

Setting the Scene: Water,¹ Poverty, and the MDGs

THE MILLENNIUM DEVELOPMENT GOALS (MDGs) reflect the commitment of the world community to work together and reduce global poverty. The MDGs do not claim to capture all aspects of poverty reduction. They are, rather, a way of understanding what must be done if poverty is to be reduced. And momentum is building, along with the hopes and concerns for those countries that seem on target and those that lag behind.

The Asia and Pacific region plays a pivotal role in the MDG commitment. The region is home to the majority of the world's poor. In the People's Republic of China (PRC) alone, the number of people without access to clean water supply is nearly as large as all of the underserved in Africa. The progress this region makes will define the entire global community's success in achieving the ambitious targets the MDGs have set for 2015.

In the five years since the MDGs were identified in the 2000 UN Millennium Declaration, Asia and the Pacific have shown remarkable progress. The region has been reducing poverty by attacking it on many fronts—through sound economic policies, development strategies, and targeting specific characteristics of poverty, such as hunger and disease. Water supply and sanitation improvements are proving to be keys that unlock many aspects of poverty.

MDG Target 10 calls for the world to halve, by 2015, the proportion of people without sustainable access to safe drinking water and improved sanitation. The MDGs and associated targets are an opportunity for prioritizing water on the basis of its ability to impact overall poverty and contribute to significant socioeconomic and environmental gains.

Target 10 also presents a particularly formidable challenge for Asia. Around two thirds of the world's population underserved by water live in this region. One third of Asians do not have access to safe, sustainable water supplies. Even worse, one half do not have access to improved sanitation. Yet, it is in many parts of Asia that the greatest gains are being posted. This progress reflects the relatively strong institutional base in the region, vibrant economic growth, a dynamic private sector and civil society and, in many cases, the high priority being given to poverty reduction issues in national development plans. Many parts of Asia are increasing their coverage rates for clean, reliable water supplies. Strides toward improved sanitation are slower, greatly because of the steep climb from extremely low coverage rates to begin with.

This report assesses the region's prospects of reaching Target 10 by 2015. It does not just consider the target's literal call to halve the number of underserved by 2015. True progress must be comprehensive and considerate of all who lack these vital services. For this reason, the report looks at the rate of a country's progress in improving both urban and rural coverage.

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The report utilizes coverage data from the WHO/UNICEF Joint Monitoring Programme for Water Supply and Sanitation in assessing the progress and defining the 2015 projections. It also utilized WHO data² on cost estimations for meeting Target 10 specifically in Asia and the Pacific. This report estimates that meeting Target 10 will cost as low as \$8 billion annually. The higher the investment, though, the higher the technology and assured quality and quantity. Target 10 calls for the most basic technology. Equally important to the progress and prospects of the region is the rationale this report presents for investing in the water sector. It is not investing for water's sake, but for poverty's sake.

Benefits of Water for Poverty Reduction

Investing in the water sector is investing in all of the MDGs, not just Target 10. And the impact of water sector investments directly targeted at poor consumers is anything but subtle. Safe water supplies immediately improve people's health and save them time, which they can use to study, or improve their livelihoods, so they can earn more, eat more nutritiously, and enjoy more healthy lives. Improved sanitation protects the poor from socially and physically degrading surroundings, health risks and exposure to dangerous environmental conditions. Investments in better water resource management further address a host of concerns related to socio-economic and environmental dimensions, such as conflicts over water rights, contamination of water sources by animal/industrial waste and agricultural chemicals, and sustainability issues related to water quantity in rural and urban areas.

The multiplier effect makes it easier to understand how \$1 invested in the water sector turns into \$6. All too often, though, the expectation and analysis of benefits from water supply and sanitation projects are limited to the most common intended result—better health. There are many other benefits from water sector investments,

such as increased agricultural outputs and income when the rural poor gain access to irrigation. Water sector investments also improve levels of gender equality and educational attainment because the poor have the time and good health to attend school and participate in economic activities, and by doing so, prove their worth by becoming cash-earning members of their households and communities.

By meeting Target 10, countries improve their likelihood of meeting the other MDG targets and goals. ADB's review of six water supply and sanitation schemes³ identified a range of social and livelihood benefits in addition to the health benefits that were the original rationale for the projects (Box 1). The nongovernment organization (NGO) WaterAid assessed the impacts of water supply projects in a number of countries and found a wide range of impacts on many aspects of life. Similar impacts have been found by other organizations. The benefits and related research prove the economic viability of water and sanitation investments to significantly reduce poverty and increase productivity. For this reason alone, it is important for stakeholders to understand the water and poverty connection. This report makes a strong case for valuing and prioritizing water sector investments and reforms by advancing the analysis beyond the domain of Target 10 to consider water's role in creating the conditions for meeting the other MDGs.

