technology.
- Developing country governments and donors need to do far more to address 'the demand side' for water and sanitation: strengthening the rights and capacity of poor people to demand improvements in water and sanitation from service providers.
- Policy on water and sanitation should be located firmly within the wider development context. Water and sanitation is not a discrete sector that can be addressed in isolation. On the contrary, it needs to be fully integrated with wider aspects of the anti-poverty agenda.

- Developed county donors, developing country governments and local communities must give much higher priority to issues of hygiene and hygiene education. At Kyoto, the World Bank and International Monetary Fund spring meetings and at the G8 Summit in July, governments should agree new targets to increase awareness of hygiene and commit to making hygiene education an integral part of the school curriculum in all countries.

Introduction

David Mepham

Dirty water and unsafe sanitation: the human and development costs

We live in a world in which over one billion people have no access to clean drinking water and 2.4 billion people – around 40 per cent of the world's population – lack safe and hygienic sanitation.

This is first and foremost a human tragedy and a denial of basic human rights. Dirty water and the lack of any means to safely dispose of human waste is a major cause of death and morbidity across the developing world. One child dies every fifteen seconds from diarrhoea, caused largely by poor sanitation and contaminated water. That is 2 million preventable child deaths each year, mostly in Asia and sub-Saharan Africa. For children and adults alike, unsafe water and sanitation is associated with skin and eye infections, including scabies and trachoma, and various worm infections including guinea worm and bilharzia.

Contaminated water also contributes to non-infectious diseases. In Bangladesh, for example, between 10 and 60 million people are at risk because of high concentrations of arsenic in groundwater in the Ganges Delta.

Lack of access to safe sanitation is a gross violation of human dignity. Those of us living in homes with access to flushing toilets, toilet paper and heated bathrooms are the global exception not the rule. For billions of the world's population, 'going to the toilet' means a stinking hole in the ground infested with flies and bacteria.

For girls, the lack of safe sanitation facilities can also be a threat to personal security and a barrier to educational opportunity. The availability of separate latrines at school, and a consequent reduction in the risk of sexual assault by male pupils or teachers, can be an important factor in enabling girls to attend school (DFID 2001, p25).

Dirty water and unsafe sanitation damage poor people's livelihoods and are a major barrier to the achievement of the

Millennium Development Goals. Diarrhoea and other water-transmitted illnesses place a large burden on families and communities, including the costs of medicines to treat illness. They can hinder poor people's efforts to improve their economic and social circumstances. Conversely, as we know from the history of the developed world, access to clean water and safe sanitation contributes towards better nutritional, educational and health outcomes, as well as greater agricultural and economic productivity. Easily accessible freshwater can free up time for education and other more productive activities. This is particularly valuable for women and girls, who are invariably the fetchers and carriers of water in the developing world, sometimes spending up to two or three hours a day on this task.

The scale of the global water and sanitation challenge

Over the last three and half decades, governments and international organisations have agreed a number of commitments and targets on water at a series of international conferences. The 2002 World Summit for Sustainable Development (WSSD) in Johannesburg was particularly significant: for the first time the international community endorsed a specific target on better access to safe sanitation. Governments and international institutions are now signed up to a target of reducing by half the proportion of the world's population who are unable to 'reach or afford safe drinking water' and 'the proportion of people without access to basic sanitation'. Both are to be achieved by 2015 (WSSD 2002 p4).

The test for governments is to translate these declarations into real improvements in the water and sanitation conditions of poor people. That means greater political commitment. It means a strengthened development partnership between governments, international institutions, the private sector and civil society. It also means learning from the successes and failures of the past.

While the scale of the unmet need for clean water and safe sanitation remains huge, considerable progress has been made over recent decades. The efforts of local communities, governments and international development agencies have demonstrated that substantial increases in water and sanitation provision are achievable.

In the course of the 1980s, during the years of the UN 'Decade for Drinking Water and Sanitation', access to safe water more than doubled, while access to improved sanitation nearly tripled. Progress in the 1990s was less dramatic, but nevertheless still significant. By 2000, five times more people had access to safe water than thirty years before and four times more people had access to adequate sanitation (Jolly 2003, p6).

While these aggregate figures are impressive, rapid population growth means that increases in the numbers of people served have not translated into equivalent reductions in the proportion of the world's population without access. These figures also mask considerable variation between regions and countries, as well as within them. The vast majority – an estimated 80 per cent – of those without clean water and safe sanitation currently live in rural areas (WaterAid 2003). Addressing their needs and those of poorer urban communities is the main focus of this report.

The politics of water

Addressing these needs more effectively also means understanding the politics of water. In recent years, the issue of water has become heavily politicised: a growing source of dispute within communities and countries and between them. In large part this is a reflection of worsening access to sources of freshwater, a product of environmental change (including climate change), rapid population growth, urbanisation and industrialisation. The demand for freshwater is growing very rapidly and, in many places, the supply is insufficient to meet it.

However, there are two other senses in which water has become politicised. The first involves the equity, or lack of it, in the distribution of existing water supplies. Within many water-stressed countries, the urban elite get plentiful supplies of freshwater, while the urban and rural poor struggle to get access to enough water for washing and drinking. Secondly, there is the contentious issue of how water should best be managed and the implications of that system of management for access and equity.

Over the last decade, the IFIs and some development donors have pushed the case for greater private sector involvement in the

provision of water (and other basic services too). With the dominant public sector model seen to have failed, the IFIs, in particular, saw the international private sector as the way to secure greater efficiency in water management and better water services. This was part and parcel of a much broader IFI agenda in favour of liberalisation, greater use of market mechanisms, and the reduction in the role of the state in the management of the economy, the so-called 'Washington Consensus'.

While the extent of the international private sector's role in water and wastewater services remains limited (five per cent), the idea of international private sector involvement has provoked a strong reaction from some local communities and from national and international NGOs. Some NGOs have focused in particular on the issue of 'cost recovery' or charging for water. While the IFIs, many donors and the private sector argue that water is an economic good which must be paid for, the critics respond that water is a human right, and that access should not be dependent on an individual's capacity to pay. Far from being inherently irreconcilable however, there is validity in both positions.

The question of the ownership and management of water assets is quite distinct from the question of paying for water services, an issue that is raised whether water services are publicly or privately provided, or provided by a community managed scheme. Some of the critics of charging and private sector involvement also overlook the fact that most poor people, without access to piped water supplies, already pay for water. Payment is usually to local private water vendors, often at high cost. While there is great variation, between countries and within them, it is not untypical for the cost of water from private vendors to be up to ten times the unit price of piped water (DFID 2001, p24).

This dispute over cost recovery illustrates a wider point, that the excessive politicisation of water can make addressing the problem more difficult. As the contributors to this report confirm, there are real differences of view and emphasis, but also important areas of agreement. The purpose of this report is to air those differences openly and honestly, to help build a greater policy consensus – the outcome of the World Summit for Sustainable Development suggest that this is beginning to happen – and to develop a comprehensive policy agenda for Kyoto and beyond.

Structure of the report

In **Chapter 1**, Clare Short places particular emphasis on getting governments and international institutions to agree to implement commitments that they have already made. As she puts it: 'when governments attend the Kyoto Conference they should understand that…recycling existing development aid around headline seeking announcements has to stop if we are to achieve a sustainable improvement in developing countries' capacity to deliver water and sanitation services to all their people' (p14).

Short presents a robust defence of cost recovery, which she says 'must be recognised as a principle of sustainability'. She goes on to state that 'sustainable financing will increase the potential for both international and domestic private finance, that remains an important but largely untapped source for funding' (p17).

In **Chapter 2**, Ravi Narayanan questions the high estimated costs of meeting the water and sanitation targets produced by the World Water Commission, and the discrepancy between their estimate and the figures produced by other bodies. The difference in figures he argues is a reflection of the 'Commission and the international private sector's predisposition towards higher-tech, more sophisticated and therefore more expensive solutions' (p19).

Narayanan believes that the international private sector is 'unlikely to play as big a role in meeting the international water and sanitation goals as is sometimes suggested, particularly in the poorest countries and in rural areas'. He cites several reasons for this, including the fact that 'the water industry is heavily capital intensive, with low profitability and long delays before investors can expect to make profits' and the 'risk from factors such as exchange fluctuation and political instability'. 'Government revenues, donor aid and community resources are likely to remain central to meeting the water and sanitation needs in most developing countries', he says (p20).

In **Chapter 3**, Bill Alexander states that while a large proportion of resources 'will need to come from governments…public sector resources alone will be insufficient' to meet the international targets on water and sanitation, 'due to competing priorities for public spending and constraints on public sector borrowing' (p26).

Alexander makes the case for Private Sector Participation (PSP). It is, he says, 'a vehicle for communities – if they so choose – to improve the efficiency and effectiveness of water and wastewater services while retaining public control of the resource itself, the service prices and standards, and the tangible assets themselves'. Public bodies, he argues, can choose to use the private sector to 'share risks, bring investment, provide managerial expertise or obtain world-class scientific and technical resources.'

On cost recovery, Alexander quotes approvingly the report of the World Water Commission to the second World Water Forum in the Hague in 2000, that states that fair and effective water pricing is 'the single most immediate and important recommendation it could make' (p28).

In **Chapter 4**, Gordon McGranahan asks whether the private sector has been oversold. While acknowledging the weaknesses and limitations of the dominant public sector model, he emphasises that private sector operators are not immune to many of these same failings, and that 'private sector involvement often brings its own problems' (p35).

McGranahan further states that there is 'little evidence of private companies or lenders wishing to invest in providing water and sanitation provision in the economically depressed villages, towns and squatter settlements where most households without adequate water and sanitation actually live' (p37).

In **Chapter 5**, Richard Jolly argues that Kyoto must place much greater emphasis on local ownership and community mobilisation in water and sanitation policies and on hygiene education. He states that 'approaches based on social mobilisation, in which individual or community action is combined with that of local or central government, can bring into play the additional labour and the additional finance to make the water and sanitation goals achievable' (p42).

