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Thirsty World

An information and discussion paper on water

Public Policy **Paper**

Tearfund information briefings are aimed at providing a resource for provoking thought and discussion of development-related issues among Tearfund staff and the organisations and individuals with which Tearfund works. They do not necessarily constitute Tearfund policy. Comments from readers are welcomed.

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An information and discussion paper on water

Joanne Green

Tearfund, 100 Church Road, Teddington, Middlesex TW11 8QE, UK
Tel: 020 8977 9144, Fax: 020 8943 3594, Email: joanne.green@tearfund.org

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Contents

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Introduction

Water is undoubtedly a crucial development issue in both urban and rural areas. It is fundamental for life, livelihoods i.e. employment and income, food, health, and economic development. The natural world is completely reliant on water, as we are, and water itself is home to delicate eco-systems. The links between the environment and poverty mean that the role of water in sustaining the earth and its creatures also has implications for people.

Despite a flurry of high level activity, most people remain unaware that by the year 2025, 2 out of 3 people will be living in water-stressed conditions, according to predictions in a recent UN report.[1] Moreover, even fewer will be aware that currently 50% of the global population do not have access to sanitation and that groundwater resources in many areas of the world are at serious or critical levels.[2] In short, there is much to be done in the area of raising global awareness and bringing stories to the attention of the media. Most of the water related problems around the world affect the poor: this does not provide enough of an incentive for Northern governments to act decisively.

This discussion paper aims to set out some of the priority areas in the current world water crisis and to discuss some of the key issues surrounding the water sector at the moment, some of which are controversial. Finally there is a brief overview of relevant policy processes and international agreements related to water.

Five Priorities

The consumption of freshwater has increased not simply because of population growth but also as a result of the improvement in the standard of living in some countries and the parallel economic development. Irrigated agriculture is a major culprit, greedily drinking at least 70% of national freshwater consumption in most countries. In addition, the expansion of the mass tourism industry in many developing countries has directed water away from local people to large hotels and complexes. As a result of all these pressures, the global consumption of freshwater rose sevenfold between 1990 and 1995.[3]

The Global Water Partnership's Framework for Action Unit (please see p11 for explanation) has identified a number of priorities within the looming crisis. Tearfund broadly agrees with these priority areas but further insights have been added that have been gleaned from Tearfund's research and experience.

1. **Extending sanitation coverage**

The supply of sanitation services, which include wastewater and solid waste disposal as well as excreta disposal, is in an even worse state than the supply of freshwater. Whilst 20% of the world's population lacks access to safe drinking water, 50% lacks access to safe sanitation.[4] Although safe sanitation is just as critical for human health it has not generated the same amount of initiatives and funds as water. This is partly because of taboos in all cultures at local level, but primarily because there is a prevailing attitude that it has to be a complex system with a consequently high cost of installation. However, this does not necessarily have to be the case if appropriate technology solutions are applied.

The effects of the absence of sanitation facilities are multiple and wide-ranging. The most devastating of these is the creation of an environment in which debilitating and life-threatening diseases flourish. The dignity of human beings, especially women, is also at stake, but this is a much more subtle consequence of inadequate sanitation.

2. **Meeting the challenge of urbanisation**

"By 2020 over 50% of the population in developing countries will reside in urban centres."[5] The crux of the problem with rapidly expanding urban areas is their spontaneous and informal nature. One result of this is the lack of planning and organisation by city authorities to provide services for new poor homes. Poor infrastructure generally was already a characteristic of most Third World cities. Utilities do not usually attempt to supply services to those in 'illegal' (unplanned) settlements, so it is now the case that other groups, such as small-scale private vendors, provide requirements which are often less than basic and even exploitative. Consequently, poor people often end up paying more for water than the better off.

In addition, the ability of state run utilities to provide services is on the decline because of poor management and a lack of investment. Thus, it is clear that organised, realistic and fair alternatives must be implemented urgently. A number of initiatives are already underway, many of which are modelled on Private Sector Participation

(PSP). Attempts to help civil society, business and government work together should provide important learning points and knowledge for the way forward.

