# Financing Water

Toward an L20 Action Plan

Safe Drinking Water and Sanitation Workshop Alexandria, Egypt, December 2004

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# The Vision

Over the past century, industrialized nations have pioneered a tried-and-tested approach to financing water infrastructure expansion: raise local capital by issuing long-term debt that can be repaid with revenues collected for services provided to new customers. Because the consumer benefits of safe drinking water and sanitation greatly exceed the cost of capital in developed nations, water projects are self-financing and -sustaining. Unfortunately, the situation in developing nations is very different. The cost of capital is far higher in poor nations because capital is scarce and water infrastructure investments entail significant political risks. Because even under the best of circumstances, donor funding for clean water will be inadequate to finance access for all, the goal of an L20 water initiative should be to help developing nations gain access to affordable local capital, thereby financing water projects in much the same way as industrialized countries. Specifically, the L20 should agree to work together to deepen local capital markets, secure needed water policy reforms and spread inevitable political risks efficiently across many parties. One way to carry this strategy forward would be for the L20 to agree to create a focal point around which they could build political will, such as by establishing a new multilateral financial mechanism called the Global Water Facility (GWF), whose mission would be to help developing nations finance safe drinking water and sanitation for all.

#### **Rationale**

Providing safe drinking water and sanitation to all should be politically, economically, technically and environmentally feasible. Clean water is an uncontroversial international political priority for all nations, as the Millennium Development Goals on drinking water and sanitation demonstrate. In fact, water may be the one area in the environment and development nexus where rich and poor nations perceive themselves as having nearly identical interests, in contrast to such contentious issues as climate change, biodiversity and biotechnology. The benefits of providing clean water to all vastly outweigh the economic cost by at least a five to one ratio as there is a strong positive link between access to clean drinking water, sanitation services, poverty alleviation, sustainable development and general wellbeing. Since the poor already pay far more for water from informal vendors than those connected to a water utility (up to 83 times more than households with piped water service), usage fees from increased water service should provide stable revenue streams that more than cover the cost of expansion, while leaving the poor with extra money in their pockets too. The technology for treating and delivering potable water is more than a century old and has been successfully applied to water utilities in many developing nations. Finding appropriate technology is not the problem. Similarly, while water scarcity is an issue in some regions, it is not the primary impediment to improving water quality. In fact, water is often a vastly underutilized resource, only 3% of Africa's renewable water is withdrawn annually for

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domestic, agricultural and industrial use. Though environmental factors must be taken into account through policies that promote conservation and intelligent water basin management techniques, there is more than enough water to provide clean water and sanitation to the poor.

Yet, after decades of development assistance, fully 1.1 billion people still lack access to safe drinking water and 2.3 billion people do not have access to adequate sanitation. International funding for water, moreover, is declining. Why is this the case? At the risk of oversimplifying, water projects in developing nations are exceptionally difficult to finance because they are expensive and risky; local capital is scarce; and the benefits are primarily local. As a consequence, politicians tend to shy away from the issue because they fear they cannot deliver.

# Expense

The resources required to provide safe water and sanitation to all (\$10-15 billion annually) are significant. Although it may be tempting to ask donor nations to carry most of this burden, some L20 donor nations are unlikely to support a donor driven approach. From 1999 to 2001, the annual average of global official development assistance for safe water and sanitation was \$3 billion, representing a \$500 million drop from 1996-1998 levels. An entirely donor driven effort would require about a 400% increase in water assistance and a reversal of recent trends. While the global benefits of providing clean water to all (\$63 billion annually by one estimate) easily outweigh the costs, as a practical matter relying disproportionately on foreign assistance is probably politically infeasible given competing development goals and domestic priorities. Although the global benefits of safe water and sanitation are large, the local benefits and incentives are far greater. A more realistic solution is to mobilize the resources of developing nations, which naturally have the greatest stake in expanding access to safe drinking water and sanitation to their own citizens. While donors need to do more than they are today and the L20 should play a role in building political will for them to do so, the ultimate solution – one that is durable and self-sustaining – must be found within developing nations given the level of expenditures required to build and maintain drinking water and sanitation systems.

#### Risk

As U.S. officials are fond of saying, "capital is a coward." It flees instability, corruption and bad governance. This is a major problem for providing safe water and sanitation to all because water infrastructure projects are inherently risky. They require extensive capital investments upfront yet the returns accrue over many decades. The problem is compounded by the high risk nature of long term investments in developing countries, which investors rightly consider vulnerable to many undesirable political and social forces such as armed conflict, civil violence, corruption, mismanagement, expropriation, inflation and currency instability.