Jolly also makes the case for the better use of 'simple, low-cost technologies and approaches', such as handpumps, improved wells, rainwater harvesting, installations using volunteer labour and community maintenance. (p43)

In **Chapter 6**, Nafisa Barot provides a grassroots perspective, drawing heavily on her experience of working in Gujarat, India. She cites a number of examples of good practice – in Bhavnagar, Amreli and Chennai – where community involvement and leadership is producing

real progress. But she also notes a deep reluctance on the part of governments to let go, to give communities the resources and autonomy they need to respond effectively. Too often, she says, 'the tendency is to recruit communities into serving central programmes imposed from above', or to favour the high-tech solutions over the small-scale (p49).

These six essays represent a unique collection. They bring together some of the leading thinkers on water and sanitation issues, drawn from a wide variety of different backgrounds and perspectives. Between them they identify the key issues facing policy makers at Kyoto and other international forums where water and sanitation will be discussed this year.

Policy priorities for Kyoto and beyond

So how should these ideas be taken forward and what should the policy priorities be for Kyoto and beyond? Below are eight core areas where the ippr believes that further action is needed.

- First, meeting the international targets on water and sanitation is going to require much greater political commitment. Developing country governments and development donors need to demonstrate this commitment in the overall resources that they allocate to water and sanitation. But they also need to radically refocus these resources to meet the needs of the poor. At present, developing country governments too often give priority to the needs of the urban elite at the expense of poorer urban communities and those living in rural areas.

  Development donors also tend to allocate their aid resources to better-off parts of urban areas. This needs to change. Development donors need to set a clear timetable for reaching the UN 0.7 per cent overseas aid/GNP target, and commit to increase significantly the proportion of aid allocated to the water, sanitation and hygiene needs of the poorest communities.

  Donors need to focus in particular on Africa, south Asia and Latin America, the regions where poverty is most entrenched and where the largest number of people lack access to clean water and safe sanitation. Donors should agree that no developing country government seriously committed to securing clean water,

safe sanitation and hygiene for all should fail in the achievement of this objective through lack of resources. A similar international commitment was made in relation to basic education at the World Education Forum in Dakar in 2000.

- Second, the international financial institutions should explore new ways to leverage additional finance into water and sanitation provision. The Global Panel on Financing Water Infrastructure, chaired by Michel Camdessus, will report to the Kyoto meeting. Its recommendations in this area should be considered carefully. In general, it is important that IFI policies on water and sanitation should be in support of nationally agreed development strategies, be equitable and sustainable, and should strengthen institutional capacity and community involvement.

- Third, developing countries and development donors should ensure that pricing policies for water and sanitation are sustainable and equitable. Access to water and sanitation is a human right and essential for human dignity, and nobody should be denied access because they cannot afford it. This principle is absolutely fundamental and applies regardless of whether water and sanitation provision is provided through the public sector or the private sector, through a public/private partnership or through a community-managed scheme.

  Water should also be recognised as an economic good. At present, investment in water and sanitation in many developing countries falls well short of what is required. Unless an economic value is placed on water it is unlikely to be well managed or conserved and it will not be possible to improve the quality of the service provided. The provision of water and sanitation services for all is expensive and the costs of providing them needs to be fully covered, either by users, donors or from general government revenues.

  The policy challenge is to ensure that the costs of providing water and sanitation are borne by those best able to meet them and that poor people get the access they need to sufficient quantities of water. This might involve, for example, the use of

subsidies for the poorest or even the provision of a basic level of water free to every citizen financed out of general government revenues. That is a decision for national, municipal and local governments to make. It is also critical that the costs are transparent, so that communities, civil society and governments can openly debate the policy options.

- Fourth, improved access to water and sanitation requires better governance and competent and transparent systems of regulation. Too often, the water and sanitation sector is characterised by weak governance. In relation to large-scale infrastructure projects there have also been problems of corruption, from which poor people are generally the biggest losers.

  Better governance and regulation, and support for institutional capacity, are therefore essential for the achievement of better water and wastewater services in the public sector, and for the more effective regulation of local private sector providers. But it is vital too if developing countries choose to involve the international private sector through a public/private partnership or some other arrangement. In these circumstances, governments need the capacity to consult effectively, formulate contractual agreements with private water companies and to properly enforce them.

  What is critical is that developing country governments themselves should be free to choose whether to involve the private sector or not in service delivery. While the technical, managerial and financial resources of the international private sector have an important contribution to make to better water and wastewater services, this role should not be exaggerated, particularly in the poorer rural areas. At present, the international private sector accounts for around five per cent of global water provision. Even if this proportion grows, public sector resources are going to remain far and away the main source of finance for water and sanitation for the foreseeable future. This is particularly true in relation to the water and sanitation needs of the poorer urban and rural areas.

Support for water sector reform from the IFIs and donors should not be made conditional on private sector participation or the adoption of a public/private partnership. It is also essential that international trade rules and investment rules should not be used to weaken the capacity of governments to regulate inward investors to secure public policy objectives.

- Fifth, there needs to be much greater community involvement and ownership of water and sanitation policies. It is hard to overstate the importance of this. Poor people are invariably best placed to identify their water and sanitation needs and to suggest policy responses to them.

  National, municipal and local governments, donor countries and the private sector need to listen and consult widely with local communities, reversing the outdated presumption of top-down, one-size-fits-all solutions. This requires the involvement of communities, particularly women, in discussions around water security, increasing the productive uses of water or coping with natural disasters. It should also involve open discussion of options in relation to existing or new sources of water supply and sanitation provision.

  In addition, developing country governments and donors need to do far more to address 'the demand side' for water and sanitation, through strengthening the capacity of poor people to demand better water and sanitation provision. This means working to strengthen the rights of poor people within local community organisations and local and national political systems. In some cases, it may also mean addressing poor people's lack of legal title to the land they occupy, which can be a major barrier to access.

- Sixth, policy on water and sanitation should be located firmly within the wider development context. Water and sanitation is not a discrete sector that can be addressed in isolation. Rather it needs to be fully integrated with other aspects of the anti-poverty agenda. This is not happening adequately at present. For example, in most of the Poverty Reduction Strategy Papers drawn up by governments in Africa, water and sanitation issues

are marginal, with links not being made with broader development issues. This too needs to change.

- Seventh, developing country governments, communities and development donors need to make greater use of appropriate, low-cost technologies that local communities can afford to maintain and manage. As the UK Department for International Development's strategy paper puts it, 'Historically, decision makers have favoured complex, high-cost piped systems for water supply, sewerage and drainage...Challenging these mindsets, and broadening decision-making to consider a wider range of technical options, will be critical to improving the sustainability of services'. (DFID 2001, p20)

  Further progress on the international untying of aid could help significantly to facilitate this. Tied aid (where aid resources have to be used to purchase goods and services from the donor country) reduces the value of that aid, and it means that developing countries are often encouraged to accept costly and inappropriate technology. Developed country donors should commit to completely untying their aid budgets, so developing country governments can purchase technology from the most cost-effective source.

- Eighth, there needs to be a much greater focus on hygiene and hygiene education. The research evidence quoted by Richard Jolly in Chapter 5 is potentially enormously far-reaching in its implications. The evidence suggests that handwashing is associated with a 40 per cent reduction in the risk of infectious intestinal diseases, a practice which, if applied universally, could save an estimated one million deaths per year.

  At the Kyoto meeting and in other forums, governments should agree tough new targets to improve standards of hygiene and commit to making hygiene education an integral part of the school curriculum in all countries.

2003: opportunities for progress

There is a basis here for a comprehensive, joined-up policy agenda on water and sanitation. The challenge now is to take this agenda forward. In many ways, 2003 represents a critical opportunity for doing so.

2003 is the UN-designated International Year of Freshwater. In March, the third World Water Forum takes places in Kyoto, Japan. The European Commission, the European Parliament and EU member states continue to discuss and develop their European Water Initiative. In April, the spring meetings of the World Bank and the International Monetary Fund provide an opportunity for the key international financial institutions to play a bigger part in resolving the global water and sanitation crisis. These issues can and should also be high on the agenda of the G8 Summit in Evian, France, in June.

The responsibility on governments and others is to take advantage of these opportunities, to mobilise additional resources and to bring about the necessary changes in policy. This is essential if we are to realise substantive and sustainable improvements in the water and sanitation conditions of the world's poor.

1. Water – a key to sustainable development

Clare Short

The UN has designated 2003 as the International Year of Freshwater. This is intended to underline the fact that global water issues need to be placed high on the international agenda. Nearly two thirds of the world's population will be living in countries of significant water stress by the year 2025. If we do not pay more attention to equitable water management we will see more conflict and war generated by water shortages.

Over a billion people lack access to safe drinking water, which means that women and girls spend hours fetching water, girls miss schooling and women lose productive time. Also water that is not suitable for human consumption leads to constant illness. 2.4 billion people also lack access to basic sanitation. This leads not only to constant illness but also to humiliation as people – women in particular – search for places to perform their bodily functions in an increasingly crowded world. Better management of water resources, access to safe water and basic sanitation and hygiene promotion are key to the reduction of poverty, greater agricultural production and the future safety and sustainability of the world.

Summits, targets and initiatives

The World Summit on Sustainable Development in Johannesburg made an important advance when it placed poverty eradication at the heart of efforts to achieve sustainable development. The Summit brought the development and environment movements together and committed the international community both to reduce poverty and pursue sustainable development.

There is now near universal acknowledgement that we need to focus on implementing the agenda that has been agreed. As we prepare for the third World Water Forum in Kyoto, efforts should be directed towards ensuring that the international community delivers on its promises by moving to an intensive period of implementation. When governments

attend the Kyoto Conference in March 2003 they should understand that the time for individual governments to announce water projects at international meetings is over. This old approach of recycling existing development aid around headline seeking announcements has to stop if we are to achieve a sustainable improvement in developing countries' capacity to deliver water and sanitation services to all their people. Providing sustainable finance, local capacity, and governance arrangements that are effective, equitable and transparent, as well as involving local communities, are all key issues.

