

## **LESSON 6: Safe Drinking Water and Sanitation (SDS)**

### **Abstract**

The Millennium Development Goals (MDGs) for safe water and sanitation call on the global community to halve the proportion of people without access to safe drinking water by 2015. There are compelling arguments that investment in SDS would provide excellent returns in health, poverty alleviation and gender equality. There are many international organizations dedicated to the various dimensions of the SDS issues. Financing for the needed infrastructure is a big gap; the private sector role is controversial. Catalytic action is required to coordinate the diffuse initiatives and unlock the financing required.

### **Background**

Global failure to manage water effectively undermines efforts to alleviate poverty worldwide and prevents progress towards sustainable development. Proponents of attacking the water issues argue that failure to provide SDS worldwide is simply indefensible in a time of great wealth and technological capability. Water shortages and water quality degradation lead to water-borne diseases that kill or seriously harm more people on a global basis than any other health problem in developing countries. Over 1.1 billion people lack access to safe drinking water. Over 2.3 billion lack access to adequate sanitation. The Millennium Development Goals (MDGs) for safe water and sanitation call on the global community to halve the proportion of people without access to safe drinking water by 2015. At the Johannesburg Earth Summit it was further agreed, by 2015, to reduce by half the proportion of people without access to basic sanitation. The numbers of people that must be provided with safe drinking water and sanitation services to meet the MDGs are 630 million and 1.4 billion, respectively. Even if these targets are met by 2015, the other half of the people without SDS services will still not have been served.

Safe water is an issue of relevance to several of the L20 countries. Millions of people in China, India, Indonesia, Brazil and Mexico are without safe water or sanitation. Credible sources report that 58% of the world's population lack safe water. More than 70% have inadequate sanitation.

The Camdessus Report cites 3 inter-linked explanations:

- Inadequacy of political will at all levels of government, ranging from national to local;
- Problems in governance approaches for implementing this goal, ranging from inadequacy of legal frameworks to poor management structures to inappropriate participation of stakeholders; and
- Shortage of financial resources to meet the goals.

Another major shortcoming is the lack of human, technological, and institutional capacity to undertake the necessary actions. Even when other challenges are resolved, capacities in developing countries will need to be enhanced to undertake the on-the-ground action.

The World Health Organization (WHO) attributes most of the global disease burden to water-borne pathogens. Impacts of industrial, domestic and agricultural pollutants found

in drinking water are no less alarming. The linkages between SDS and health are clearly quantified. A cost-benefit analysis of water and sanitation improvements, conducted by WHO ( [http://www.who.int/water\\_sanitation\\_health/wsh0404/en/index.html](http://www.who.int/water_sanitation_health/wsh0404/en/index.html) ) identified significant savings through the following avoided health costs:

- Reduced health sector investment due to avoided illness
- Patient expenses avoided due to avoided illness
- Value of time savings due to access to water and sanitation
- Value of productive days gained of those with avoided illness
- Value of days of school attendance gained for children with avoided illness

Provision of SDS can form the basis for reducing poverty – removing the cycle of disease that reduces productivity of those without access to SDS, and re-directing the savings in the health sector to other imperatives. The unequal burden placed on women for provision of drinking water, particularly in rural areas, can also be significantly reduced. Where communities can raise credit to improve water and sanitation, financing opportunities become available for other projects

One controversial argument is that ODA should be used to finance investment for SDS by using development aid to lever private investment capital. This could be done through partial loan guarantees and interest rate subsidies to developing countries' water agencies. Loan guarantees and interest rate subsidies would reduce the cost of capital, spread financial and political risks and make infrastructure investment possible for the poorest countries. The L20 could establish an independent multilateral financial mechanism called the "Global Water Facility." Parallel efforts would also be required to ensure governance and pricing reforms and to provide capacity assistance to poor nations to help them "deepen" their capital markets. Such an approach, proponents of leveraging private sector investment suggest, would also begin the long process of regularizing property rights in the "informal" sector, and unlocking "dead capital" (illiquid real estate "owned" by the poor), particularly in urban slums. They argue that this is a win-win-win strategy, engaging and benefiting all key players, not least the United States, which currently favors a private-sector oriented and performance-based approach to foreign aid. Opponents argue that that this is a slippery slope. The utility providing water is a natural monopoly, providing services which should be considered a human right. Private capital will seek to maximize profits rather than service.