Water Sector Reforms and Poverty Reduction

For water supply and sanitation to dramatically reduce poverty, a greater commitment of resources and political will are needed, and urgently. They are the preconditions to building institutional capacities, improved governance and investment flows, which are all a part of the larger reform work that must happen for water supply and sanitation to play its role in reducing poverty.

Reform as a foundation for social and economic change cannot be underesti-

mated. Recent studies⁴ conducted jointly by the United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP) and the Food and Agriculture Organization (FAO) point out the need to formulate, implement and manage water supply and sanitation programs in strategic approaches of socioeconomic development. This requires complex and multi-dimensional reforms. There is growing realization that the barriers to achieving this are frequently political and institutional, rather than economic or physical.

A number of agencies are collaborating to help key stakeholders, particularly governments in their reform efforts, to understand the water-poverty relationship. ADB and the Poverty Environment Partnership (PEP)⁵ (of which ADB and UN agencies are members) have collaborated in the Water and Poverty Initiative and come up with a framework for understanding this relationship. The report of the UN Millennium Project Task Force on water and sanitation and the WHO/ UNICEF JMP *Meeting the MDG Water and Sanitation Target: A Mid-Term Assessment of Progress* report⁶ also provide key insights into how water and sanitation relate to poverty. The analyses in these different sources are consolidated here.

Four key dimensions of poverty are used in the PEP conceptual framework:

- **Enhanced livelihoods security.** The ability of poor people to use their assets and capabilities to make a living in conditions of greater security and sustainability. This analysis should address all aspects of their livelihoods, including the use of domestic water supplies for productive activities.
- **Reduced health risks.** The mitigation of factors that put the poor and most vulnerable (especially women, children and the immunocompromised) at risk from different diseases, disabilities, poor nutrition, and mortality. Many health risks are linked to water supply and sanitation, including killers such as diarrhea, malaria and dysentery.

- **Reduced vulnerability.** The reduction of threats from environmental, economic and political hazards (e.g., resettlement, conflicts over water rights, water quantity and quality, etc), including floods, droughts, storms, pollution, and other forms of water-related hazards that threaten the livelihoods of the poor. Water quality is a direct concern for providing safe water supplies; improved sanitation is essential for maintaining environmental integrity; and providing access to water and sanitation is a key priority in response to serious disasters.
- **Pro-poor economic growth.** Enhanced economic growth is essential for poverty reduction, but the quality of growth, particularly the extent of new opportunities created for the poor, greatly matter. Investments in the water sector (for both supply and sanitation) must utilize strategies that directly, and even disproportionately, benefit the poor. To effectively target the poor, though, their needs and abilities to contribute must be understood, which requires their direct involvement as stakeholders in consultation and implementation processes. Beyond being just recipients of investments, the poor must be seriously and genuinely valued for their multiple abilities as shareholders of knowledge, participants in implementation, and caretakers of investment outputs—the very systems they will use and depend on into the far future. Their needs vary within communities and locations, requiring a more complete understanding of the full range of costs and benefits associated with different options for improving water supplies and sanitation.

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Water Management and Poverty Reduction

It is important for Asia and the Pacific to understand the links between water resource management, water supply and sanitation,

and these wider development processes if the region is to meet its MDG aspirations and obligations. Many parts of Asia and several Pacific Islands face critical and worsening problems in the availability, reliability and quality of water and in environmental degradation and health risks from poor sanitation option that is available to them. These problems are likely to worsen in the coming decade, despite (and, in some cases, partly because of) their otherwise positive development trajectory.

The Millennium Declaration and the policies and strategies of many organizations like ADB, UNDP, UNESCAP, and WHO address the challenge of water resource management and water supply. The Millennium Declaration calls for “sustainable water management strategies at the regional, national, and local levels that promote both equitable access and adequate

supplies.” ADB’s water policy⁷ sees water as a socially vital economic good that needs careful management to sustain equitable economic growth and reduce poverty. Similarly, the Human Poverty Index⁸ developed by UNDP identifies access to safe water as a key indicator of poverty.