Taken together, the series of recent international summits provides a strong basis for action. The Millennium Summit in September 2000 gave us the Millennium Development Goals, committing all countries to focus their development work on poverty reduction targets. The Doha meeting of the World Trade Organisation in November 2001 agreed an agenda for a trade round which if delivered will provide a major advance in the trading opportunities of developing countries. The Monterrey Financing for Development Conference in March 2002 recognised the need to galvanise all sources of finance – domestic savings, foreign direct investment, export earnings, debt relief and aid – to promote sustainable development.

The World Summit reaffirmed these commitments and integrated environment and a commitment to sustainability into the agendas agreed at Doha and Monterrey. The Summit also agreed a new target to halve the proportion of people without access to basic sanitation by 2015. This is important. Provision of sanitation is essential if we are to meet the health targets. The challenge now is to ensure that the political momentum generated by this new target leads to action on the ground.

Water and economic growth

Water's main contribution to economic well-being is through its use in agriculture. The vast majority of farmers in developing countries are smallholders and water for crop irrigation can be vital for their livelihoods. Water also has important economic benefits through industrial use and power generation.

Effective water management reduces the vulnerability of people, especially poor people, to droughts and floods that can devastate livelihoods and destroy infrastructure. Environmental sustainability can

be achieved through better water management, sustainable levels of abstraction and control of pollution. Water resources are integral to the dynamics of many ecological processes. Wetlands and flood plains play a strong role in maintaining biodiversity.

Good water management, with co-ordinated development of resources that balances economic and social welfare whilst maintaining environmental sustainability, will maintain livelihoods and resources into the future. The most direct beneficiaries are often the poor, those who are living in the marginal areas who gain most from reduced flood risks and who rely on the sustained availability of natural resources such as water and fish.

Equitable allocation between competing needs is increasingly important. Water has never been a respecter of national boundaries: there are over 80 shared rivers and a number of shared lakes and groundwater in Africa alone. Equitable sharing between users, at national and at local level, has a significant contribution to make towards reducing conflict. Sharing means sharing the water as well as sharing the benefits available from the water. This includes irrigation and hydroelectric power as well as the benefits beyond the river such as the regional infrastructure and trade.

Investment in major water infrastructure such as dams and irrigation schemes can act as a catalyst for local and regional development but too often in the past this has been done without regard to the social and environmental costs. There is a critical need for responsible development of hydraulic infrastructure (dams and water storage). We must learn the lessons of the past but not allow campaigners to block all beneficial development. The World Commission on Dams was established with a mission to improve practices and produced its recommendations nearly two years ago. The Commission's report will be valuable in informing policy, and ensuring that the benefits that can be derived are achieved without paying an unacceptable price in social and environmental terms.

Water and human health

The principles of sustainable development have human health at their core. Improved health from better quality water, access to sanitation and improved hygiene will lead to a reduction in human suffering,

increased productive capacities, increased quality of life and life expectancy. They will also reduce health care costs.

Water-related diseases are the single largest cause of human sickness and death in the world, and disproportionately affect poor people. A major issue for children is diarrhoeal disease, which accounts for two million child deaths each year. This number could be reduced by better hygiene practices, safer water supplies and provision of basic sanitation. These measures also improve maternal health in the home. Better water management will reduce the vulnerability of all to diseases such as malaria, for which water plays a part in transmission.

We should also be clear that gender inequality hinders growth, poverty reduction and progress in health and education. The role of women in household water provision and use is often ignored or underestimated whilst the health and social consequences of poor sanitation are especially harsh on women and girls. Improved health resulting from clean water and access to sanitation at school is key to improving school attendance, especially by girls.

Governance and finance

Better governance is essential to improve water management and water and sanitation services. As with any service, corruption in procurement leads to waste, inefficiency leads to poor maintenance and in most developing countries costs are not shared equitably. Indeed it tends to be the elite that are provided with low-cost public services and the poor who pay to buy water at very high cost by the bucket.

Governments must have the capacity to manage their water infrastructure effectively and sustainably. The principal issue is to establish national policies and laws that balance social and economic development priorities with those of the environment. Corruption in the management of water and in the delivery of services must be eliminated. Effective public sector institutions that are accountable, representative and transparent are essential to manage and regulate the water sector.

The principle of cost recovery must be recognised as a principle of sustainability. This does not mean that we have to impose unaffordable water rates on those least able to afford them. If the poor are to receive water services, it will often be appropriate for services to be subsidised,

be it through lifeline tariffs or any other form of subsidy, explicit or implicit. Such subsidies should be open and accountable. We need to impose a discipline that recognises where subsidy is being made available, so that we understand and account for the true cost of providing water supply and sanitation services.

Finance needs to address not only the amounts of money required to support initiatives at an international level, but also the economic environment at local and national levels that, in the longer term, will harness truly sustainable service delivery, backed up by effective regulation. Too often subsidised public services are provided to the elite, and the poor get no service and pay high costs for water, either by purchase in urban areas or hours of toil in rural areas.

The investment that will be needed in the water sector to meet the internationally agreed targets for poverty reduction is massive. The current trends in financing are unlikely to provide sufficient increase in funds unless important reforms are carried out in the water sector of developing countries and unless available funds are used more efficiently and effectively. Applying principles of sustainable financing will increase the potential for both international and domestic private finance that remain an important but as yet largely untapped source of funding. Legal and financial systems also need to work well enough to provide the confidence required to make water more attractive for private sector investment.

Development assistance also has a substantial role to play by helping to build the capacity of national institutions, and, in poorer countries, providing a lever for other forms of finance and thus helping bridge the funding gap.

Increasing the quantity of aid is not enough. Improving its quality is also crucial. The Monterrey Consensus recognised the need to bring this about by targeting aid more on the reduction of poverty, untying it from the interests of donor countries, harmonising donor procedures so that the high transaction costs in developing countries are reduced, and making it more responsive to the needs of developing countries.

The Monterrey Consensus also recognised the crucial role played by developing countries' own Poverty Reduction Strategy Papers (PRSP) and the need for donors to provide aid that supports these strategies. Whilst it is entirely legitimate for donors to provide evidence of the importance of water and sanitation, aid should be allocated in

ways that strengthen and not undermine a government's ownership of its PRSP and its accountability to its own people. Reform agendas drawn up locally are more successful than those imposed from outside.

The UK Government's focus

The work of the UK Department for International Development (DFID) is focused on meeting the Millennium Development Goals, including access to safe water, access to basic sanitation and adoption of national strategies for integrated water resource management in all developing countries by 2005.

The world is on track to meet the overall target of halving the proportion of people living in extreme poverty by 2015. This means one billion people lifting themselves out of poverty between 1990 and 2015. The world population is set to rise to 8-9 billion by 2030-50. In 2015, therefore, it will be necessary to set another target to ensure another billion people are lifted out of poverty. This is obviously an enormous task, but the targets can be met with greater effort. The consequence of failure would be growing suffering, poverty, conflict, disease and environmental degradation.

Policies that are better informed on water and poverty linkages are vital. These issues are increasingly significant in the Poverty Reduction Strategies that a growing number of developing countries are committing to. Inclusion of strategies for development of water within Poverty Reduction Strategies is a key goal and we are continuing to work towards innovative ways of bringing the water sector into this process.

The importance of water and its fundamental contribution to sustainable development is now recognised, but the full contribution of water to poverty reduction will only be realised if it is set in the broader context of social and economic development and environmental improvement. The UK Government is working with development partners, both donors and recipients, to help achieve this objective.

2. Mobilising the resources to meet the water and sanitation targets

Ravi Narayanan

Meeting the international development targets on water and sanitation will require increased resources. On that there is pretty universal agreement. There is less agreement, however, about the scale of the extra resources required, the use to which they should be put and, specifically, about the relative importance of the public and the private sector in providing the resources necessary to meet these targets.

The World Water Commission has estimated that to meet global water security by 2025, including universal water and sanitation coverage, would require some $180 billion a year for the next ten years. That is an extra $100 billion on top of the $80 billion currently being spent. Of this amount, it estimated that for water supply and sanitation alone, an additional $45 billion is necessary every year, on top of the $30 billion currently spent on the sector. For comparison, global aid flows last year were just over $50 billion. The Water Supply and Sanitation Collaboration Council (WSSCC), by contrast, estimated that an extra $9 billion per year would be needed to meet universal access goals by 2025 on the basis of a basic level of service. What accounts for these hugely different figures?

Much of the difference is explained by the World Water Council's much higher estimates for the costs of meeting the needs of urban communities for sanitation, waste disposal and wastewater treatment. This difference is a reflection of the Commission's and the international private sector's predisposition towards higher-tech, more sophisticated and therefore more expensive technological solutions.

While the international private sector has a contribution to make to better water and sanitation provision – perhaps especially in the area of management – there are several significant problems associated with its participation in this area:

- First, the water industry is heavily capital intensive, with low profitability and long delays before investors can expect to make profits.

- Second, in many developing countries the risk from factors such as exchange fluctuation and political instability will further reduce the attractiveness of the environment for inward investment.
- Third, the foreign direct investment that does occur in this sector tends to bypass the low-income countries where the majority of people currently not served by decent water and sanitation facilities live.
- Fourth, in developing countries that do attract foreign direct investment, such investment is unlikely to be directed towards poor areas, such as rural districts, or disadvantaged sections of the urban population, because of the difficulty of recovering costs.
- Fifth, if low-income countries try to overcome this by, for instance, offering tax concessions to encourage investment in certain areas and weakening restrictions on profit remittances, the overall benefits of the investment will tend to be reduced.
- Sixth, international private sector investment in water and sanitation is likely to be heavily dependent on debt financing, with its associated drawbacks.

I should stress that none of this is to suggest that the private sector should be excluded from the provision of water and sanitation, in circumstances where national or municipal governments believe that it can add value. But it does indicate that the international private sector is unlikely to play as big a role in meeting the international water and sanitation goals as is sometimes suggested, particularly in the poorest countries and in rural areas.

Government revenues, donor aid and community resources are likely to remain central to meeting the water and sanitation needs in most developing countries. But that does mean increasing those resources, using them more effectively, strengthening systems of governance, setting water in the wider poverty context and, above all, making local communities central to the improvement of their own water and sanitation services.