3. **Protecting and restoring water resources**

Unsustainable water withdrawal — a situation where the rate of the use of water is faster than the rate which nature replenishes it — in some countries is at a serious to critical level. The "indiscriminate"[6] mining of groundwater supplies has led to a situation where unsustainable use occurs on every continent except Antarctica.[7] This is worrying in itself but, in addition, depletion and pollution has reduced the quality of the water as well as causing land subsidence and saline intrusion in some cities, for example, Mexico City.

African and Western Asian countries are the worst affected because they cannot rely on the import of 'virtual' water, in the form of food, or desalinisation, (an expensive process) unlike some of their wealthier neighbours in the Middle East. Currently one-third of the world's population lives in countries with moderate to high water stress — that is where water consumption is more than 10% of the renewable freshwater supply. The situation, especially in Africa, is set to worsen.[8]

For many years industry, communities and individuals have been polluting water regardless of the fact that use of the resource becomes unsustainable as a result of this abuse. The consequences of these actions fall on ecosystems and vulnerable people. Water is only renewable if quality is maintained at a decent standard but there are many areas where surface water is so severely contaminated that there is no incentive for individual polluters to clean up.

Industry's use and pollution of water is an area where regulation is crucial, especially because of the growth in heavy industry in developing countries. If industrialising countries follow the example of the already industrialised, water use will rise dramatically. By the year 2025 it is set to double, with a four-fold increase in pollutant emissions to watercourses.[9]

4. **Achieving water-food security**

Water and food security are closely linked. As the demand for grain grows due to the world population increase so will the need for water for agriculture. [10] Currently agriculture counts for on average 70% of freshwater use worldwide and in some developing countries is much higher. There is a need for an increase in the efficiency of the use of water for this purpose, especially as there is increasing demand from cities as they expand. Rural areas are likely to lose out to an even greater degree if more sustainable ways of using water resources cannot be found.

The conflict between very small scale domestic water abstraction and much greedier agricultural abstraction is also a very important issue. The poor in rural areas frequently experience water scarcity and water supply deficiencies. This results in health problems for whole communities.

Unfortunately this urgent issue does not get the attention it deserves at policy level, despite the obvious implications for food security. It is essential that those countries

where the twin evils of food and water insecurity exist have access to fair and secure trade so that they can import 'virtual' water in the form of food.

5. **Improving the management of floods worldwide**

Over 130 million people were affected by floods between 1993 and 1997.[11] The vast majority of those most severely affected were poor people. Flooding ruins health, homes, food sources, lives and livelihoods. Growing populations, the construction of buildings in unsuitable areas, environmental degradation, and climate change will all contribute to worsening this already serious situation. Moreover, according to scientists, natural disasters are on the increase. In fact, 1998 was "a record year for heatwaves, flooding and hurricanes."[12]

The devastation caused by flooding is at least partly preventable through town planning, rural management, the provision of adequate housing, environmental management and a decrease in greenhouse emissions worldwide.

Key Issues Involved in Solving Water Problems

Water as a Human Right

There is some controversy over the perception of water as a human right. The problem for some objectors is a core concern over the concept of universal human rights, and for others, it is simply the inclusion of water in the long list. It is important to state here that it is not water itself that is a right, water is a resource. Rather it is access to adequate water to sustain life that should be an inalienable right. It is perhaps surprising that access to water is not included in the UN Convention on Human Rights and only receives a passing mention in the more recent UN Convention on the Rights of the Child. It is surprising because it is a basic requirement for survival and a resource that is increasingly becoming concentrated in the hands of the powerful as strains and stresses associated with its supply worsen.

Whilst human rights are not the answer to every problem, they can be a useful tool in empowering poor people to lobby those who control the resources. Therefore in employing human rights terminology, it is important to note its limitations and dangers. There are a number of general difficulties regarding human rights that will need to be overcome by those wishing to create international consensus that access to water should be a human right.