Arguments claiming SDS is a win- win issue for an L20 include:

- **SDS is a "home grown" issue** of enormous relevance: In its current composition, the G20 Finance Ministers group contains 70% of the world's population without adequate sanitation and 55% of those without safe drinking water.
- **A non-contentious issue:** Framed as a human health issue, SDS can be presented to governments as enlightened self-interest investing in future economic growth. Overall expenditures on health will decrease with congruent improvements in existing public health services.
- **Manageable costs:** Annual average cost to reach the sanitation MDG is about *US\$ 9.5 billion*, while the comparable estimate for safe drinking water is *US\$ 1.8 billion*
- **Enormous economic benefits:** Exceptional returns on the investments in SDS

associated with time savings, increased adult productivity, school days gained, and reduced medical diagnostic and treatment frequency.

- **Eminently attainable:** A high probability of success. The means to successfully accomplish the targets are well understood and can be developed in the time required. Action can be mobilized in households and within communities that have vested interests.

- **A “Development Multiplier” Issue:** Once SDS is no longer a “suffocating impediment” to progress, other important aspects of the water crisis, such as water supply, water for agriculture, integrated water resource management, trans-national water issues, water and peace issues, can be dealt with more effectively.

## **Lesson Plan**

Read the December, 2004 background discussion paper *Safe Drinking Water and Sanitation for All – A G20-Led Initiative* written by Daley, Adeel, Mayfield, King and Grover (United Nations University - International Network on Water, Environment and Health)  
[http://www.l20.org/publications/Phase%20II/Water/water\\_backgroundpaper.pdf](http://www.l20.org/publications/Phase%20II/Water/water_backgroundpaper.pdf)

Watch the video narrated by Ralph Daley, Director  
UNU International Network on Water, Environment, and Health  
<http://www.l20.org/publications/4-Water.mov>

Review the mandates of the World Water Council, World Water Forum, UNESCO's World Water Assessment Programme, Global Water Partnership, International Office for Water, International Water and Sanitation Centre, and the International Water Management Institute:

<http://www.worldwatercouncil.org/>  
<http://www.worldwaterforum4.org.mx/home/home.asp>  
<http://www.unesco.org/water/wwap/>  
[http://www.gwpforum.org/servlet/PSP?chStartupName=\\_about](http://www.gwpforum.org/servlet/PSP?chStartupName=_about)  
<http://www.oieau.fr/anglais/index.htm>  
<http://www.irc.nl/>  
<http://www.iwmi.cgiar.org/>

Discuss the merits of establishing a dedicated agency with a mandate to attain the safe water and sanitation Millennium Development Goals. Review the argument that the existing international organizations listed above are unlikely to achieve the Goals. The new dedicated agency would oversee the preparation of a global action plan, and management of advocacy, fundraising, networking, capacity building, and monitoring and evaluation exercises.

Read the Purvis & Sahni paper "*Financing Water: Toward an L20 Action Plan*"

[http://www.l20.org/publications/Phase%20II/Water/water\\_purvis.pdf](http://www.l20.org/publications/Phase%20II/Water/water_purvis.pdf)

Consider the pros and cons of using ODA to attract private capital to invest in SDS infrastructure.

Monitoring and evaluation are essential elements of any global SDS initiative, both to chart its progress and to understand its impacts. Any further initiatives would have to build on the existing comprehensive program of the UN Joint Monitoring Program (JMP), WHO, JMP and the UN-WWDR. To gain an appreciation of the activities of the World Water Assessment Programs review the web site  
<http://www.unesco.org/water/wwap/partners/index.shtml> .