Redirect resources towards reducing water poverty

Although increasing water and sanitation coverage would lead to a wide range of social, economic and health benefits, its importance is not adequately reflected in the spending priorities of either national governments or development donors. Developing country governments typically spend a low proportion of their national budgets on water and sanitation. Even within the area of basic social services, which as a whole receives only 13 per cent of government budgets, water and sanitation tends to lose out to other priorities such as health and education. Investment in water and sanitation infrastructure also does badly compared to other types of infrastructure. For instance, in 1996, investment in water and sanitation constituted only about 0.4 per cent of developing countries' GDP.

At the international level, Official Development Assistance (ODA) for water and sanitation is also not targeted adequately towards those countries with the greatest needs. For instance, during the 1990s, the least developed countries received less aid for water and sanitation than the low-middle income countries. According to the Development Assistance Committee of the Organisation for Economic Co-operation and Development (OECD) only 1.7 per cent of all aid for water and sanitation in 1996-97 was earmarked for programmes based on sustainable, affordable low-cost technology that, by definition, target the poor.

Meeting the water and sanitation targets requires developing country governments and development donors to shift their priorities. Even within limited budgets, there is scope for developing country governments to increase the resources they allocate to the water and sanitation needs of the poor. Areas where public spending might be reduced in order to fund these improvements include subsidies for the urban elite and military expenditure.

Development donors also need to increase their resources. At the UN Financing for Development Conference in 2002, bilateral donors agreed to increase development assistance to 0.39 per cent of GNP by 2006. Donors should meet this target and set a clear timetable for reaching the UN 0.7 per cent UN ODA/GNP target. A growing proportion of these increased aid resources should be allocated to meet the water and sanitation needs of the poor.

Improving cost effectiveness

Resources allocated to water and sanitation also need to be used more effectively. Many water and sanitation programmes funded from development aid achieve only modest impacts in return for very high expenditure. For instance, in Mozambique, a Japanese-funded bilateral water supply programme has cost US$180 per head, compared with a per capita cost of about US$13.5 for similar WaterAid-funded programmes in Mozambique.

The high cost of some donor-funded water and sanitation programmes represents a barrier to fulfilling the water and sanitation targets. Value and sustainability should be prime considerations. To make inroads into water poverty, the technologies used need to be of an appropriate standard of service, be affordable (even by people on very low incomes), and be sustainable (ones that can be easily operated and affordably maintained by local communities). Priority should also be given to expanding services to those who lack safe water and sanitation rather than improving services to populations who already have access. Investments need to be prioritised towards rural areas, where 80 per cent of those without basic services live and low-income slum districts, rather than better-off communities.

Policy-makers could also enhance the impact of resources by looking at the potential to lever other sources of finance, particularly user contributions, household and community investments. The ability and willingness of households and local communities to pay for water and sanitation should be better recognised as a strength that can be built on.

In particular, locally based financial mechanisms, such as micro-credit, can be an important source of finance both in rural and urban areas. This has been shown in the case of the Soozhal initiative, a programme in Tamil Nadu, India, supported by WaterAid. The programme includes micro-credit schemes earmarked for sanitation. Its creditworthiness, due to low transaction costs and low rates of repayment default, has attracted local bank finance where none was previously forthcoming.

Low-cost finance or grants to start or expand micro-credit funds so that they can be used by poor households for improving their water and sanitation systems is a very strategic use of donor resources. Additionally, as experience in some slum areas in Manila, Philippines

shows, flexible and low-cost credit schemes enable poor households to afford connections to improved water systems. Donors and governments should support non governmental organisations (NGOs) and other organisations that assist local communities to develop and run micro-finance schemes for water and sanitation.

The water and sanitation sector also needs to become more sophisticated in the way it recovers costs from users. The reality is that recovery of capital costs and, in some cases, even operation and maintenance costs, is beyond the capacity of many people living in extreme poverty, even where low-cost technologies are used. This is especially true for large urban systems. It would be self-defeating, as well as immoral, to allow cost recovery objectives to become a barrier to poor people's access to sufficient quantities of water and sanitation. Options include transparent subsidy arrangements from public funds and cross-subsidisation from wealthier to poorer users, or from commercial/industrial to domestic users.

Strengthening governance and local participation

Improving poor people's access to clean water and safe sanitation also requires better systems of governance in the water and sanitation sector and greater involvement of poor people in decision-making. Transparency in the decision-making process is crucial. Independent regulation and effective scrutiny by parliament and civil society groups of water and sanitation providers would minimise corruption, avoid wastage and build credibility in the governance system.

Decentralised participatory budgeting and social auditing by stakeholders could be used to enhance systems of governance. Civil society organisations are often well placed to champion the interests of poor people and develop their ability to oversee the use of public funds. In addition, a substantial proportion of new funding for water and sanitation should be allocated to building the capacity of national and local government as well as civil society and local private sectors, to plan, deliver and monitor water and sanitation services to the poor.

Water and sanitation programmes should also seek to bring about qualitative change for households and communities rather than simply focussing on physical output targets, such as the number of water points built. This involves building the capacity of communities, local

government and other local stakeholders. Donors and governments can draw from the experience of water and sanitation projects such as the Orangi Pilot Project (OPP) in Karachi, which has mobilised a poor urban community to address its own sanitation needs. (Zaidi 2001)

Making the links between water, sanitation and poverty

Water and sanitation funding priorities are unlikely to change in favour of pro-poor spending unless policy-makers and planners recognise the multi-dimensional links between lack of access and poverty. Many economic and social benefits flow from improving their access to clean water and safe sanitation, including the indirect consequences of health improvements and the reduction in time spent collecting water. For instance, researchers studying the long-term impacts of water supply projects in India, Ethiopia, Ghana and Tanzania found significant positive impacts in the areas of health, livelihoods, social relationships and people's self-esteem (Adugna *et al* 2001).

In spite of such evidence many agencies tend to regard water and sanitation as an aspect of infrastructure, rather than a priority that belongs firmly on the poverty reduction and social development agendas. This is reflected in the way water and sanitation programmes often neglect participation and community development, even though the lack of user participation in selecting technologies has been identified as a major constraint to water and sanitation development.[1]

The failure to make the links with poverty is clearly seen in Poverty Reduction Strategy Papers (PRSPs). In principle, they provide an important opportunity to put water and sanitation centre-stage in anti-poverty plans, unlocking resources for the sector from both domestic governments and official development aid. Yet water and sanitation tends to be given a relatively low priority in PRSPs. This was highlighted in a recent study by the Overseas Development Institute and WaterAid into PRSPs in Malawi, Madagascar, Kenya, Zambia and Uganda. Among other things, the report found that funding allocated to water and sanitation was low and did not reflect the importance which the poor themselves attach to it. By contrast, where planning and finance ministries have opened up the PRSP process and engaged with other stakeholders, there has been more scope to ensure that water and

sanitation issues are properly addressed as in the experience of Uganda and, to some extent, Zambia.

The challenge for Kyoto

Resources, governance and local participation all matter. The challenge for the Kyoto World Water Forum and beyond is to increase the resources allocated to water and sanitation, to target those resources better, to improve their effectiveness and to strengthen systems of governance in the water and sanitation sector. It is also vital that water and sanitation issues should be located firmly within the wider poverty and development context, and that poor people should be given a bigger voice in the shaping of local and national solutions to the problems of dirty water and unsafe sanitation.

Endnote

1 This problem is becoming prevalent where the private sector is contracted by government to provide services (see, for example, Barungi 2003). Additionally, contracting experiences in Ghana and Nepal show the challenges and difficulties of contracting services to develop community participation (see Clayton 1999).

3. Delivering water and wastewater services: the role of the private sector

Bill Alexander

To halve the proportion of the world's people without access to basic sanitation by 2015 and by the same date to reduce by half the proportion of the world's population without access to safe drinking water represents an enormous challenge for the international community. This challenge is made more demanding still by the continuing rapid growth in global population.

The World Water Commission has estimated that US$100 billion a year will be required to achieve these water and sanitation goals, over and above the existing annual expenditure of $80 billion. (World Water Commission 2000, p23) While a large proportion of these resources will need to come from governments, public sector resources alone will be insufficient to meet these targets, due to competing priorities for public spending and constraints on public sector borrowing. Indeed, the report of the UN Secretary General *Water: a key resource for sustainable development* states that, 'both internal and external resources have to be generated en masse if an integrated water resources approach and universal safe water and adequate sanitation are to be realised in the foreseeable future' (UN ACC Subcommitee 2001, para 22). At present, the private sector accounts for only five per cent of investment in water and freshwater services. If we are to make faster progress in the provision of water and sanitation, the private sector can and should play a greater role.

But what should that role be? In particular, what is the best way in which international private sector water companies can make a contribution? Thames Water provides substantial support for the work of the UK-based charity WaterAid, helping them to provide safe water and effective sanitation facilities to some of the poorest urban and rural communities in the developing world. We are also engaged in a number of multi-sectoral partnerships at the local, national and increasingly the global level. Our support for these partnerships will continue.

Nevertheless, Thames Water's main contribution to improving

people's lives coming not through charitable initiatives, important though they are. Rather it is through managing and growing our core business, through delivering essential services responsibly wherever we operate, in partnership with government and civil society; and through extending service provision to as many people as possible over time. The Global Water Partnership has identified that it is not the lack of water *per se* that is the issue, but rather the way the resources are managed.

Defining private sector participation

Private Sector Participation (PSP) in the water and wastewater sector provides a vehicle for communities – if they so choose – to improve the efficiency and effectiveness of water and wastewater services while retaining public control of the resource itself, the service prices and standards, and the tangible assets themselves. What we are talking about here is private sector involvement in what is primarily and properly a public service for the common good.

As a privatised company, Thames Water understands that the political circumstances in a given country may sometimes mitigate against PSP. However, it should also be recognised that the predominantly public sector model of water provision has not proved sufficient to prevent an overall decline in relative coverage over recent decades.

Private sector participation is a solutions-oriented concept with a variety of possible expressions. The particular form that any given PSP scheme may take will vary according to local needs and circumstances. But what all the different potential PSP solutions have in common is that each can contribute powerfully to sustainable development through improvements in public health and economic growth in the developing world.