Underlying the issues and relationship of water resources management and water supply is the view that water management must have two attributes. First, it must be integrative: looking at all aspects of water resources and their uses at different institutional levels. Secondly, it must be targeted: focused on specific actions that provide for the needs of the poor in an equitable and effective manner. In this context, it may be noted that several countries and organizations in the region have been developing strategic approaches to integrated water resources management as

BOX 1: The Impact of Improved Water Supplies

Studies by the Asian Development Bank (ADB) and WaterAid on the impact of their projects on the communities in different parts of the Asia region found that multiple benefits were the norm, including many that had not been anticipated or invested in. These benefits, which affected many aspects of life, included:

- **Time saved**, along with reduced fatigue from not having to collect water from, on average, 6 kilometers away: this was often the benefit most valued by the community. The savings were usually directly translated into productive activities, especially by women.
- **Health benefits**, including lower medical expenditure and the reduction of the long-term debilitating effects of diseases such as endemic dysentery and worm infestations.
- Improved **income opportunities** from home-based livelihood activities that used the new water supplies, such as vegetable and livestock production, brick and pot making, and operating food stalls.
- **Multiplier effects** throughout the local economy from increased incomes and new enterprises based on improved water supplies.
- **Local organizations** set up to build and run water supplies were often the basis for wider social mobilization, and led to the empowerment of women and greater social cohesion.
- **Savings and credit** groups led to the development of wider access to credit among the communities and improved financial management skills. In urban areas, poor households also saved on the cost of water, as before they had to pay informal providers high prices.
- The new skills, organizations and social cohesion, along with increased economic momentum, had impacts on the wider **political and social system**, including at times influencing government policies and bringing about more balanced representation.

Sources: ADB. 2003. The Impact of Water on the Poor. ADB Operations Department, Manila; and WaterAid. 2001. Looking back: The long-term impacts of water and sanitation projects. WaterAid, London.

recommended by the UN General Assembly at its Nineteenth Special Session. In this connection, UNESCAP has developed a set of guidelines on strategic planning and management of water resources⁹ in 2003 and applied it in pilot studies on integrated water resources management in 17 countries in the region. ADB has also helped advance integrated water resource management (IWRM) in the region in two ways: through its Water for All Policy that gives high priority to fostering IWRM and through its initiation of the Network of Asian River Basin Organizations.

The MDG Water Supply and Sanitation Target

Target 10: To halve, by 2015, the proportion of people without sustainable access to safe drinking water and sanitation, is actually defined by two indicators—one for safe drinking water and the other for improved sanitation. Ultimately, a country must meet both indicators to qualify for achieving the entire Target 10. This report looks at the region’s progress and prospects toward each indicator and applies the indicator for measuring rural and urban coverage. Analyzing a country’s progress of Target 10 can render a number of scenarios. A country may be on course to meeting one of the indicators in rural areas but not urban areas. A country may be on course toward meeting one indicator and not the other. **This report does not credit a country with being on track toward achieving Target 10 or its indicators unless adequate progress is being made in both urban and rural areas.**

The drinking water indicator was included as a high priority issue in the Millennium Declaration, while the sanitation indicator was added after much debate in the World Summit on Sustainable Development (WSSD) in Johannesburg in 2002. The WSSD Plan of Implementation recognized that attaining improved sanitation to such a level as what Target 10 demands entailed more than just constructing new facilities for a given number of people. It

would involve a number of social and financing activities for those facilities to be sustainable and deliver the desired impact. The Plan of Implementation¹⁰ cited the following examples of activities that investments must support:

- development and implementation of efficient household sanitation systems;
- improvement of sanitation in public institutions, especially schools;
- promotion of safe hygiene practices;
- promotion of education and outreach focused on children as agents of behavioral change;
- promotion of affordable and socially and culturally acceptable technologies and practices; and
- development of innovative financing and partnership mechanisms.

Target 10 presents formidable challenges to Asia and the Pacific. This report provides a detailed analysis of progress since 1990, the reasons for good or poor progress in the subregions, and the implications of the progress. The challenges are not confined to one aspect of life, cannot be addressed by one sectoral agency, and are found in all levels of society. The UN Task Force Report captures the multiple and multi-level character of these challenges well, emphasizing in particular the institutional and political issues that are a focus of this report:

“In order to put forward effective recommendations for action to meet the MDGs, it is first necessary to analyze what is holding us back. Understanding why two in every ten people in the developing world lack access to water supply, and five in ten lack access to sanitation services, is fundamental to identifying effective strategies for meeting Target 10. Clearly, the explanations vary across communities, countries, and regions, but a common set of political, financial, institutional, and technical challenges confronts most developing countries in their quest to expand

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Effective and affordable strategies to address these different areas where action is needed present major challenges in the poorest countries of Asia, where institutions are at their weakest and progress toward Target 10 most distressing. Of the two, challenges around meeting the sanitation target are the greatest—coverage levels are only half those of drinking water and the rate of progress in working toward the MDG target is noticeably slower. Indeed, the WHO/ UNICEF report¹² suggests that for most Asian countries, their prospects are good for reaching the water supply indicator, but bleak for the sanitation indicator unless major changes are introduced with urgency.

