

Water Supply and Sanitation: Improving Services for the Poor

Target 10 under the Millennium Development Goals (MDG) is to halve by 2015 the proportion of people without sustainable access to safe drinking water and basic sanitation. The International Development Association (IDA), the concessional lending arm of the World Bank, has been working to improve access to water and sanitation in the world's poorest countries and has seen real progress in the last 15 years. Overall, access to improved water sources in IDA countries rose from 65 percent in 1990 to 75 percent in 2004. Progress in sanitation, however, has been slower.

Over the past five years, IDA has become the single largest source of financial assistance for improving water supply and sanitation in low-income countries. IDA concessional lending has supported policy reform and institutional development of the water supply and sanitation sector (WSS), while directly providing at least 25 million people with access to improved water supply sources and/or sanitation between 2000 and 2006. These investments have proven to be both life-saving (in terms of improved hygiene and decreased incidence of disease) and very cost-effective.

IDA is increasing its investments in the sector during the period of IDA14 (Fiscal Years 2005–08). This stepped-up commitment is expected to provide access to an additional 36 million people by supporting infrastructure development, by laying the basis for the expansion of water and sanitation services through reform, by including water and sanitation in country development plans, and improving local institutional capacity to implement related programs.

At a glance

- Access to safe water in IDA countries improved from 65 percent in 1990 to 75 percent in 2004.
- IDA directly contributed to shrinking the water and sanitation access gap by at least 25 million people (22 million for water) in 2000–06.
- Since 1998, annual IDA lending to the WSS sector has averaged US\$478 million.
- Expanding water supply access costs on average US\$55 per capita.
- Worldwide in 2004, some 1.1 billion people still lacked access to a reliable source of water, reasonably free of contamination and 2.7 billion people still required improved sanitation services.

SECTORAL CONTEXT

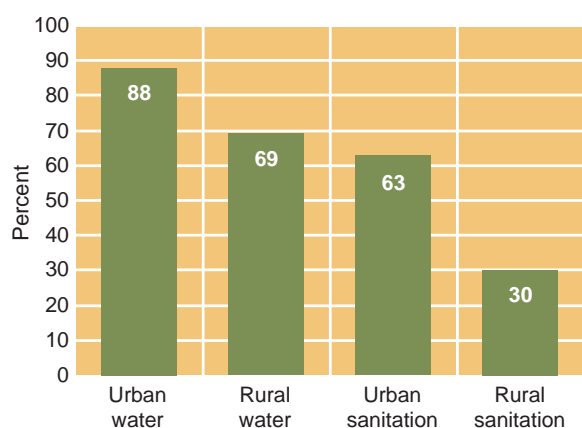
Halving by 2015 the proportion of people without access to improved water and sanitation is a vast challenge.

For IDA countries in Sub-Saharan Africa, the share of the population with access to improved water has increased from 45 percent in 1990 to 53 percent in 2004.

For all IDA countries, it has improved from 65 percent in 1990 to 75 percent in 2004. However access to sanitation still trails behind: access to improved sanitation rose from 25 percent to 41 percent in the same period.

Although some regions and countries fare better than others, IDA as a group is off-track in its quest to reach MDG target 10. In IDA borrowing countries, 660 million people remained without access to safe water in 2004 and 1.6 billion people were deprived of basic sanitation, with coverage in rural areas lagging seriously behind urban access.

Urban and Rural Access in IDA Countries, 2005
(% of population with access to improved source and facilities)



Source: World Development Indicators.

Measuring results in the absence of solid data.

IDA estimates it has helped close the access gap by a small fraction (3 percent), directly providing 22 million people with safe water. However, only half the projects in IDA's water and sanitation portfolio measured quantitative outcomes—its contribution to closing the access gap is certainly much higher.

As a result of the increased focus on results measurement, 67 percent of approved sector projects now have baseline outcome indicators, compared to 32 percent in Fiscal Year 2005, despite the fact that constructing baselines in dysfunctional utilities or rural locations where data availability is scarce can be challenging.

IDA is also working on tools to help project teams to improve overall monitoring and evaluation in projects. Yet, improving results measurement at the local level remains a long-term endeavor. Support from donors is often required as data collection and analysis are public goods which usually are not accorded high priority in the allocation of scarce public resources.

In order to improve monitoring at the country level, IDA has started to assist its clients to build and strengthen statistical capacity in both sector and central agencies. One tool is the International Benchmarking Network (IBNET) utility performance indicators database (funded by the United Kingdom). It uses standardized definitions for the indicators being collected and currently includes 2,100 utilities in more than 80 countries.

Life-saving, cost-effective interventions.

Initiatives focused on hygiene, sanitation and water supply have varying, but collectively important, influences on the improvement of child health. Hand washing initiatives were reported by experts to reduce the probability of contracting diarrheal diseases—an important cause of child morbidity and mortality—by 44 percent; sanitation improvement resulted in a 32 percent decrease; while improved water supply resulted in a 25 percent reduction.