In all cases, a transparent and reliable 'enabling environment' is required. This includes mature local political, judicial, regulatory and financial systems. It also goes without saying that contracts should only be awarded on the basis of open and fair competition between domestic and foreign water companies, to ensure that the public authorities have the broadest possible range of partners to choose from.

In the water sector, all PSP schemes are designed to meet, over the long-term, the needs of all members of a specific community for

safe water provision and wastewater removal at a fair and affordable price. In seeking to deliver these benefits, public bodies can choose to use the private sector to share risks, bring investment, provide managerial expertise or obtain world-class scientific and technical resources.

As the water business of the RWE Group, one of the world's largest multi-utility companies, Thames Water operates across the full spectrum of these PSP models, from consultancy services to concessions over water and wastewater assets.

Valuing water properly

Cost recovery, or water pricing, is one of the most sensitive issues in the water sector, especially in the developing world. Cost recovery affects water services that are owned and operated entirely by public bodies, not just private sector partners. Many public bodies have failed to provide adequate services because water is considered free and services are under-priced, tariffs are not enforced and no funds exist to maintain existing infrastructure and improve customer service, let alone extend it beyond the high and middle-income groups who usually benefit from the status quo.

The cost recovery principle simply means that the total cost of providing safe water and wastewater services should over time be met in full by consumers, including public subsidy where necessary for essential use by low-income households. This creates a 'virtuous circle' of fair payments, investment and good service.

In 1998, the United Nations Commission on Sustainable Development for the first time supported the principle of cost recovery in the water sector. It has also now been backed by World Water Vision, the major report presented by the World Water Commission to the Second World Water Forum in The Hague in March 2000. Significantly, the Commission regarded fair and effective water pricing as 'the single most immediate and important' recommendation it could make. (World Water Commission 2000, p33)

More recently and in connection with the 2003 UN International Year of Freshwater, the UN Committee on Economic, Social and Cultural Rights published a statement on water, which Thames Water broadly supports. There is clearly a strong link between the

management of a vital natural resource like water and the human rights agenda, even though the UN Convention on Economic, Social and Cultural Rights itself does not mention water explicitly.

The Committee's view is that 'water should be treated as a social and cultural good, and not *primarily* as an economic commodity'. (UN Economic and Social Council 2002, para 11) However, this hierarchy of priorities does not and must not preclude an economic value being placed on water as a scarce and precious resource whose treatment, delivery and removal costs money. There is broad consensus within the UN and across the water policy community that unless water services have a price attached they will continue to be abused, polluted, wasted and underfunded.

Where private sector partners are involved, they will need to make a fair and reasonable profit, at least in the medium to long term and having demonstrated tangible results and commitment to partnership, in addition to recovering their costs. The cost recovery principle is conceptually different to the issue of profitability, but it is widely recognised that profitability is a legitimate and necessary aspect of the economic dimension of sustainable development. Indeed, a carefully crafted PSP contract, together with the wider regulatory framework, should create a direct link between efficiency savings that keep costs down on the one hand and the amount of profit to be made on the other hand.

There is a strong case for the benefits that a well-constructed PSP arrangement can bring to a community in terms of the financial and environmental elements of sustainable development. Clearly, the appropriate harnessing of private sector capital, technology and managerial expertise can contribute towards the better stewardship of a vital natural resource and also provide a stronger foundation for sustained economic activity. But if this is achieved at the expense of the social element of sustainable development, perhaps because access has not been extended to certain neighbourhoods or because poorer sections of the community cannot afford the tariffs that have been set by local politicians and regulators, then this flies in the face of the spirit of sustainability. However, none of this is inevitable: politicians and regulators can and should use a variety of policy tools to protect the interests of vulnerable groups.

Environmental benefits

Protection of the environment and natural resources is fundamental to achieving sustainable development. Although Thames Water embraces the sustainable development agenda as a whole and seeks to integrate sustainability measurement systems into every area of the business, water is a vital natural resource and a strong emphasis is put on the environmental element of sustainability.

Water services are inextricably linked to the water environment and need to be provided alongside maintaining a healthy aquatic environment and encouraging biodiversity. Water companies also need to operate in an environmentally responsible way in terms of the waste, energy and emissions they produce.

Thames Water is committed to the principles of Integrated Water Resource Management which are essential for effective water management and the achievement of sustainability.

Community involvement and local solutions

The exercise of control over water use and water access is often fragmented among a multitude of institutions. Indeed, in many parts of the world the formal government rules that are meant to resolve water disputes are powerless in the face of informal customary, religious, tribal or family-based systems of water management.

Thames Water is investing in research that identifies social factors involved in managing or using a particular water resource. This process complements other forms of risk assessment, such as an Environmental Impact Assessment, and should certainly precede any substantive formal dialogue or negotiation about PSP. Such an approach allows a company like Thames Water to better understand the interaction between local, national and international factors in determining local water rights and interests.

It is also important that there should be the earliest and deepest dialogue possible with any local communities in advance of PSP negotiations. Thames Water's own efforts to listen to and work with local communities often go beyond any process of engagement that local politicians or officials have undertaken. However, it is primarily the right and the responsibility of the public body inviting private sector

participation in delivering water services to consult and involve the local communities affected.

Thames Water is now present in more than 46 countries and serves nearly 70 million customers worldwide. Its contracts around the world demonstrate the diversity of PSP options. No single universal solution exists to the challenge of delivering sustainable safe water supplies and wastewater services. Each project is tailored to the circumstances of the location in order to deliver the maximum benefit to the community it serves.

Capacity building

Experienced, responsible international companies can also play a significant role in capacity building in the area where they operate. The development of the necessary technical and commercial expertise for the management of water services in urban areas is complex. After years of neglect, local private or public companies cannot be expected to develop the full range of expertise required without assistance. Thames Water sponsors graduate students from around the world to undertake MSc and PhD studies. We also support technological research and training programmes to facilitate knowledge transfer in partnership with local academic institutions and the UK Government.

One comment often heard from PSP sceptics is that too few public bodies have the necessary capacity to assess, manage and enforce PSP agreements, especially in the developing world, and that this may not result in a 'level playing field' for the negotiating parties to any contractual partnership.

This is certainly a potential obstacle to expanding the fair and effective use of PSP arrangements to meet the growing demand for services. However, the challenge of building the necessary financial, legal and technical capacity in public bodies is not one that it would be appropriate for private sector companies to undertake alone. Primary responsibility for building capacity of this kind lies with the governments of the countries concerned, and with donor nations and multilateral institutions such as the World Bank that have public sector capacity building in the developing world as part of their official mandate. Specialist NGOs such as Transparency International may also have a role to play in capacity building.

Where next?

The World Summit for Sustainable Development in Johannesburg in 2002 was very clear that the private sector has a critical role to play in poverty reduction and sustainable development. While public sector resources remain vital, the public sector alone will not deliver the Millennium Development Goals, including those relating to water and sanitation.

A key challenge then for the Kyoto World Water Forum is to make much better use of the undoubted expertise and resources of the private sector in the provision of water and wastewater services. Not supplanting the role of governments, or international organisations or civil society, but rather working in partnership with them to deliver sustainable development outcomes for all.

4. Has private water been oversold?

Gordon McGranahan

Everyone agrees that reducing the share of the world's population without access to adequate water and sanitation should be an international priority. Yet when it comes to agreeing on how this reduction is to be achieved, the consensus disappears, and conflicting political and economic interests intrude.

The 1990s saw increasing international interest and investment in support of private sector participation in water and sanitation utilities. Many overambitious claims were made concerning the role that increased private sector participation could and should play in addressing the world's water and sanitation problems.

The recent international water and sanitation targets provide an important opportunity to correct these claims, and develop a strategy more responsive to local needs and priorities, and more supportive of good local governance. Water sector reforms are clearly needed, but the role of the private sector should emerge from, not drive, local water sector reforms. And it is ultimately the public sector that is responsible for such reforms.

Shifting agendas for water and sanitation

There was a time when publicly owned and operated utilities seemed to many to be the ideal route to achieving universal access to safe water and sanitation. The challenge for the idealised public utility was, to put it crudely, to plan the best way to pipe the clean water in and drain the dirty water out; and then to implement the plan. Good planning included choosing the appropriate technologies (especially challenging in rural areas), finding the requisite finance (especially challenging in low-income countries), preventing pollution (especially challenging in densely populated areas), and avoiding excessive leakage and over-consumption (especially challenging in dry regions). But once the public sector had achieved near universal coverage in most high income countries, this also seemed the obvious way to go in other parts of the world.

Public provision never really lived up to its ideals, and in the 1990s it came in for sustained criticism. The Water and Sanitation Decade had just ended, and universal provision seemed nearly as far away as ever. Environmental issues were beginning to be taken more seriously, and environmentalists were talking of a global water crisis, driven by increasing water demand in the face of limited supplies. Central planning was in disrepute, and market economists were debating how rapidly to privatise the state enterprises in formerly planned economies. From both environmental and free-market perspectives, public utilities came to be seen as part of the water and sanitation problem rather than part of its solution.

The two agendas that responded to these emerging concerns were those of improving water resource management (from the environmental perspective) and increasing private sector participation (from the free market perspective). Terms like Integrated Water Resource Management (IWRM), Demand-Side Management (DSM), Private Sector Participation (PSP) and Public-Private Partnership (PPP) began to appear with increasing frequency in international policy documents. Relatively little has actually been invested in improving water resource management, and private sector participation remains contentious. In terms of the number of customers they serve, public utilities still dominate. However, the combined effect of these agendas has been to undermine the favoured position of public utilities, particularly when water sector reforms are being considered.

Proponents of both water resource management and private sector participation have also made ambitious claims for how well their agendas coincide with the goal of reducing the share of the world's population without adequate access to water and sanitation. In the literature arguing for improved water resource management, existing deficiencies in provision are often presented as if they were symptoms of water resource scarcity and mismanagement. Alternatively, in the literature arguing for more private sector participation, existing deficiencies are often presented as if they were symptoms of public sector failures that private sector participation could overcome.