The practical implications of human rights education taking into account cultural differences are immense. The reality is that in many countries the notion of human rights does not exist or has an alternative interpretation, and to introduce our interpretation of it, which may contradict strongly held beliefs about religion and community, is not only ethically questionable but also counter-productive. In addition, whilst the absence of either statutory or customary national law relating to water rights in the majority of developing countries could provide a goal to aim for, it may also render calls for water rights to be enforced farcical.

It is also vital that any work on human rights must be allied with the issue of responsibility. If somebody has a right to a particular service or good then it must be somebody else's responsibility to provide it. The question of who has the responsibility of provision is a more difficult one than claiming a human right to something, yet it is vital to find the answer if that right is ever going to be realised.

The capacity of governments, whether national or federal, to ensure people's human rights are met must be accompanied by the resources and ability to enforce and implement relevant legislation. Without the enforcement of the law the reality of human rights will be purely academic.

Despite the existence of these factors, there are encouraging signs that it is feasible to introduce the notion of water rights into a country and even to enshrine this principle in law. The example of South Africa stands out as a country where this has been possible. The abolition of apartheid and establishment of a new constitution and Bill of Rights has provided the opportunity for the inclusion of a comprehensive set of water rights as well as responsibilities.

The example of South Africa not only provides a good case study for those interested in emulating such legislation, but also reveals many of the barriers at the heart of progress towards provision for all. [13] Lack of access to land, inequalities of every kind, poverty and the corruption of power are core problems. When faced with these evils the assertion that each person is equal and entitled to basic services is a potent weapon and one that shares many values with Christianity.

It is important that the world also continues to work towards global or at least regional understandings of human rights. This could help conflict and tensions over water between countries in some areas of the world to be resolved.

Water as an Economic Good

Water has traditionally been seen either as a resource, a natural phenomenon or a basic need. More recently the concept of water as an economic good has been regarded as controversial by many who hold one of those views.

Environmentalists ask whether water, which obviously occurs freely in nature, should be based on economic principles (opportunity cost). However, the argument that water should be handled as an economic good does not necessarily contradict the idea that water is a natural resource. All resources occur freely, but there is always a cost involved in extracting the resource and in delivering it. This is what the customer should be paying for.

In addition, the idea of water as an economic good and water as a human right may appear to contradict each other: How can one reconcile the idea of payment with a human right?

In reality, supplying water costs money and taking an economic approach to its distribution can help to control its use. For example, in developing countries it is estimated that 91% of total water consumption is for agriculture. Consequently "there is a need to consider the pricing of irrigation water as an economic good to protect the higher value supply to drinking water."[14] However it is important that the economic approach does not dominate and is balanced with social and environmental considerations. The ultimate aim is access to water. The economic considerations should be secondary but important nonetheless, especially if they can improve access for the poor.

Those concerned with the social perspective may still disagree with the idea that those who are provided with a drinking water supply should pay (cost recovery). The willingness and ability of poor people to pay are clearly significant issues to address. Firstly it is important that they are consulted and that there are channels through which they can express their concerns. The biggest hurdle is moving people from non-payment to payment. The evidence is that where there is no choice people often pay a lot for water, particularly to water vendors in urban areas. The setting of affordable tariffs and a reliable service are also crucial factors in convincing people to choose a reliable and regulated service rather than buying water from a private vendor to whom they will often pay several times the amount they would for a piped water supply to their homes. Local people must be given information about the services they will

receive and the feeling of ownership is particularly important. Coming to terms with all these factors will necessitate good communication and relationships between the community and the service provider whether it is the government, private sector, non-governmental organisation or a community-based organisation.

The Involvement of the Private Sector

The increasing complexity and, therefore, cost of supplying water services to rapidly expanding cities in the Third World has resulted in the involvement of business, both multinational and local, in what had previously been a sector led by the state. Previously, the involvement of the private sector was discouraged because of the public good and basic need characteristics of water and sanitation and the monopolistic tendencies of the water sector. In industrialised countries such as the UK and France, the privatisation of water utilities has occurred relatively recently and already the companies running water services in these countries have been expanding their business overseas, for example, Thames Water, Anglian Water and Suez-Lyonnaise des Eaux.

