MAKING WATER A PART OF ECONOMIC DEVELOPMENT

The Economic Benefits of Improved Water Management and Services

A report commissioned by the Governments of Norway and Sweden as input to the Commission on Sustainable Development (CSD) and its 2004–2005 focus on water, sanitation and related issues.
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For the 13th meeting of the Commission on Sustainable Development (CSD-13) the Norwegian and Swedish Governments commissioned the Stockholm International Water Institute (SIWI) to produce the report entitled Making Water a Part of Economic Development: The Economic Benefits of Improved Water Management and Services. A collaborating partner for the report has been the World Health Organization (WHO).

In making its case, the report focuses on the economic benefits of actions that address the insufficient supply of water and sanitation services and inadequate water resources management. The report also brings to the forefront direct and indirect costs related to inaction, the costs of action and cost-benefit comparisons.

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Making Water a Part of Economic Development

Good business: that’s what investing in improved water and sanitation and water resources management is for national economies and poor people. What’s more, the greatest economic benefits of such investments will be felt in those countries with the greatest water challenges.

If followed, five urgent but realistic investment messages to public and private sector decision makers can help make water truly a part of economic development.

**Message 1**
Improved water supply and sanitation and water resources management boosts countries’ economic growth and contributes greatly to poverty eradication.

- Among the world’s poor countries, those with access to improved water and sanitation services experience greater economic growth. Poor countries with improved access to clean water and sanitation services enjoyed annual average growth of 3.7%. Poor countries with the same per capita income but without improved access had an average annual per capita GDP growth of only 0.1%.

**Message 2**
The economic benefits of improved water supply and – in particular – sanitation far outweigh the investment costs, surprisingly good news for Northern and Southern decision makers who often view investments as mere costs.

- Economic benefits ranging from USD 3 to USD 34 per USD 1 invested (depending on the region and technologies applied) would be gained in the health, individual and household, and agricultural and industrial sectors if the water and sanitation MDG targets are achieved. Furthermore, benefits of sanitation investments often are greater than those for water interventions.
- In aggregate, the total annual economic benefits of meeting the MDG on water supply and sanitation accrue to USD 84 billion.
Message 3
National economies are more resilient to rainfall variability, and economic growth is boosted when water storage capacity is improved.

- Decoupling an economy from rainfall variability promotes gains in GDP. In Kenya, which has a water dependent economy, the 1997–98 floods and the 1999–2000 drought provide a tantalising “what if”. The floods cost the country at least USD 870 million, or 11% of GDP; the drought, at least USD 1.4 billion a year, or 16% of GDP. On average, the country experiences a flood that costs about 5.5% of GDP every 7 years and a drought that costs it about 8% of GDP every 5 years. This translates to a direct long-term fiscal liability of about 2.4% GDP per annum. This means that Kenya’s GDP annually should grow at a rate of at least 5–6% in order to start reducing poverty. In 1996, a good year in Kenya, real GDP growth was 4.1%.

- Measures of improved water resources management have considerable economic gains – a USD 15–30 billion investment in improved water resources management in developing countries can have direct annual income returns in the range of USD 60 billion. Every USD 1 invested in watershed protection can save anywhere from USD 7.50 to nearly USD 200 in costs for new water treatment and filtration facilities.

Message 4
Investing in water is good business – improved water resources management and water supply and sanitation contributes significantly to increased production and productivity within economic sectors.

- Meeting the MDG on water supply and sanitation will gain 322 million working days per year, and the annual global value of adult working days gained as a result of less illness would be almost USD 750 million. The biggest
potential gain for increased productivity and production within both households and economic sectors is found in the total convenience time saving — water collection and sanitation access time saved due to improved access — it amounts to USD 64 billion.

- Providing reliable and sufficient water supplies is critical for business development and reduces investment risk. For example, a study in China points at the considerable gains that can be made by improved water quality. The industrial income lost due to water pollution amounted to USD 1.7 billion in 1992 alone. What is now becoming increasingly clear to many governments is that reliable access to water resources is a competitive advantage and attracts business opportunities.

**Message 5**

The overall public and private investment needs for improved water supply and sanitation and water resources management are considerable. However, at the country level, meeting such investment challenges is highly feasible and within the reach of most nations.

- Global estimates indicate that an additional annual investment of USD 11.3 billion is required to meet the MDG on water supply and sanitation. But, the total accrued economic benefits of reaching the MDG is USD 84 billion — a seven-fold return.
- Broken down into country cost estimates, it is clear that meeting such investment challenges by 2015 is doable. The annual per capita cost to meet the MDG on water supply and sanitation in Bangladesh, Cambodia, Ghana, Tanzania and Uganda ranges from USD 4 to USD 7 per capita annually.
- Meeting public and private investment challenges related to improved water resources management and infrastructure is feasible. For example, countries in Sub-Saharan Africa need to invest between USD 150 and USD 700 per capita to reach a level of water storage infrastructure equivalent to South Africa’s. Spread out over the ten years between 2005 and 2015, these investments would amount to USD 1.5 to USD 70 per capita on an annual basis.

Improved water supply and sanitation and water resources management boosts countries’ economic growth and contributes greatly to poverty eradication. The required financing for improved water supply and sanitation and water resources management is a sound public and private investment strategy that boosts economies and that allows individuals and households to explore new livelihood opportunities as well as businesses to increase productivity and production and venture into new markets.

The productivity and production capacity of people and economic sectors, such as agriculture and industry, depend on people’s health and secure water availability. Investing in the health of people, ecosystems and more efficient water use are investments that not only provide immediate economic benefits but also safeguards future economic gains. For example, well-managed ecosystems provide “ecosystem goods” — such as fish and crops — and “services” — such as flood control and water purification. In Uganda alone, the use of inland water resources is worth almost USD 300 million a year in terms of forest catchment protection, erosion control and water purification services.

It is critical that the economic benefits of improved water supply and sanitation and water resources management are understood, clearly articulated and included in strategic macro-economic decision making. Investments in the water sector — sanitation in particular — must be acknowledged for the economic benefits they generate. Seen this way, the economic benefits outweigh costs considerably.

What are the required steps to action? This report highlights examples of economic benefits that derive from the implementation of the guiding principles or prerequisites to action, as set out by the United Nations Millennium Task Force on Water and Sanitation. The required action is not possible without strong leadership and commitment from government, civil society and business leaders and opinion makers. Leadership must set priorities and instigate the reforms necessary to improve institutional performance and attract investment. It is critical to convince decision makers that public and private investment in the water sector makes good economic sense and that improved water supply and sanitation and water resources management are acknowledged as critical for economic growth and poverty eradication. **Water and related services must be a part of the economic development business.**