In both cases, such claims should be treated with scepticism. When new policy agendas are being promoted, their benefits tend to be exaggerated. Benefits to groups considered deserving, but not directly represented in the policy arena, are especially prone to exaggeration.

Neither water resource management nor private sector participation derives its core support from the desire to extend water and sanitation services. The fact that so many people in regions with plentiful water resources lack access to adequate water and sanitation does not sit well with the claim that water resource scarcity is at the root of their access problems. Public sector failures may well help explain existing deficiencies, but there is little evidence to suggest that the private sector is immune from many of these same failings, and private sector involvement often brings its own problems.

This all makes the water and sanitation targets very timely. They can serve to refocus attention on goals that have, in recent years, too often been held hostage to disputes whose central concerns lie elsewhere. The remainder of this essay presents and rejects some of the exaggerated claims that would have international development agencies promoting private sector participation, or public-private partnerships, to meet the water and sanitation targets. The role of international development agencies should be to help achieve the water and sanitation targets, not by deciding how these targets should be pursued globally, but by supporting those strategies that have the best chance of succeeding locally.

Overselling private sector participation

The case for private sector participation relies heavily on the failures of public utilities. Supporters of PSP typically claim that public utilities are inclined to be inefficient, overstaffed, manipulated by politicians to serve short term political ends, unresponsive to consumer demands, and, particularly in low-income settings, inclined to provide subsidised services to the urban middle class and leave the urban and rural poor unserved. In many instances, there is at least some truth to these claims. Indeed, such problems were noted long before private sector participation became the order of the day.

In the 1990s, as indicated above, private sector participation was promoted as the fresh new alternative to the public utilities. Private companies would bring sorely needed private finance to the sector. They would depoliticise water and sanitation provision, introduce efficiency improvements and reduce costs. They would recognise the economic value of water, and ensure that it was distributed to its most valuable

uses. Independent regulation, along with competition for concessions and other contracts, would prevent the abuse of monopoly powers. If necessary, targeted subsidies would be used to assist those households who could not afford to pay the real cost of adequate water and sanitation. But new research indicated that even the poor were usually willing to pay at least for water, and indeed were often already paying more than their more affluent neighbours, who tended to be better connected in both senses of the term.

There are a number of problems with such exaggerated accounts of how privately operated utilities will address the world's worst water and sanitation problems. It is not clear that this exaggeration serves the interests of the private sector, and it certainly does not serve the interests of those without reasonable access to water and sanitation.

First, private sector participation and public private partnerships are not actually new, and there is little in the history of private sector water and sanitation provision to suggest that increasing private sector participation will, in itself, help meet the water and sanitation targets. Even 'innovations' such as public-private partnerships and competitive bidding for water concessions, have existed in various forms for well over a century, and these past experiences do not inspire a great deal of confidence.

At the turn of the nineteenth century, for example, New York City faced the classic dilemma: public sentiment favoured a city-owned supply, but the city's financial resources were considered insufficient. In an attempt to overcome this dilemma, a proposal was put forward for a 'public-spirited private enterprise' to be owned in equal shares by 2,000 citizens. But this proposal was considered overambitious. A few years later, the city opted for a less constrained private enterprise; the Manhattan Water Company. Even this company turned out to be a public/private partnership of sorts. Unfortunately, the partnership seemed to involve using the water company's charter to provide banking services for the politicians who helped to get this charter through the state legislature, rather than to develop a water system suitable to New York City. The banking operations eventually evolved into Chase Manhattan Bank, while the water operations served primarily to convince New Yorkers of the merits of public waterworks. Once the city managed to rid itself of the Manhattan Water Company – which had also been granted extensive water rights – it never again opted for a private utility.

Just as in the late twentieth and early twenty-first centuries the failures of public utilities have been used to justify a shift towards privately operated utilities, so in the late nineteenth and early twentieth century the failures of private water companies were used to justify a shift towards public utilities. The lesson of history would seem to be that while the public-private debate may be the most politically controversial, it is not the interests of those without water and sanitation that are under dispute.

Second, there is little contemporary evidence to support some of the key claims being made for the private sector. There is little evidence of private companies or lenders wishing to invest in providing water and sanitation provision in the economically depressed villages, towns and squatter settlement where most households without adequate water and sanitation actually live (instead there seems to be a strong preference for large cities, preferably with a substantial middle class). There is still less evidence that were they to do so water and sanitation provision would thereby become depoliticised. Indeed, the involvement of transnational firms can make water provision more politicised.

Even the efficiency claims are misleading. Without the right contract design and the right regulatory environment, there is no reason to expect a private utility operator to strive to reduce costs and increase efficiency. Indeed, under a poorly regulated cost-plus contract, a private operator faces pretty much the same incentives as the stereotypical public utility operator. On the other hand, it is perfectly possible to set up a public utility to face the commercial pressures that are held to drive private sector efficiency. Also, the fact that a handful of transnational companies dominate the sector is not only politically controversial, but economically disquieting.

Third, debating the relative merits of public and private provision detracts attention from the many reasons why people fail to gain access to water and sanitation that have nothing to do with whether utility operators are public or private. Where extending networked systems is the key to improving access to water and sanitation, many of the same challenges need to be addressed regardless of who is operating the utility. If tenure problems can inhibit public utilities from extending provision to low income communities, they can also inhibit privately operated utilities. If pervasive corruption can subvert public utilities, it can also subvert privately operated utilities. Conversely, if a sound

regulatory environment is needed to prevent a profit seeking private utility operator from ignoring the water and sanitation needs of the economically and politically deprived, good regulation is also needed to curb similar tendencies among public utility operators.

For a large share of those without adequate water and sanitation, improvements are unlikely to come from conventional water and sanitation utilities in any case. Sewerage systems and piped water networks are ill suited to the dispersed rural settlements where most of them live. Piped networks are generally the least cost means of transporting water around a city, but even in urban centres water-borne sewerage systems are not always the least cost means of disposing of human waste safely. If investment funds are channelled into the networked utilities at the expense of more decentralised options, then, again regardless of the ownership and operation of large utilities, this will not only favour those who are already relatively well served, but will also favour water over sanitation improvements. This may help explain why sanitation improvements lag behind water improvements.

Of course private sector participation need not be limited to large companies capable of operating network utilities. For many of the more deprived urban dwellers, the most relevant private operators are informal water sellers delivering water on foot or by truck (or in some cases through pipes), vendors of water pumps and latrine components, and private latrine and water kiosk operators. However, the participation of these private operators is not being promoted internationally with the same vigour.

Refocusing on the water and sanitation targets and supporting good governance

The last decade's critique of public water and sanitation utilities made at least one thing clear: that public utilities cannot presume to be the providers of choice, either locally or internationally. It also helped to reintroduce a number of alternatives to public provision into the policy debates, including not only privately operated utilities, but a range of other public-private arrangements and, especially in more deprived areas, forms of provisioning involving non-governmental organisations and community-based organisations. Attempts to claim inherent superiority for any specific alternatives to the public utility model have

failed, however. And there is no reason to expect complex and still largely untried combinations, such as 'public-private-community partnerships', to fare any better. Local water and sanitation problems, and their political, economic and social settings, are far too varied to fit with a single institutional straightjacket.

The water and sanitation targets provide an opportunity for the international development community to move on from debating and promoting particular approaches to water and sanitation provision, and to concentrate on assisting locally driven initiatives that can realistically claim to be achieving the internationally agreed upon targets efficiently and equitably. This is likely to require learning from a wide range of experiences, and recognising the willingness and ability of the intended beneficiaries to organise, as well as their willingness and ability to pay. Water sector reforms will still be needed, and are often likely to require measures to improve the financial accountability. The private sector, including transnational water companies, could have an important role to play. But the role of international agencies should not be to favour the private sector, but to favour those without adequate water and sanitation.

5. Sustainable local solutions, popular participation and hygiene education

Richard Jolly

With political commitment, a clear policy focus and a modest allocation or re-allocation of resources, the goals of halving the proportion of those without access to safe water, basic sanitation and knowledge of hygiene by 2015 are challenging but achievable. Some 70 developing and transition countries, comprising about half of the population of the developing world, are currently on track to achieve the goal for safe water. But another 100 countries are not. Of these, 25 are lagging or far behind while for another 75 no data is available.

If Kyoto is to help us to make greater progress in these countries there needs to be a much greater emphasis on local ownership and participation in water and sanitation policies, and on hygiene education.

Recent research shows that hand-washing does more for reducing child mortality and the incidence of diarrhoea than the provision of safe water or even basic latrines. In an analysis of some fifteen case-studies, nine from Asia, three from Africa, two from Latin America and one from the US over the years 1981-2000, Curtis and Cairncross estimate that hand-washing on average is associated with a 40 per cent reduction in the risk of infectious intestinal diseases. This leads them to estimate that appropriate hand-washing with soap could save almost one million lives per year (Curtis and Cairncross, forthcoming).

The conclusion to be drawn is not that safe water is unimportant, but that people need access to adequate sanitation and basic knowledge about hygiene as well as to safe water. All three contribute to better health directly. But they also contribute to poverty reduction indirectly: by reducing the incidence of ill-health and disease of children and of adults, they can free up the time of women and men for more productive activities. Access to water and adequate sanitation near the home can also save much of the time and burden of collecting water far away, which is a cause of many girls being absent from school as well as a heavy chore for children and women involved in daily water collection. Less emphasised is access to improved sanitation and hygiene as a step

to ensuring greater dignity and privacy and often security, especially for women and girls.

Specific goals for improved hygiene were set out in *Vision 21*, a report presented to the Second World Water Forum at the Hague in 2000 by the Water Supply and Sanitation Collaboration Council (WSSCC 2000). The report proposed several new targets for 2015, including 80 per cent of primary school children to be educated about hygiene by that date, all schools to be equipped with facilities for sanitation and hand-washing, and a reduction in diarrhoeal disease by 50 per cent. I believe that each of these targets should be endorsed at the Kyoto World Water Forum.