## Discussion Questions

1. At Summit Meetings, Leaders can commit themselves to promote certain priorities or undertake specific actions. Leaders can agree to mandate their Ministers to give priority to specific initiatives. Leaders can agree to direct their representatives to work together towards specific ends in exiting international fora or multilateral organizations. Occasionally, Leaders can agree to catalyze the creation of a new international organization.

Question: If it is true that actions and commitments for capacity building must be scaled up by at least an order-of-magnitude if there is to be any chance of meeting the Millennium Development goal, is there a more promising avenue than the L20?

2. Some argue that we must establish a dedicated agency to oversee the preparation of a global action plan, and manage advocacy, networking, capacity building, monitoring, and evaluation. They argue we should merge the World Water Council, World Water Forum, World Water Assessment Program, Global Water Partnership, the International Office for Water, the International Water and Sanitation Centre, and the International Water Management Institute. Others argue we should avoid bureaucratic turf wars, starve the existing organizations of funds, and just start over.

Question: Could the L20 create a World Water Organization (WWO) which would:

- (a) Provide a platform for policy dialogue and partnerships
- (b) Be a bridge between governments, citizens and civil society, and
- (c) Bring about synergies among the large number of diverse and diffuse institutions involved with various aspects of SDS, I, WSP, WHO, FAO, UNICEF, UNESCO, and UNEP.

What Machinery is required? What kind of organization changes makes sense? Should there be a Secretariat to the WWO? Funded how?

3. Questions. Would it be a practical idea for the L20 to establish a World Water Trust Fund (WWTF) managed by WWO to deliver SDS programmes and projects? The Trust Fund would mobilize multilateral and bilateral donors, foundations, CSOs, the private sector and private-public partnerships.

4. Proponents of SDS believe a catalyst is required to promote partnerships and stakeholder participation at national and local levels.

Question Could the L20 commit each member country to legislate SDS as a human right? Would this be sheer grandstanding or would it create an enabling environment and motivate communities, legislators, local authorities and the private sector to invest in SDS. If L20 countries agreed that SDS was a human right deserving of legislative protection how might that catalyze programmes for unserved parts and communities?

5. It may be unrealistic to expect performance by already overburdened local authorities and governments in many developing countries. There are problems of managerial capacity, corruption, politics, and property rights.

Question Should immediate action be promoted for the Poverty Reduction Strategy Papers, promoted by the World Bank and IMF, to require effective inclusion of water and sanitation programmes?

6. One approach to attacking the problem could be an aggressive “Global Advocacy Campaign for SDS” – a worldwide campaign to convince the public, policymakers and community leaders of the critical challenge and need for commitment to meeting the SDS goals. The campaign could highlight the health, economic and social benefits from every person on the globe having access to safe drinking water and sanitation and encourage capacity building measures to meet the gaps in human, technological, infrastructural and institutional capacity.

Question: Is there room for an effective public campaign, or is the public too cynical? If you were in charge, what would you choose as the themes and instruments of the campaign?

## **WEB Based Resources**

1. Ralph J. Daley, Zafar Adeel, Colin I. Mayfield, Caroline King and Velma I. Grover  
United Nations University - International Network on Water, Environment and Health  
Hamilton, Canada

“Safe Drinking Water and Sanitation for All –A G20-Led Initiative  
Background Discussion Paper”

[http://www.i20.org/publications/Phase%20II/Water/water\\_backgroundpaper.pdf](http://www.i20.org/publications/Phase%20II/Water/water_backgroundpaper.pdf)

2. 2001 UNICEF report “*Numbers of people without safe drinking water and sanitation within the G20*

*and prospective G20 countries*”

(2000 data, in millions;)

<http://www.unicef.org/sowc02/>

3. (Camdessus) Report of the World Panel on Financing Water Infrastructure  
“*Financing Water for All*”

World Water Council, 3rd World Water Forum, & Global Water Partnership  
(author – J Winpenny)

[http://www.gwpforum.org/gwp/library/FinPanRep\\_MainRep.pdf](http://www.gwpforum.org/gwp/library/FinPanRep_MainRep.pdf)