Private sector involvement in water provision is not limited to purely large multi-national companies. A lot of private sector activity is small-scale, local and even rural. (In these cases regulation is just as important but may prove to be more difficult because of the multiplicity and potential informality of businesses involved. It is easier to identify the big multinational companies and their activities than it is the small scale businesses).

The involvement of the private sector brings *potential* benefits for poor cities. In theory at least, it should bring capital where governments have failed to attract the necessary investment and in the case of the large multi-nationals it should bring experienced, trained staff to run the utilities in an efficient and organised way. However, there is understandable concern that the interests of poor people who make up a considerable proportion of potential customers will be sidelined in the interest of profits and efficiency. Moreover, as far as the large utility companies are concerned, there are concerns that they will not benefit the poorest of developing countries which are less attractive to foreign investors. Investment so far has been concentrated in Latin America and East Asia with Sub-Saharan Africa accounting for less than one per cent of total investment.[15] It is likely that business will only consider moving to these developing countries if there is an assurance of profit and anti-corruption measures in place.

Recognising the potential good that PSP involvement could bring to poor people but also its possible dangers has led to the establishment of a new triangular model which involves business, government and civil society working together. In this model business provides the service and investment; governments establish strong regulation; and civil society provides input for community development goals. Valuable lessons have been learnt from these experiments in cooperation. However, in many cases where the private sector is already involved there is not the time or resources for similar structures to be organised. Questions also remain over the ability of some governments to provide a regulatory role and the extent to which society can

engage due to the informal and possibly transient nature of the community in which it is centered and the difficulty of defining who the community is and who should represent it.

Ideally, the private sector should be accountable to the community in which it is working as well as to government regulation. A possible way of doing this would be to give the community a share in the company or to invoke the biblical 'Jubilee' principle which would mean that every seven years the contract is reviewed and the company held accountable for its actions.

It is essential that companies involved in service provision to poor communities are open and responsive to them. Foreign companies are used to considering the environmental impact of their operations but in these situations they must also give considerable thought to their social responsibility.

The Move Towards Integration

Integration has become the watchword of the water sector. Increasingly 'Integrated Water Resource Management' (IWRM) is being proposed as the solution to the problem of global water security by academia, NGOs and international development departments in national governments. In practice this means balancing the competing demands of society, the economy and the environment.[16] It is a comprehensive approach that requires focused coordination across the various sectors. The concept is a response to the conflicts experienced between different interests. It is an attempt to bring about equity, efficiency and sustainability.

IWRM is a goal that should be worked towards if we are going to achieve the supply of water and sanitation services to everybody, because it will take into account and manage many of the factors that are currently diverting water away from those who need it. To work, IWRM will require mechanisms to adjudicate fairly between the different demands. A paradigm shift in our attitudes towards water will have to take place before this is achieved. At the moment government generally gives the economic and private agricultural uses the highest priority, with social needs coming second and the environment a poor third. So, it is particularly important that this paradigm shift occurs at the highest levels of political office in all countries.

It is important that the complexity of integration is not underestimated. It will take a great deal of political will and perseverance to overcome the inevitable barriers to integration. Human beings are simply not good at the practice of integration so we must not underestimate the time and will it will take to achieve it, otherwise it will be abandoned as another good idea that didn't work in practice.

Civil society has an important role to play in raising awareness and educating activities in the community, which in turn should motivate governments to take action themselves. The concept of Integrated Water Resources Management is not the easiest soundbite to communicate and may seem far removed from people's basic needs. Therefore the connection must always be made between IWRM and the way it should ensure a better and more secure water supply for poor people.

Participation

The participation of poor people in water and sanitation supply and decision-making is often said to be the key to ensuring a sustainable and equitable service. But what does this mean? It seems that most people agree that participation is an important aspect of water provision, but they are not sure why, how it should look or how to bring it about. Effective participation, therefore, rarely happens.

