Ministers of finance hold the key to progress in the water sector and should ideally be much more closely involved in discussions about its future.

Water management is an integral part of economic growth and poverty reduction, despite the fact that its direct financial returns often understate its importance to the wider economy.
The need for better and more informed communication between the water and finance communities is a common refrain

Finance is widely regarded by the water sector as the main constraint on water development. This message is aimed at ministers and senior officials in finance ministries in developing, emerging and transition economies who have the following crucial roles:

- Raising and allocating public finance to support water-using sectors
- Acting as a catalyst or conduit for external finance – official development assistance (ODA), IFI loans, commercial loans, sovereign fund operations and private equity – including co-funding, on-lending and offers of sovereign guarantees
- Managing national and external debt of sovereign and sub-sovereign entities
- Linking annual budgets with medium- and long-term public expenditure frameworks
- Assuming responsibility for transparency, accountability, and efficiency in institutions and programmes that are dependent on national budgets, including regulation, guidelines for tariff-setting and other aspects of the financial management of water-related institutions

Messages

Water underpins economic growth

The direct financial returns from investment in water infrastructure tend to understate its true economic worth: financial rates of return on such projects are often less than their economic returns. Providing household water and sanitation has high net economic benefits in terms of improvements in public health, productivity and time-efficiency. Likewise, water storage can have major macroeconomic benefits. In general, the returns on water investments often accrue to other parts of the economy and to overall welfare and growth. As a result, investment in water infrastructure and services has historically been an integral part of economic growth and development.

Adapting to climate change requires more investment in infrastructure

Adaptation to climate change has implications for investment in infrastructure. Climates are expected to become more variable and periods of both drought and flooding are likely to become more frequent. This will place a premium on water storage and transmission schemes. A World Bank study in Ethiopia found that climate variations reduced projected rates of economic growth by 38% per year and increased projected poverty rates by 25% over a twelve-year period. Furthermore, the variability of rainfall increased the value added by water investments such as irrigation, which reduce vulnerability to rainfall.

In terms of increasing investment in water infrastructure, private sector participation (PSP) will remain essential if water management is to continue to evolve and become more efficient. However, the global financial crisis is already placing new demands on international financial institutions (IFIs) such as the World Bank, and new forms of PSP are emerging as a result. Despite pressures for fiscal retrenchment, ministers must maintain spending on key services and functions, especially maintenance, and prioritize the infrastructure investment necessary for long-term water security.

More finance is needed from all quarters

Attaining the long-term goals of water security – including the reduction of hunger and completing the coverage of household services – will call for more allocations of public finance. But there will need to be more finance from all quarters, including national budgets, user tariffs, ODA, commercial loans, bonds and private equity. There is a varied menu of instruments available for risk sharing, leveraging and facilitation that enable greater mileage to be obtained from national and external grants.

Finance should be fit for purpose

The kind of finance that is typically available for the water sector does not fully correspond with what is required, leaving certain important functions and sub-sectors under-funded. There is an imbalance between funding for capital investment – which is more attractive to external financiers – and that for routine operation and maintenance (O&M), which tends to be deficient. In order to fund O&M, tariff revenues need to be enhanced and budgetary transfers placed onto a more solid and predictable footing.

Likewise, not enough financial provision is made for the high cost of rehabilitating and modernizing ageing systems. This is a problem for municipal distributions systems, irrigation networks and other kinds of hydraulic infrastructure. It is also much easier to get finance for hardware than for the many kinds of ‘software’ involved in the water sector, such as watershed management, research, policy-making, monitoring, training, public awareness and environmental and pollution control.

While some of these might not seem as essential as infrastructure and frontline services, neglecting them will adversely affect all water users.

Thinking outside the box

Depending on national budgetary conventions, it may be more efficient for public spending on water to be made through the budgets of other ministries, such as agriculture, power, regional development, environment, public health and housing. Examples would be to earmark the proceeds of pollution charges for subsidizing waste-water treatment, or paying farmers to practise organic farming.

The water sector will make a big call on private sector resources and different kinds of PSP will be required

In the coming decades the adjustment of water economies to the stresses outlined in United Nations World Water Development Report 3: Water in a Changing World will call on all the resources of private agents. This is particularly true for municipal water services, but there is also potential for PSP in the management of irrigation water supply and other parts of the water sector. Current global financial stresses have highlighted a trend in PSP that places greater weight on public ownership and control. In this model, more finance is raised on public-sector balance sheets, and private partners engage only in the lower-risk elements of the value chain. This applies to PSP solutions in municipal water and sanitation services (WSS) and also to major infrastructure projects such as storage, hydroelectric power and bulk conveyance. Much of the growth in PSP in water services in Latin America, South East Asia, East Asia, Russia, the Middle East, and elsewhere has been driven by new national and regional operators who have access to finance from their own cash flow or from local banks and investors.