As domestic and international investors face few barriers to investing in less risky ventures elsewhere, including the safer capital markets of Europe, Japan and the United States, those seeking to raise money for water projects in the developing world must offer investors a substantial risk premium. This necessary premium makes many otherwise viable water investments entirely uneconomic. Even when developing countries can attract capital, that capital is often unstable and can lead to economic disruptions. During the 1994 Mexican peso crisis, more than \$5 billion left the country in only a few days. Similarly, capital flight in the 1997 Asian financial crisis devastated the capital markets of several emerging economies such as Indonesia and Thailand. Though, developing nations can partially reduce risk premiums through sound economic policies and good governance, their benefits are realized over decades rather than months, so policy reforms alone are incapable of quickly making long term capital affordable.

### Capital Markets

Even leaving aside enormous costs and high interest rates, developing nations tend to have difficulty raising money because their domestic capital markets tend to be poorly developed. Many developing nations lack the legal infrastructure, public disclosure or technical knowhow necessary to operate well-functioning equity or bond markets. These governments have few alternatives to capital markets. Their treasuries are stretched and insufficient to finance major infrastructure projects. Large portions of their economies are in unregulated and untaxed 'grey markets' or 'informal sectors', so developing nations have few options for raising new revenues. Local citizens in developing countries cannot or will not lend to their governments, moreover. Elites distrust their governments given years of mismanagement, nepotism and cleptocracy. They prefer Swiss bank accounts or the New York Stock Exchange to investing at home. The poor neither trust their governments not have liquid capital to lend. Peruvian economist Hernando De Soto estimates that the very poor around the world have at least \$9.3 trillion in illiquid 'dead capital' in real estate for which they do not have formal title but nevertheless 'own' in practice. Without legally recognized property rights, however, the poor cannot pool their assets in socially beneficial ways.

#### Political Will

Political will is lacking at the international, national and local level. The international response on safe drinking water and sanitation has been uninspired and highly fragmented. Compared to other pressing international issues, such as debt relief, AIDS and climate change, clean water has received relatively little high level political attention. The benefits of safe drinking water and sanitation are perceived as accruing locally not globally. Water, therefore, is an issue that leaders from donor nations raise infrequently with their publics, whom they assume are not eager to support higher levels of international funding. There is no overarching international strategy and no legal instrument that frames international cooperation, unlike in many other environmental areas. No specialized global institution coordinates international efforts, in contrast to the substantial (but admittedly not exclusive) role played by the World Bank on global poverty or the Global Fund on the issue of HIV/AIDS.

Generating political will in the United States may be the greatest challenge at the international level. Attracting early and active U.S. support may be indispensable given America's influence over international institutions and the reluctance of other donors to offer new funding or commitments absent U.S. leadership. The United States has the largest official and private foreign aid flows and, in recent years, has unveiled some of the most innovative approaches to global poverty alleviation and water financing. Yet, the United States has the lowest levels of official foreign assistance per capita and may be the L20 nation most likely to resist a major new water initiative that envisions an increase in donor assistance. Historically, the United States has not attached priority to clean water assistance. U.S. bilateral water aid currently represents a mere eight percent of the global effort and much of that is targeted towards Afghanistan and Iraq.

For their part, developing country governments have proven unwilling to pursue needed water policy reforms. These countries often subsidize the cost of water and are unwilling to raise prices to market levels. Water subsidies usually benefit politically powerful constituents such as elites, the urban middle class, large agricultural interests and water-intensive industries. As a consequence, developing countries resist price reforms and under-invest in water infrastructure because with low prices the sector provides a limited financial return. National governments in developing nations also frequently cap the ability of local water authorities to raise capital. Although this guarantees strong central control, it undercuts efforts to finance expanded service. Further, local governments and water authorities often value the control

they have over water systems, and see nationally- or internationally-backed expansion projects as potential risks to existing water revenues. In short, leaders at all levels of government find the status quo of slow but manageable progress less threatening than many bolder alternatives.

# Elements of an L20 Communiqué

Financing safe drinking water and sanitation for all will be difficult even under the best of circumstances. Any proposed L20 solution must create a compelling vision that will mobilize political support in all countries. To make dramatic progress both donor and recipient nations will have to agree to do more. The best use of limited foreign aid (even at substantially increased levels) is to help developing nations attract the much larger pools of private capital needed to solve the drinking water and sanitation problem. The L20, therefore, should focus on creating the conditions for this to occur. Specifically, the L20 should work together to:

- Minimize the political risks associated with water projects in the developing world;
- > Spread the remaining risks in an efficient, equitable and commercially reasonable manner:
- Create in poor nations well-functioning capital markets (both debt and equity) for water infrastructure and utilities; and
- ➤ Build political support at all levels of government for needed policy reforms, including significant increases in water-related foreign aid by donor nations, and major water policy and pricing reforms in developing countries.

To implement this strategy, the L20 should incorporate the following concrete elements into any leaders' communiqué on safe drinking water and sanitation.

