International efforts to improve access to water and sanitation in the developing world: a good start, but more is needed

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Abstract

Considerable international efforts are underway to address water and sanitation needs in developing countries. The 2003 G8 Action Plan on water sets the right tone, but more is needed. Three activities deserve additional support and greater cooperation between government and non-government organizations. These are: immediate steps to improve health and sanitation, multilateral efforts to foster good governance, and the development of innovative financial mechanisms to make local and investment capital available for water infrastructure development. Public understanding of these three approaches is often misunderstood, as evinced by the Stakeholder Dialogue at the 2003 World Water Forum. Achieving the Millennium goals on water and sanitation requires greater public and private sector cooperation in these three areas. A significant accomplishment for the next G8 meeting would be to strengthen partnerships between public and private sectors in these areas.

Keywords: Millennium goals; Revolving funds and loan guarantees; Safe water systems; Water privatization

World Water Forum and water priorities

Since 1990 the number of people without access to safe water has remained constant at about 1.1 billion. Today, another 2.4 billion people have no access to proper sanitation (WHO, 2000). Water-related diseases are among the most common causes of illness, affecting mainly the poor in developing countries. In 2000 the estimated annual mortality rate caused by water- and hygiene-related diarrhea and other diseases was 2.2 million people, the majority of whom were children under the age of five (UNESCO, 2003). For the developing world, achieving clean water and improving sanitation are crucial elements of development and poverty alleviation. No one argues this point. The question is how to make the availability of clean water a reality.

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Thousands of government and non-government officials met at the 2003 World Water Forum in Kyoto, Japan. In one ministerial session identified as a Stakeholder Dialogue, government ministers and representatives of civil society and the public sector sat around 30 or so dinner tables and discussed water priorities. A facilitator moderated the event.

On a large screen in the front of the meeting room, two questions were listed for each table to discuss. The first was to identify the three greatest challenges to reducing poverty and providing access to clean water. After about 30 minutes of discussion, the facilitator turned to ask representatives of each table to report their conclusions, which were then listed on the screen. The second question asked participants to specify the three most important actions that should be taken after the World Water Forum. The final lists (Appendices 1 and 2) are instructive in demonstrating the spectrum of opinion, largely from civil society, on both challenges and action in delivering clean water and sanitation to billions of people.

The list of challenges is eclectic, reflecting political opinions (anti-World Trade Organization (WTO) and anti-free trade), social activism (community control and gender empowerment) and philosophy (water as a human right). Some of the recommendations would enjoy widespread support (e.g. good governance and anti-corruption); others are controversial (e.g. privatization and the role of the private sector.) The ten challenges and actions that the stakeholders listed most frequently for these questions were equally diverse:

- involving youth in local and international decision-making bodies,
- assuring that the World Water Council controls the agenda for next World Water Forum,
- affirming that governments and international organizations should implement recommendations of the World Commission on Dams (WCD),
- admonishing the Free Trade Area of the Americas (FTAA) and WTO to exclude water as a tradable item,
- promoting the harvesting of rainwater,
- supporting increased financing for water infrastructure,
- affirming that water is a human right,
- promoting the transferring of low-cost technologies to developing countries, and
- advocating that democratic governance be based in the local community and not be constrained by the World Bank and International Monetary Fund.

Given these broad perspectives and the proposed actions, what strategies can contribute most to achieving by 2015 the Millennium goals on water (reducing by half the proportion of people without access to safe drinking water) and the World Summit goals on sanitation (cutting by half the proportion of people without access to adequate sanitation)? Roughly, achieving these goals would require providing water and sanitation services to an additional 125,000 people per day from now until 2015. If billions of dollars were available for the developing world, could that alone significantly address the problems?

At another venue of the World Water Forum, a report commissioned by the Global Water Partnership (GWP) and the World Water Council (WWC) was hotly debated. The report, Financing Water for All (WWC, 2003), the work of the World Panel on Financing Global Water, has become known as the Camdessus Report after the Panel’s chair, M. Michel Camdessus, the former managing director of the International Monetary Fund and now honorary Governor of the Banque de France. This report made a number of recommendations, some easy to accept, others more controversial. At the core of the report is the recommendation to double Official Development Assistance (ODA) for the water sector. “Current
spending on new water infrastructure in developing and emerging countries is very roughly US$80 billion a year. This will have to more than double over the next 20–25 years to around US$180 billion. Much of the increase will be for household sanitation, wastewater treatment, treatment of industrial effluents, irrigation and multipurpose schemes”.