On average, water supply projects are inexpensive: expanding water supply access comes out to US\$55 per capita. Those costs vary of course by country and type of investment. The costs of inadequate water supply and sanitation are harder to measure but certainly very high: lack of water affects poverty, health, education, and the environment, and overwhelmingly weighs down on the poor.

Economic rates of return at the closing of IDA-funded WSS project are on average 19 percent (for those projects that provide such data), which is significantly higher than the Bank's requirement of 10-12 percent rate of return on its investments. It is also higher than a similar sample of projects that are funded through the Bank's other lending arm, the International Bank for Reconstruction and Development (IBRD) and which generated an average rate of return of 14 percent.

IDA CONTRIBUTIONS

IDA has steadily increased its lending for water and sanitation since 2003.

Since 1998, annual IDA lending to the WSS sector has averaged US\$478 million, increasing steadily to US\$585 million in 2006. Planned

investments for WSS in 2007 are US\$1.6 billion, almost double the investments made during 2005. IDA lending has been concentrated in Africa, which has received about half of the IDA commitments to the WSS sector since 1998. Most of the remaining IDA lending for WSS is focused on East Asia/Pacific and South Asia, the two regions that have especially large gaps in achieving the MDG sanitation targets.

Multi-sector projects.

In the past decade, much of the assistance to WSS has been provided through projects that incorporate multiple sectors where water supply and sanitation represents one of these sectors. Since 1998, 46 percent of IDA lending has been provided directly through these multi-sector operations funded as part of urban and rural development and social protection projects. This tendency to incorporate WSS components into multi-sector projects is a positive development as it reflects the increased recognition of WSS in reducing poverty and promoting economic growth.

Analysis and advice.

The increase in lending has been accompanied by an increase in the number of analytical and advisory studies produced by IDA experts that include a focus on water and sanitation. This analytical work helps project teams set the right priorities and suggest adequate reforms in borrowing countries. These studies address increasingly cross-sectoral issues—such as community participation, local government reform, public sector reform, and capacity-building—while also more effectively integrating WSS into country and regional studies.

Customized projects.

IDA assistance in post-conflict countries such as Sierra Leone or Afghanistan is mainly focused on reconstruction and rehabilitation of critical infrastructure while supporting longer term efforts to strengthen institutional capacities.

In countries characterized by a more supportive environment, such as Ghana, Guyana, India or Vietnam, IDA assistance is focused on the delivery of sustainable WSS services.

Effective lending.

The effectiveness of IDA lending in WSS has improved significantly. Ex-post evaluations show that 80 percent of the WSS projects completed between 2001 and 2006 had satisfactory outcomes, higher than the Bank average and a major improvement over prior years. Sustainability ratings have also gone up, as has the percentage of completed projects with satisfactory policy reforms.

Tangible results.

Urban water projects in Senegal helped usher a reform of the water sector in 1996 which led to increased efficiency and expanded access, particularly for the poor, without increasing water tariffs beyond the rate of inflation. Following the engagement of a private operator in an innovative public-private partnership, water losses decreased from 32 percent to 20 percent between 1998 and 2003. Between 1996 and 2006, access to water supply services was extended to approximately 1.6 million people in Dakar and secondary cities. IDA helped finance 140,000 new household connections

at subsidized rates for poor families and 400 public standpipes. Sanitation improved in urban areas with 830,000 people gaining access to sewerage connections or on-site sanitation.

Two successive projects leveraged important funds from other donors and commercial banks and contributed to expanding global access to water to 98 percent of people in Senegal's cities in 2006, up from 74 percent 10 years earlier. The level of household connections in urban areas (76 percent) is now the highest in sub-Saharan Africa.

In Ghana, the Second Community Water and Sanitation Program adopted a community-driven approach to water supply, supporting Ghana's decentralization strategy through grants. More than 2,014 communities are now using and managing water and sanitation facilities that they planned and helped build. Overall nearly 800,000 people in four regions (6 percent of Ghana's total rural population) gained access to potable water. The project also provided training to 500 service providers.

The Small Towns Water and Sanitation Project in Uganda succeeded in improving water supply services for over 190,000 people in 11 towns and significantly reduced time spent on water collection.

The Yemen Social Fund for Development provided basic social and economic services to almost 10 million people, of which almost 2 million benefited from access to water supply services. A follow-up project provided more than 820,000 people with improved environmental sanitation.

In the **Cambodia** Urban Water Supply Project, water losses were reduced from 57 percent in 1998 to 18 percent in 2003, while adding almost **100,000 new connections** to the piped network system and resulting in a 34 percent increase in access to improved water sources in the country's urban areas between 1998 and 2004. The increased sales and lower cost of production had a positive impact on the financial performance of the utility.

In rural areas of **Indonesia**, **600,000 households** and 3,000 schools have benefited from improved WSS services under the Second Water and Sanitation for Low Income Communities Project.

The on-going Second Community Water Supply and Sanitation Project in **Sri Lanka** has succeeded in providing so far safe access to water supply to 46,000 households and supported the construction of some **10,000 latrines**.

Several factors drive these positive results.