Over the last two decades, the development community has become increasingly aware of the importance of sustainable local solutions and popular participation. This includes: the need to involve communities in the provision of facilities, maintenance and financing; the importance of empowering women; and the multiplier effects of focusing on primary and secondary schools and school children, to ensure that schools have adequate sanitation facilities separately for girls and boys and adequate access to safe water.

This approach has proved extraordinarily successful in some parts of Bangladesh in motivating whole villages to improve their toilets and waste disposal systems. The approach begins with a village-wide assessment of the whole situation. Often it is shame at the recognition of the situation that triggers a collective determination to make changes. It is then left to individual villagers to decide on what they can and will do for their individual homes and plots.

This appears to be a general rule for latrine construction and other forms of household sanitation improvement. It is important to recognise that individuals want to improve their houses, and will do so if low-cost opportunities are available. There is often no need for subsidies. Rather, it is possible to let the market work, with local craftsmen providing the materials and often doing the work. Instead, resources can be channelled into training and motivation, hygiene education and promotion.

The experience of South Africa also demonstrates that involving local communities and devising sustainable local solutions reduces the costs of meeting the water, sanitation and hygiene targets. South Africa embarked on a major programme of safe drinking water in 1994, when

the democratic government came to power. Within seven years, by 2001, they had halved the numbers without safe water thus achieving the global goal fourteen years ahead of 2015. They now have the target of achieving safe water for all by 2008.

Progress on sanitation in South Africa has been slower: that was until the outbreak of cholera in 2000. This served as a wake-up call. The South African Government has now increased expenditure and latrine programmes by multiples, in one year achieving more than in the previous six. There is now a government commitment to provide sanitation for all by 2010.

The world's richer countries have a role to play in supporting action to achieve these three vital goals. But as South Africa demonstrates, the starting point for accelerated advance has to be national and local action: to adopt the goals as a national priority, to prepare action plans for their achievement, to open opportunities for community action and to mobilise public awareness and support, especially for sanitation and hygiene.

Priorities for action

Experience over the last two decades underlines seven critical areas where further progress is needed if we are to make more substantive advance. It is important that the Kyoto meeting should address these issues and commit to the actions necessary to secure faster progress towards the targets.

First, a greater emphasis on social and community action. To rely on government or the private sector alone in countries of limited resources will require expenditures far beyond the revenues available or the capacity of households and communities to pay. In contrast, approaches based on social mobilisation, in which individual and community action is combined with that of local or central government, can bring into play the additional labour and additional finance to make the goals achievable. These approaches have often been used in many of the countries and states that have seen rapid expansion of water or sanitation facilities. Social mobilisation seems almost the only way in which hygiene education can be expanded to the point where behaviour is influenced on a major scale.

Second, the pragmatic involvement of the private sector. The private sector has an important role to play, but it is not a panacea. In matters

of sanitation, and for water and sanitation in rural areas more generally, small-scale private entrepreneurs have the skills needed and have often demonstrated a capacity to contribute on an increasing scale. They can be ideal for making the concrete slabs required for simple latrines, for installing local level water taps and supplies, occasionally for providing water through drums or tankers where these are needed.

Keeping competition open is important to ensure these contributions are made at low cost. In larger towns and cities, the private sector in the form of national and international water companies, if willing, can also play an important role in providing water and sanitation as part of the management of major schemes. Here however, it is important to ensure that the contracts for such companies require them to reach out to the peri-urban areas, especially to poorer communities.

Third, making better use of simple, low-cost technologies and approaches. Handpumps, improved wells, rainwater harvesting, installations using volunteer labour and community maintenance are all relevant and cost effective in rural situations, as well as many peri-urban areas. Vision 21 of the Water Supply and Sanitation Collaboration Council (WSSCC) estimated that some $9 billion per year would be needed between 2000 and 2025 to meet the goals of water and sanitation for all (WSSCC 2000, p28). These estimates were based on a cost of $15 per person for water in rural situations and $50 in peri-urban areas. For sanitation and hygiene promotion, the average costs were estimated to be $10 and $25 per person respectively. Further work is underway to refine these estimates but providing low-cost approaches and technologies are adopted, the revised estimates are likely to be of the same order of magnitude.

Fourth, better monitoring, with the results more publicly disseminated. Monitoring is required for efficient management, but also for effective social mobilisation at the national and the local level. Monitoring means the development of a regular system of reporting, sufficient to demonstrate progress in a way that can be reported publicly to sustain interest, enthusiasm and political support. Publicising progress in expanding water state by state in India stimulated popular demand and support for water, just as it had in many countries in relation to child immunisation.

Fifth, pricing policies that are politically acceptable and equitable, in the sense that water becomes affordable to all. Prices must be set in

relation to the capacity of different groups to pay and in relation to the overriding commitment to ensure access to water and sanitation for all, in line with international commitments on human rights.

Often this pragmatic approach may lead to communities being encouraged to provide labour in kind to ensure rapid installation of community supplies by hand pumps and public facilities. A priority in all cases is to ensure that charging covers maintenance costs, though again successful examples exist of communities providing their own maintenance services. This has proved successful in Swach project in Southern Rajasthan, also in Nigeria. Women often prove more reliable in maintaining hand pumps, in part because they are usually the main users, and also because when trained in maintenance they are less likely to move from the community in search of a job elsewhere. This was the logic behind many UNICEF programmes for training women in pump maintenance in Sudan, India and Bangladesh.

Sixth, strong participation of women in the management and operation of water, sanitation and hygiene programmes. Women are more affected by inadequacies of arrangements in these critical areas and almost always are more motivated to do something to improve the situation. Being the daily drawers and carriers of water, they are also usually the best informed about what is wrong and what could be done to put it right. However, very often, their voices are not heard and their household resources are not theirs to control. Nonetheless, there are increasing examples of how this can be changed if women are empowered to exercise more sanitation control and influence: in Gujarat in India, in Ethiopia even during the civil war, and in Nigeria.

Seventh, focusing development assistance more directly on the water and sanitation needs of the poorest. Given the strong donor support for the Millennium Development Goals, one would imagine that donor support for water and sanitation for the poorest would be readily forthcoming. In practice, the bulk of international support goes to urban schemes, relatively high cost, benefiting the better off urban communities. Support for water and sanitation schemes in the rural and peri-urban areas forms only a small fraction of the total – probably less than 20 per cent – though accurate statistics are almost impossible to obtain.

The challenge

With a greater emphasis on sustainable local solutions and using low-cost technologies, the achievement of goals for safe water, sanitation and hygiene are all technically possible with only a modest allocation of additional resources or re-allocation of existing ones. Nor should we forget that the goals are modest: only to halve the proportion without access, in countries where half to two-thirds already have access.

Whether the water goal will be achieved in any particular country will be mostly down to three factors:

- first, political commitment to go to scale and to provide national leadership to make the goal real and meaningful;
- second, the adoption of participatory approaches which enable and support local participation and management, especially of women;
- and third the provision of adequate resources for programmes in the rural and peri-urban areas.

For sanitation and hygiene, the same three factors will also be critical. But in addition two others will be important: to ensure that the education system gives proper attention to issues of hygiene and sanitation with backing from the national media, and to obtain support from the private sector, especially from soap manufacturers. With such support the goals for sanitation and hygiene can readily be achieved in any country.

One final point needs to be made. In most of Asia and Latin America, the above factors cover the main issues. But in the least developed countries, and in most of sub-Saharan Africa, achieving the goals will also depend on – and be part of – sustained long-run economic development, of a sort that has not been seen for two or more decades. Civil conflict and collapse of local administration hinders all aspects of development, including pursuit of the goals for poverty reduction and the goals for safe water, sanitation and hygiene. The priority problems of Africa are now widely recognised. The presidents of South Africa, Algeria, Egypt, Nigeria and Senegal have established the New Partnership for Africa's Development (NEPAD). The Millennium Development Goals for poverty reduction are part of this agenda.

Whether they are achieved in this continent of such desperate need will depend on how seriously the goals are taken by the individual countries and made part of the new partnerships with donor governments and institutions of the international community.

6. Local ownership for sustainability: an Indian experience

Nafisa Barot

Over recent years, there have been some tentative signs that the global development community has at last recognised that genuine participation of individuals and households in decision-making is key to making faster progress towards international water and sanitation goals. There is also a greater appreciation that community participation in plans and programmes must entail genuine empowerment to find local solutions in which equity is the key and access a human right. This has been the consensus of *Vision 21*, *the World Water Report 2002*, the Bonn Recommendations as well as the approach that emerged at the Johannesburg World Summit on Sustainable Development. But to what extent are these declared principles influencing real policy on the ground?

In the region I know best – the Indian sub-continent – there have been some excellent examples of effective local action. The difficulty – and the challenge – is in taking these to scale. This is because existing policies and institutions do not seem capable of responding to the real paradigm shift that is required. While the need for policy and institutional reform has been accepted at the theoretical level, Kyoto must now help us to achieve the substantive breakthrough without which the Millennium Development Goals will continue to elude us. Sustainability as a concept must respect the need for empowerment of and ownership by those most in need, and progress should be judged by whether a transfer of power is actually taking place.

Lessons from India

The first major move towards greater decentralisation of water resources in India took place through the National Drinking Water Mission in the mid-1980s. The focus of this gigantic effort to bring safe water to millions of citizens was the handpump. Despite major achievement, the goal of adequate access and coverage is still a long way from being

realised in India, not least because of depleting water resources and unresolved issues of ownership. The Indian Government has initiated a Sector Reform Programme, in which the emphasis is on decentralisation, implemented and managed through local institutions, particularly village-level water committees and self-governing bodies. The Swajaldhara programme, its latest extension, stresses direct access to central resources by local institutions. Simultaneously, rainwater harvesting is assuming greater importance as water tables fall further and survival in many parts of the country depends on the ability to catch water where it falls.

Another recent initiative is the Water and Sanitation Management Organisation (WASMO) that receives assistance from the Dutch Government. This is designed to strengthen partnerships in the water and sanitation sector between government, donors and people's organisations. A parallel initiative in civil society is the network, Pravah, which brings together over 80 NGOs, technicians, scientists and other organisations behind a new drive on clean water and safe sanitation.