The reasons that poor people should at least participate in decision-making regarding water and sanitation provision are many. Originally community participation was advocated as a way of improving cost effectiveness and efficiency because it facilitated the incorporation of local technologies and knowledge into planning and design, the devolution of responsibility for operation and maintenance and an emphasis on cost-sharing.[17]

More recently, there has been an emphasis on participation as a means of community and individual empowerment. This is part of the move away from a 'supply-led' approach to a 'demand responsive' approach that encourages the active involvement of primary stakeholders at all stages of the project.[18] The development of shared agendas between professionals and all stakeholders is also important and a positive outcome of community participation. Crucial issues that will determine the sustainability of the service such as willingness to pay, cultural sensitivities, conflict and expectations can also be resolved through varying levels of participation.

There are different levels of participation ranging from simply providing information to handing over complete control. Analysing who the different stakeholders are and whether they are willing and able to participate is clearly fundamental to any exercise in participation. It is vital that the people who participate are the genuine stakeholders. For example, women are usually the primary stakeholders in the water sector but are often excluded from any participation and decision-making. Capacity building to enable participation may be needed. Changes in the attitudes, expertise and procedures of private and public institutions so that they become more amenable to participatory approaches will probably be necessary.

Some useful case studies detailing projects with a participatory approach have been produced and donor institutions such as the World Bank and the UK Department for International Development are doing more work around the whole area of participation. In reality, models vary according to the system of governance, service provider and cultural differences. Ultimately, though, what matters is strong user involvement whatever the institutional mix.[19]

Principles Which Will Underpin Tearfund's Work

The aim of Public Policy work on water will be to play a part in ensuring that poor people have access to adequate water and sanitation facilities, whatever part of the world they happen to live in. That they can live in an environment where water is free from industrial and human waste pollution and where they can use water in a sustainable way in order to improve their income, health and happiness.
The following set of principles are important in achieving these aims:

1) **justice:** for all people to have access to a clean and affordable water supply and sanitation service.
2) **participation:** of the poor in the water and sanitation decision-making process.
3) **accountability:** of governments, industry and NGOs involved either directly or indirectly in water supply and sanitation.
4) **sustainability:** of all water usage for domestic, industrial, agricultural and environmental purposes.
5) **integration:** of the different demands on water into its management.

Relevant Policy Processes

The seriousness of the water and sanitation predicament has motivated major international policy fora and organisations to plan programmes that will try to overcome the threats of pollution, scarcity, population pressures, waste and inefficiency. Currently the most important process is the World Water Vision and Framework for Action. However it is likely that the most strategically important forum will be Earth Summit III. The World Water Vision and Framework for Action are seen as important components in the build up to making sure that this is successful in terms of outcomes for freshwater.

The World Water Vision and Framework for Action

In March 2000 the World Water Forum and Ministerial Conference took place in the Hague, Netherlands. The Forum was the platform for the launch of the World Water Vision and Framework for Action.

The World Water Vision is an initiative intended to address the water crisis by developing long-term visions on Water, Life and the Environment in the 21st Century. This "Vision" is being prepared under the guidance of the World Water Council. Translating the Vision into practical plans is being executed by the Global Water Partnership (GWP) through the "Framework for Action", an ongoing initiative that incorporates regional Frameworks for Action. Both of these documents, it is claimed, have been developed through a global consultation process with the principal stakeholders. The whole process is intended to be as participatory as possible, relying on a decentralised structure, setting targets and milestones that will try to 'make every drop count.'

There have been some concerns that participation has not been as widespread or inclusive as it should have been in some areas, for example, Eastern Africa, and that the presence of Southern organisations and individuals was not high at the actual World Water Forum in March.

The Ministerial Conference that ran alongside the Forum aimed to mobilise political support with an eye to countering the global water predicaments with concrete action. The Ministerial Conference had some positive outcomes that will be fed into the UN Commission on Sustainable Development but there were no real commitments to actual change.

www.worldwaterforum.org
www.gwpforum.org (Global Water Partnership homepage)

Agenda 21

Agenda 21 was an outcome of the Earth Summit held in Rio in 1992. Chapter 18 of Agenda 21 was devoted to freshwater, which was given a high profile at the Earth Summit. Local Agenda 21 is an initiative to bring sustainable development to local communities around the world and so it is hoped that water and sanitation are playing

a key role in the development of these 'agendas.' The fact that these plans should be developed locally provides a good opportunity for civil society to influence them.