A call to double ODA for water evoked strong reactions from many governments. But those who focus only on this recommendation fail to appreciate the insightful and critical recommendations in the report on the roles of good governance, national and sub-national governments and capital markets: “There is general agreement in expert presentations to the panel that the water sector’s problems arise partly from weaknesses in governance and partly from risks specific to the sector”.

While more money from donors to assist developing countries is clearly needed in the water sector (as discussed below), creating social and environmental conditions by national governments that will make the money work effectively must come first. In the developing world, governments themselves must treat water as a higher priority in their own development plans.

This paper examines three principle strategies:

• making immediate improvements in health and sanitation,
• fostering good governance and strengthening sub-national authorities, and
• developing innovative financing at the local level.

A number of examples illustrate the potential for making progress in each of these areas. Actions already supported by the heads of state of the G8 countries give these initiatives a strong political foundation. Implementation by governments, UN agencies and the development banks and stronger partnerships with the private sector will translate these initiatives into concrete results.

Health and sanitation

The 2003 UNESCO report (Water for People, Water for Life) attributed 2.2 million deaths annually, mainly from diarrhea illness, to the lack of safe drinking water, sanitation and hygiene, constituting the third-highest cause of death in the developing world (after under-nourishment and unsafe sexual practices, both of which are strongly linked to AIDS/HIV). Meeting the internationally accepted sanitation goal requires a frontal attack to eliminate water-borne diseases.

Many approaches are clearly evident. Building adequate water infrastructure in urban centers and distribution to rural communities is necessary. But addressing serious health issues cannot wait for more pipes alone. The UNESCO report showed that providing water-disinfecting capacity at point of use (POU) is the most cost-effective approach to reducing water-borne disease. Regardless of whether collected household water is initially of acceptable microbiological quality, it often becomes contaminated with pathogens of fecal origin owing to unhygienic storage, transportation, and handling. Cost-effective technologies already exist to treat water at its POU, including locally produced water disinfectants and diluted chlorine-based solutions. Varying technologies for treating household water have been developed and employed in different parts of the world (Macy & Quick 2002; Mintz et al., 2001). When these technologies are coupled with education and hygiene programs, field experience shows that a 50% or greater reduction in water-related disease can be achieved rather quickly (Macy & Quick, 2002). According to the UNESCO report, “There is now conclusive evidence that simple,
acceptable, low-cost interventions at the household and community level are capable of dramatically improving the microbial quality of household stored water and reducing the risks of diarrhea disease and health in populations of all ages in the developed and developing world”.

The availability of a product for purifying water does not mean it is readily used. The technology must be marketed to reach the widest possible number of users. Market development is advanced by social marketing, which involves both product development and behavior change. Social marketing combines the availability of a reliable and cost-effective product with education to motivate healthy behavior (safe household water practices and condom use for AIDS prevention) (Meekers, 2001, 2000; Thevoz et al., 2002). The United States has been a leader, along with the UK, in the social marketing of health commodities (e.g. condoms, insecticide-treated nets and oral rehydration salts). Once the market for these technologies has been established, it tends to grow on its own and become self-sustaining (Figure 1). In Zambia and Madagascar, US$600,000 in donor funding has helped create a market for POU technologies that has now reached over 2 million people.

Improving the health of people living at the bottom of the economic pyramid: the private sector can help

The growth of water-purification technologies at the household level illustrates the opportunity for private sector market development and subsequent development of indigenous local industries in low-income countries. As a growing number of multinational companies are discovering, the four billion people at the lowest economic level of the global economic pyramid (those with per capita income under US$1500 per year) represent a potentially huge market. This market is large, but not easily accessed (Prahalad & Hart, 2002).

\[ \text{Zambia: Product Sales 1998-2002} \]

![Sales (units)](Zambia: Product Sales 1998-2002)