Over recent years, I have been closely involved in Gujarat with state level efforts at implementing these government initiatives as well as independent efforts through civil society. Let me give three examples of good practice:

- In Bhavnagar, women-led committees have followed policies of rainwater harvesting and recharging on a scale that has ensured self-sufficiency as well as provided neighbouring villages with tanker supplies during periods of drought. The technology utilised has combined roof water collection and bore well recharging through a series of check dams built and managed by local committees.

- In the districts of Amreli and Bhavnagar, Utthan has demonstrated that sanitation conditions can be improved through local action. In an environment which most often neglects hygiene awareness and sanitation on the flawed presumption that communities do not demand this, local communities have come together to build latrines and to contribute towards the costs of better sanitation. Field visits have been arranged to Tamil Nadu to demonstrate the range of options from which communities and households can choose.

Demand creation has been so effective that the issue is no longer reliance on government subsidies but rather on community level credit schemes.

- The southern city of Chennai has been a pioneer in systems of urban rainwater harvesting and waste management in which the role of civil society is central. A massive public education campaign preceded legislation that makes water conservation compulsory. Institutional mechanisms have been put in place to assist communities in implementing the new regulations. Civil society has taken the initiative to propose a major urban facility, which can help with awareness raising, linked to technical services and resource mobilisation.

As these examples demonstrate, there is real progress towards water and sanitation targets. However, there still remain enormous challenges and barriers that stand in the way of more rapid progress. The ambiguities in the latest Indian National Water Policy are a good case in point. For example, it asserts that water is national property, while the Indian Prime Minister recently stated that water is the communities' property. The Government's sector reform effort has been initiated in 65 districts across India. In Maharashtra, Tamil Nadu, Karnataka, Uttar Pradesh and Andhra Pradesh, there is evidence of clear political will to promote this initiative. But in Gujarat our field experience has been disappointing. Communities have no genuine involvement in decision-making processes. Instead of building local ownership over local resources, and responding to local needs and capacities, the tendency is to recruit communities into serving central programmes imposed from above.

In many respects the institutional reform so essential to change is not being taken sufficiently seriously. An example has been the decision to appoint elected village leaders to head local committees rather than allowing communities to select their own leaderships. At Ghogha, the state government insists on supplying Narmada water through pipelines up to the village, with community participation limited to the distribution and management of the water received. The communities on the other hand are demanding financial resources and support for planning and building their own local water resources, based on local needs.

In the Water Supply and Management Organisation, the organisational structure is marked by bureaucratic control. At the village level, NGOs have been advocating that women should represent at least half of the membership, that marginalised groups should be adequately included and those willing and able to take on decision-making responsibilities should be identified by the community. Instead, the state has passed a resolution for the mandatory inclusion of elected officials, with the village sarpanch (head) in charge. The Swajaldhara scheme that was launched in December 2002 by the Prime Minister leaves glaring questions unanswered: about the space and scope for women's participation, key institutional arrangements, and investment in capacity-building at the grassroots and not only in capital costs.

This situation is particularly frustrating because the need for genuine decentralisation and local ownership, as well as the strategy for how to achieve it, has been spelled out through the *Jal-Disha 2010* exercise and strongly confirmed by experience both in India and in other parts of the world. At this time of preparation for the Kyoto Forum, we therefore need to acknowledge that the consensus on decentralisation that emerged at The Hague and which was subsequently endorsed at Bonn and Johannesburg is still very far from being translated into a reality on the ground.

Speaking as a field worker in Gujarat, the priority is for the paradigm shift to take place first within the minds and attitudes of the political and administrative leadership. There is no way that established institutions working through their established systems can achieve this change. We need new policies and new ways of doing things. Dramatic evidence of this dichotomy in Gujarat is that state policies and programmes continue to be based on the gigantic Narmada pipeline programme, which in turn is wholly government-owned and government-operated.

The real need is for the bureaucracy to hand over power to local communities, and this is proving a very difficult transfer. So long as this preoccupation with massive capital-intensive schemes continues, there can be no genuine decentralisation or local ownership. Most resources will be swallowed up by the pipelines and only marginal resources will be left to implement the people-centered approaches advocated at the global level by *Vision 21* and at the local level by the Pravah network and the *Jal-Disha 2010* coalition.

What needs to change?

- First, we need to encourage and create the space for local communities to find their own local solutions. The experience of several districts of Gujarat, operating in the most adverse conditions, including drought in several years, shows what is possible. For example, in fluoride-affected Balisana village of Patan district, women have led a gigantic rainwater harvesting effort that is capable of recharging and storing huge amounts of water. So successful has this effort been that irrespective of what happens in the monsoon this year, there is adequate provision of community-managed fluoride-free water for essential domestic needs over the next two years. In addition, the community has devised arrangements to regulate the proper use of this resource. This has been achieved in the face of considerable pressure from vested interests to gain control for commercial uses.

- Second, greater priority should be given to hygiene awareness and sanitation. This overwhelming need can never be achieved unless it is linked to local water-resource conservation, development and management, and to the development of a local, gender-sensitive and women-led movement.

- Third, there needs to be a new approach to the problems of water and sanitation in urban areas. The growing concern with the impact of population growth and urbanisation on poor communities is reflected in the efforts of India's urban authorities and many NGOs to develop community-based strategies. A key example is the introduction of new legislation in several Indian cities that makes rainwater harvesting compulsory for new construction. Some authorities realise that this cannot be implemented without strong community understanding and involvement in decisions and resource management.

- Fourth, there needs to be greater clarity about ownership of water resources. This emphasis on ownership needs to be more uniformly applied by state and local authorities, to remove the uncertainties which now surround issues of ownership, and thus to encourage genuinely people-centred programmes on the ground. Genuine ownership of local resources will also require

an extremely close monitoring system that can help ensure that key decisions are those of local communities and not of dominating power structures. It is worth remembering that only a few months ago, a senior state official in India declared that every drop of rain that falls from the sky belongs to the state. This, while underground resources are merrily exploited by those rich enough to dig deeper.

- Fifth, we need a clear directive that financial resources will be channelled to local, community-led water resource building and management. In all of this, the state must acknowledge and support the role of women in decision-making, not just through rhetoric, but through investment in capacity-building and through building institutions in which women and other marginalised groups have a bigger voice.

There is clearly no hope of achieving the Millennium Development Goals for safe water and sanitation if things continue at the current pace. Donors should do much more to support those local groups whose actions on the ground are in keeping with the principles of *Vision 21*. This requires major changes in policy, treating governments more as facilitators than suppliers, and acknowledging that other partners in civil society need to be given greater weight in the processes of decision-making and implementation. These are the preconditions for greater progress in improving the water and sanitation conditions of the poor.

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Glossary

European Water Initiative

Water for Life is an initiative announced by the European Union at the Johannesburg Summit on Sustainable Development in 2002. It aims to create strategic partnerships to develop innovative funding mechanisms and higher efficiency for water-related projects to achieve the international goals on water and sanitation.

Global Panel on Financing Water Infrastructure

Organised jointly by the WWC, GWP and the Secretariat of the Third World Water Forum, it consist of financial experts, chaired by Michel Camdessus (Former Managing Director of the IMF), and focuses on financial mechanisms and investment solutions to meet international development targets. Its findings will be presented at the Third World Water Forum.

Global Water Partnership (GWP)

www.gwpforum.org

Set up in 1996 by the World Bank, the UN Development Programme and the Swedish International Development Agency it is based in Stockholm. Its main focus is on Integrated Water Resource Management (IWRM), its conceptual development and practical tools for implementation. It works through an international network of country partnerships.

Millennium Development Goals (MDG)

www.developmentgoals.org

A set of development targets agreed at the UN Millennium Summit in 2000 including the eradication of extreme poverty, universal primary education, gender equality, reducing child mortality, improving maternal health, combating HIV/AIDS and other diseases and environmental sustainability.

Water Supply and Sanitation Collaborative Council (WSSCC)

www.wsscc.org

Set up in 1990, based in Geneva and mandated by a UN Resolution. Its main policy document is *Vision 21* with an emphasis on participatory,

local solutions. Through regional and global fora, the WSSCC promotes its major campaigns – IAP (Iguaçu Action Programme) and WASH (Water, Sanitation and Hygiene for All).

World Commission on Dams (WCD)

www.dams.org

An international, multi-stakeholder process which addressed controversial issues associated with large dams. It launched its final report *Dams and Development – a new framework on decision-making* in November 2000.

World Water Commission (World Commission on Water in the 21st century)

Established in 1998 and sponsored by UN agencies, it prepared the World Water Vision document for the WWC which was presented at the Second World Water Forum, 2000.

World Water Council (WWC)

www.worldwatercouncil.org

Set up in 1996 and based in Marseille it organises the (tri-annual) World Water Fora. Its members are public and private institutions, NGOs and UN agencies. A policy level think tank, it focuses on improving water policies, laws and regulatory frameworks set out in two major documents – *World Water Vision* and *World Water Actions*.

Timeline of key international events

1977 **United Nations Conference on Water**, Mar del Plata, Brazil

1980 UN General Assembly proclaims **Declaration of International Drinking Water Supply and Sanitation Decade**

1992 International conference on **Water and the Environment**, Dublin, Ireland

UN Conference on Environment and Development (UNCED Earth Summit), Rio de Janeiro, Brazil

1994 Ministerial Conference on **Drinking Water Supply and Environmental Sanitation**, Noordwijk, Norway

1997 **First World Water Forum**, Marrakech, Morocco, March

2000 **Second World Water Forum**, The Hague, Netherlands, March
UN Millennium Summit, New York, September

2001 **International Conference on Freshwater** (Dublin +10), Bonn, Germany, December

2002 **World Summit for Sustainable Development** (Rio +10), Johannesburg, South Africa

UN Committee on Economic, Cultural and Social Rights declares **access to water a human right**, Geneva, 27 November

2003 **UN International Year of Freshwater**, organised by UN Departments of Economic and Social Affairs

Third World Water Forum, Kyoto, Japan, 16-23 March

WSSCC Sixth Global Forum, Dakar, Senegal, December