National Strategies for Sustainable Development

In 1997, the UN General Assembly Special Session agreed that each country should formulate and implement 'National Strategies for Sustainable Development' (NSSDs). Each country should have these in place by 2002 and have begun to implement them by 2005. The main thrust of the NSSD is to integrate environmental issues into mainstream planning. NSSDs are also intended to put poor people at the center and be owned at a local level. The UN Commission on Sustainable Development (CSD) has agreed that they should include commitments to national water management policies. Special assistance to help developing countries to meet this commitment has been given by some donor governments, such as the UK. To date only the UK and Canada have formulated a written NSSD, so it looks unlikely that this target will be achieved.

(See CSD homepage below)

United Nations Commission for Sustainable Development

The CSD was also established as a result of the Earth Summit in order to monitor the implementation of Agenda 21 and it has recently been focusing on water. In April 2000 a report on freshwater was presented to the eighth session meeting in New York. The paper was a report on the 'Progress made in providing safe water supply and sanitation for all during the 1990s.' The CSD recently proposed that water should be a key issue at Earth Summit III.

www.csdngo.org/csdngo (NGO information)
www.un.org/esa/sustdev (CSD homepage)

Earth Summit III

The work of the Commission on Sustainable Development is also focused on 2002 when it is hoped that another Earth Summit will be held. The location is not yet known. If the Summit takes place, freshwater is predicted to be a priority issue for discussion and agreement. Earth Summit III will be extremely important in making sure that key problems are recognised by all governments and that enforceable commitments are made to solving them.

www.earthsummit2002.org

Convention on the Non-Navigational Uses of International Watercourses

After nearly three decades of negotiations and redrafting the Convention on the Non-Navigational Uses of International Watercourses was approved by the UN General Assembly in April 1997. The convention covers issues such as cooperation between watercourse states and the peaceful settlement of disputes over shared watercourses.

However the Convention is not binding and does not give specific guidance to countries.

Notes

[1] United Nations Environment Programme, *Global Environment Outlook 2000*, Earthscan Publications Ltd, London (1999) p 41.
[2] ibid. p 43
[3] Gleick, P (1998) *The World's Water, The Biennial Report on Freshwater Resources 1998- 1999,* Island Press, p 6.
[4] United Nations Environment Programme, *Global Environment Outlook 2000*, Earthscan Publications Ltd, London (1999) p 42
[5] http://www.wsscc.org/vision21/docs/doc16.html
[6] *Framework for Action: Towards Water Security* p 13.
[7] Gleick, P (1998) *The World's Water, The Biennial Report on Freshwater Resources 1998- 1999,* Island Press. p 2.
[8] United Nations Environment Programme, *Global Environment Outlook 2000*, Earthscan Publications Ltd, London (1999) p 41.
[9] ibid p 43
[10] ibid.
[11] *Framework for Action: Towards Water Security*. p 15
[12] Report on the Proceedings of the *1999 World Disaster Forum on Environmental Change and Natural Disasters*, British Red Cross. p 3
[13] Gleick, P (1998) *The World's Water, The Biennial Report on Freshwater Resources 1998- 1999,* Island Press. p 159
[14] http:www.lboro.ac.uk/well/occpaps/no.3.htm
[15] http: www.wsscc.org/vision21/docs/doc21.html
[16] *Framework for Action: Towards Water Security*. p 3
[17] *DFID Guidance Manual on Water Supply and Sanitation Programmes,* WEDC (1998). p 58
[18] ibid.
[19] ibid p 51

100 Church Road,
Teddington
Middlesex
TW11 8QE
United Kingdom

Telephone: 020 8943 7818
Facsimile: 020 8943 3594

Internet: www.tearfund.org
E-mail: py@tearfund.org