Rediscovering the IFIs

The financial crisis has made it more difficult to raise commercial and private finance for public sector projects, especially for PSPs. Where feasible, some projects are raising more funds from local banks, especially where these are publicly owned. There is likely to be greater demand for financing from IFIs, whose products and terms are well suited to the needs of water-related sectors. Early indications from the IFIs are that the demand for both their loans and risk-sharing products is reviving after a period of years when they had been subject to strong market competition from their commercial counterparts. In the World Bank Group for example, the International Bank for Reconstruction and Development is gearing up to triple its rate of lending; the International Development Agency has a facility in place to alleviate the effects of the financial crisis in poorer countries, and the International Finance Corporation now has facilities to re-capitalize distressed banks and provide rollover finance and recapitalization for existing PSP projects.\(^3\)


\(^4\) Latest news bulletins from PPIAF www.ppiaf.org

\(^5\) Jamal Saghir. 2009 A presentation to MEDEF International, Paris

The benefits of Strategic Financial Planning (SFA)

A number of countries are using SFP as a management tool for their water services in response to chronic under-financing. SFP attempts to bring demand for funds closer to the supply available. Demand for funds is minimized through efficiency measures and by tailoring ambitions, and supply of funds is optimized through measures that raise tariff revenues and make public and external transfers more predictable. Future cash flows are used to attract loans, bonds and equity, depending on circumstances. Models are available to iterate demand and supply scenarios to arrive at affordable and realistic solutions.

Opportunities for efficiency and waste reduction

In return for greater public financial support, it is reasonable and desirable for ministries of finance to demand greater efficiency in the way water institutions operate. The United Nations World Water Development Report 3: Water in a Changing World documents the high level of waste in the distribution of water and its use by household, industrial and agricultural end users. In many municipal distribution systems, non-revenue water (NRW) - water that is unaccounted for - exceeds 50%. This comprises both physical losses through leakage and economic losses through unregistered and illegal connections, meter tampering, and the bribing of collectors. The World Bank estimates that NRW worldwide costs $14 billion annually, and in developing countries the amount lost through leakage is enough to serve an extra 200 million people. Physical NRW is a waste both of the water and of the energy it takes to propel it around the network, while economic NRW indicates that there is potential for improving the collection of revenues due.

Across all water sectors, there is ample scope for more critical and cost-effective targeting of investment, the reduction of waste and other good housekeeping measures which would improve the reputation water has of being a financial black hole. Where there is inefficiency and unaccountability, corruption flourishes. Transparency International's 2008 Global Corruption Report details the extent to which corruption in the water sector leads to more expensive services as a result of inflated construction costs and revenue lost through bribery.

The response to the current financial crisis

International financial turmoil is damaging many economies as a result of its impact on trade volumes, commodity prices and the movement of capital. National budgets are suffering reduced tax revenues as a result of the recession, while at the same time facing increasing pressure to alleviate distress through subsidies, bail-outs, and other anti-cyclical spending measures.

In such circumstances, finance ministries are coming under pressure to curb their discretionary spending. As a result, it is more important than ever that they set spending priorities that protect vulnerable social groups and shield the key infrastructure projects that are essential for long-term growth. These include investments in water infrastructure, where squeezing recurrent budgets or delaying maintenance would add greatly to costs in the longer term.

On a more positive note, at the current time a number of countries are rediscovering the value of large infrastructure projects, with some also considering the benefits of public finance for water projects and other ‘green’ investments as an anti-recessionary strategy, as at certain crucial times in the past.

* A number of countries in Eastern Europe, the Caucasus and Central Asia as well as several in Africa. A number of OECD countries practice SFP in various forms.
* More details will be found in the forthcoming report from OECD, Strategic financial planning for water supply and sanitation. Due March 2009.


Water is vital to all aspects of human life. Using water wisely and managing our water resources is an essential component of growth, socioeconomic development and reducing poverty. Yet around the world we see water scarcity problems rising. And if we don’t take action, they will become even more severe.

Coordinated by the World Water Assessment Programme, the United Nations World Water Development Report 3: Water in a Changing World is a joint effort of the 26 United Nations agencies and entities that make up UN-Water. The report brings together some of the world’s leading experts to analyse the state of the world’s freshwater resources: it monitors changes in our water supplies and in how we manage them, and tracks our progress towards achieving international development targets.

Water in a Changing World also provides decision makers with the tools to implement sustainable use of our water – offering best practices to help stimulate ideas and actions for better stewardship of this most essential resource.

The report is presented together with a case study volume: Facing the Challenge. Adopting the premise that local actions and on-the-ground insights are the starting point of a global strategy to improve management of the world’s freshwater resources, these 20 case studies from around the world examine water challenges and the offering management approaches taken in response in Bangladesh, Cameroon, China, the Cholistan desert (Pakistan), Estonia, the Han River basin (Republic of Korea), Istanbul (Turkey), the Lake Mehr basin (Brazil and Uruguay), the Li River basin (China), the Li River basin (China), the Po River basin (Italy), the Autonomous Community of the Basque Country (Spain), Sri Lanka, Sudan, Swaziland, Tunisia, Uzbekistan, the Vuoksi River basin (Finland and the Russian Federation) and Zambia.

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