- **A country-based approach** ensures that IDA investments are tailored to the needs and capacities of specific countries. The Bank's capacity to work across sectors, interlink these different sectors, and link local (i.e., city or rural districts) with the country aspects of development helps to create an environment that facilitates efficient and sustainable water and sanitation investments.
- **Global operational experience and research capacity.** The increase in analytical work in the past five years has helped to improve WSS policy and institutional reform strate-

gies that underpin the lending program, and has, as such, contributed to improved results in the lending portfolio.

- **Budget support.** Indirectly, the increased use of budget support instruments, such as the Poverty Reduction Strategies and the subsequent Poverty Reduction Strategy Credits (PRSCs), has enabled sector-wide reforms that have brought WSS programs funded by different donors under one umbrella. It has also helped to strengthen public management, improving the predictability of financial support to the sector.

In Benin, for instance, the PRSC approach has since 2001 resulted in a doubling of the population served with improved water supply and sanitation. In Uganda, general budget support has helped up budget allocations to water from 0.5 percent of public expenditure in 1997 to 2.8 percent in 2002. Uganda is on track to meet the development goal of supplying 65 percent of the population with safe water and 80 percent with sanitation by 2015.

- **International cooperation.** IDA actively contributes to the international dialogue on water and sanitation, whether as a participant of the UN task force on MDGs or as a speaker at various conferences. Special attention has been given to Africa through the African Ministerial Conference on Water, the New Partnership for Africa's Development and regional initiatives such as the Nile Basin Initiative. Efforts to ramp up financing for WSS will continue, mostly through the establishment of an Africa Infrastructure Consortium (agreed on at the 2005 G8 summit) which will focus on aid effectiveness.

Partners in Action

The World Bank and the African Development Bank (AfDB) are committed to working together to support national programs for rural and urban WSS in order to minimize transaction costs and maximize the funds that government and donors can contribute to the sector.

The Rural Water Supply and Sanitation Initiative (RWSSI) led by the AfDB is an important element of this strategy. The partnership with AfDB and other donors enables the Bank to leverage its IDA funds significantly, and to balance investments between rural, town and urban WSS.

- **Drawing on available knowledge.** IDA has also been able to draw on policy research funded by trust funds to improve its operational work. The Bank-Netherlands Water Partnership (established by the World Bank and the Netherlands in 2000) played a key role in getting sanitation and hygiene components into water projects in more than 18 IDA countries and shed light on innovative ways to improve service delivery to the poor. Other trust-funded programs, like the Public Private Infrastructure Advisory Facility (PPIAF) and the Global Program for Output Based Aid (GPOBA) have also contributed by disseminating knowledge and providing new financial instruments to increase access to WSS services.

OUTLOOK

Learning from the past.

In the past two decades, it has become increasingly clear that sustainable infrastructure development is more likely to occur within an environment that fosters reform to improve the performance of service providers.

Engaging in policy dialogue and institutional strengthening at the country level has a positive impact on country ownership and can contribute to improved project performance.

The implementation of a revised business strategy in 2003 has resulted in assistance to WSS focused on those countries where the potential for impact is the highest, matching Bank support with country commitment to sound policies and institutions. The lending program increasingly has been combined with sector diagnostics to strengthen lending programs through, for instance, WSS MDG action plans (e.g., for India or Senegal) and regional infrastructure strategies.

Nevertheless, the fact that sector reform tends to take place in spurts and bursts, depending on the political climate in client countries, means that progress often experiences ups and downs.

To ensure sustainable WSS service delivery, the following project design features have proved to be of major importance: the use of demand-responsive approaches in service provision; managing services at the lowest appropriate level; adherence to cost recovery policies where necessary in combination with transparent subsidies targeted to the poor; the use of appropriate technologies and standards to ensure cost effectiveness of investments; and a shift from sewerage to on-site sanitation and hygiene promotion programs.

In addition, IDA engagement in the sector is becoming more nuanced by addressing the reality that different management models are appropriate for different country contexts. Increasingly diverse management models in

the public and private sectors, and through public-private partnerships, are being utilized as a result. A last lesson is that regulation can not substitute for good governance.

Strategy going forward.

The major challenge facing the development community is scaling up investment and reform efforts.

IDA has been able to increase lending for WSS, thanks to the sector's prominence in poverty reduction and country assistance strategies: water and sanitation is currently represented in 75 percent of PRSPs Bank-wide.

IDA lending is expected to grow further over the coming years, although scaling up can be limited by country-specific IDA investment

ceilings. In the period covered by IDA15 (Fiscal Years 2008-11) IDA will mostly continue to focus on priorities set up during the previous cycle, with Africa remaining a major focus of efforts.

The provision of urban water supply will remain important, fuelled by the rapid urbanization taking place in many IDA countries. Sanitation and hygiene promotion components in the overall IDA portfolio are likely to increase as previous projects are starting to show results and create demand. However, there will also be an increased focus on improving governance so that WSS infrastructure investments can be operated and maintained in a long-term, sustainable fashion.

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<http://www.worldbank.org/ida>