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indicators of Target 10 must be implemented without delay. This presents a milieu of challenges for countries and governments to manage. Ideally, water supply and sanitation projects should be implemented in as far advance of the 2015 deadline as possible for their impacts to register on the other MDG targets. Yet, the impact of these projects that deliver water supply and sanitation services are not likely to be sustainable if they are not accompanied by reforms that build the capacity of institutions and enhance investment flows. These reform tasks take time to work through and cannot be implemented too quickly, although they are urgently needed. Governments, therefore, should immediately prioritize water sector reforms to maximize their ongoing implementation of water supply and sanitation projects.

Table 1: CONTRIBUTION OF WATER SUPPLY AND SANITATION TO THE MILLENNIUM DEVELOPMENT GOALS

Goals and Targets	Impacts on MDGs
<p>Goal 1: Eradicate extreme poverty and hunger</p> <p>Target 1: Halve, between 1990 and 2015, the proportion of persons whose income is less than \$1 a day</p> <p>Target 2: Halve, between 1990 and 2015, the proportion of people who suffer from hunger</p>	<ul style="list-style-type: none"> • Water as a factor of production in home-based production ● ■ • Investments in water infrastructure and services as catalyst for local development ● ◆ • Reduced water-related hazards and ecosystems degradation ○ ■ • Improved health increases productive capacities ● ◆ • Reliable water and fertilizers from wastewater and human excreta for subsistence agriculture, home gardens, livestock, tree crops ○ ◆
<p>Goal 2: Achieve universal education</p> <p>Target 3: Ensure that by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary education</p>	<ul style="list-style-type: none"> • Improved school attendance from improved health and reduced water carrying burdens, especially for girls ● ■
<p>Goal 3: Promote gender equality and empower women</p> <p>Target 4: Eliminate gender disparity in primary and secondary education preferably by 2005 and at all levels of education not later than 2015</p>	<ul style="list-style-type: none"> • Community-based organizations for water management including women improve social capital ○ ◆ • Reduced time and health burdens from improved water services increase earning and saving activities and more balanced gender roles ○ ◆
<p>Goal 4: Reduce child mortality</p> <p>Target 5: Reduce by 2/3 the under-five mortality rate</p>	<ul style="list-style-type: none"> • Improved quantities and quality of water and sanitation reduce main morbidity and mortality factor for young children ● ■ • Improved nutrition and food security reduces susceptibility to diseases ● ■
<p>Goal 5: Improve maternal health</p> <p>Target 6: Reduce by 3/4, between 1990 and 2015, the maternal mortality ratio</p>	<ul style="list-style-type: none"> • Improved cleanliness, health, and reduced labor burdens from water portage reduce mortality risks ● ◆ • Improved health and nutrition reduce susceptibility to anemia and other conditions that affect maternal mortality ○ ◆
<p>Goal 6: Combat HIV/AIDS, malaria and other diseases</p> <p>Target 7: Have halted by 2015 and reversed the spread of HIV/AIDS</p>	<ul style="list-style-type: none"> • Improved health and nutrition and increased incomes reduce susceptibility to HIV infection and the onset of AIDS ○ ◆ • Better water management reduces mosquito habitats, malaria incidence, and other diseases ● ◆
<p>Goal 7: Ensure environmental sustainability</p> <p>Target 9: Integrate the principles of sustainable development into country policies and programs and reverse the loss of environmental resources</p> <p>Target 10: Halve, by 2015, the proportion of people without sustainable access to safe drinking water and improved sanitation</p> <p>Target 11: Achieve, by 2020, a significant improvement in the lives of at least 100 million slum dwellers</p>	<ul style="list-style-type: none"> • Pollution control and sustainable levels of abstraction and eco-sanitation methods reduce water consumption and recycle nutrients and organics ● ■ • Actions to ensure access to adequate and safe water for poor and poorly-serviced communities ● ■ • Actions to ensure access to improved and if possible of productive eco-sanitation for poor households ● ■ • Health and hygiene promotion activities to ensure greater service coverage generate improved health benefits ● ■ • Develop operation and maintenance and cost recovery systems to ensure sustainability of service delivery ● ■ • Actions to improve water supply and sanitation services for urban poor communities ● ■ • Reduced waterborne pollution and wastewater discharge and improved environmental health in slum areas ● ■ • Communities organized around water supply provision better placed to negotiate for other needs ○ ■
<p>Goal 8: Develop a global partnership for development</p> <p>Target 13: Address the special needs of the least developed countries</p> <p>Target 14: Address the special needs of land-locked countries and small island states</p>	<ul style="list-style-type: none"> • Actions to reform water sector and invest in needs of the poor demonstrate poverty reduction commitments ● ◆ • Water problems (e.g., water scarcity, salinity, pollution) major constraint on development in these countries ● ◆

● Direct Contribution ○ Indirect Contribution ◆ Significant Impact ■ Major Impact

Source: Poverty Environment Partnership: Linking Poverty Reduction and Water Management