Create a Global Water Facility. The L20 should agree to work with other interested nations to create a new Global Water Facility (GWF). The purpose of the GWF should be twofold: first, to loosely coordinate bilateral funding of clean water initiatives and second, to manage and encourage voluntary contributions to the facility from donor nations and private parties, including charitable foundations. The GWF should be independent of existing international institutions, including the World Bank and the United Nations. All members of the L20 should be represented on the governing board of the GWF with voting weighted according to some agreed upon formula that would take into account contribution levels and possibly other relevant factors. Private entities, such as philanthropic foundations contributing to the GWF, should also have opportunities to participate in its governance. The GWF should make grants not loans, thus avoiding the problem of increasing the indebtedness of poor nations.

Limit Funding to Eligible Countries. Funding from the GWF should be limited primarily to 'well performing' governments with sound sustainable development policies. Criteria might include country credit ratings, macroeconomic conditions, corruption, social stability, the rule of law and political and economic freedoms. Channeling funds initially to top performing governments only would increase donor confidence that the money will be spent wisely, create incentives for other developing nations to reform and thereby increase political support for higher levels of GWF funding. Countries that fail to qualify should be eligible for capacity building assistance to improve their prospects in the future. Importantly, focusing only on the best performers will appeal to the United States, possibly the most reluctant donor, because this is the approach President Bush pioneered in the recently created U.S. Millennium Challenge Corporation (MCC). In doing so, President Bush secured support for the largest foreign aid increase in U.S. history, including from conservatives in the U.S. Congress that have tended to consider most foreign assistance a waste of resources. Absent an effort to build on the MCC approach, the Bush administration would be unlikely to participate in an approach that envisioned additional funding from the United States. With a modest amendment to the legislation establishing the MCC, monies appropriated to the MCC could

be transferred to the GWF or programmed in support of its activities. This is critical because President Bush is unlikely to ask the Congress for new foreign aid monies outside of the MCC.

Subsidize Private Rates of Return. To make private capital more affordable to developing nations, the GWF should supplement the interest rate on local water bonds and/or provide partial repayment guarantees. The repayment guarantees should only cover non-commercial risks such as political interference, expropriation, currency inconvertibility and deflation, war and civil disturbance. The GWF should require developing country national governments to guarantee loans or bonds issued by domestic water authorities in their country. In exchange for partial repayment guarantees, the GWF should also encourage multinational water contractors to receive some deferred payments either through equity participation in water projects or developing country bonds. This too would reduce the cost to developing nations. These policies would reduce the risk premium that local water authorities would have to pay private investors.

This approach is modeled on the Development Credit Authority (DCA) of the United States Agency for International Development (USAID). The DCA is a financing tool designed to leverage limited development assistance by accessing untapped capital in the developing world. It has had considerable success and in some projects has leveraged development assistance by up to 50 times. The DCA has used credit guarantees to encourage local private capital to invest in clean water projects that would otherwise be economically infeasible for borrowers and too risky for lenders. The credit guarantees cover up to 50% of a lenders risk and are usually coupled with training and technical assistance. The credit guarantees have been used to direct bank loans to water authorities, support bond issuances and promote the expansion of water infrastructure.

Condition funding on policy reforms. The GWF should require that local water authorities, municipalities and national governments undertake needed policy reforms. For example, water authorities should progressively reduce subsidies and increase prices to market levels to ensure the long-term financial sustainability of clean water and sanitation systems. Long term access will occur fastest and be most durable if water authorities are financially selfsustaining. Raising prices will lower the cost of borrowing by increasing revenues and reducing perceived repayment risks. One worry when raising water prices is that the poor may suffer. This concern however is largely unfounded. In most developing countries only the middle and upper classes have connections to piped water and sanitation. Objections from these groups could be overcome through transitional assistance and by phasing in reforms. Most of the poor, in contrast, obtain drinking water from informal water sellers including water trucks and households with piped service that resell water at a profit. In fact, in most developing countries the poor pay far more for their water than connected households, from five times more in Abidjan, Cote d'Ivoire to 83 times more in Karachi, Pakistan. Raising the price of piped water service gives the double benefit of raising capital for service expansion, which in turn lowers the cost of water to the poor.

In addition to price increases, the GWF should require water utility management reforms to increase transparency and improve governance. Increased participation of civil society groups and major investors would increase accountability and local support, while also making water authorities more responsive to the needs of their customers and creditors. As part of the effort to promote policy reforms, the GWF should review projects and activities to minimize their environmental and social impact. The reviews should be conducted by an independent outside source to avoid conflicts of interest. The process should be transparent and involve the participation of non-governmental organizations. Accountability could also be increased wherever needed by segregating a portion of new water authority revenues into an internationally supervised fund to ensure reinvestment into the water system, similar to the approach taken by the World Bank and Chad in connection with the Chad-Cameroon pipeline.

The extent and type of reforms needed will differ from one country to the next. The GWF should be indifferent whether the water authority is publicly or privately owned or managed as long as the water service delivered is efficient and equitable. Recognizing that a one-size-fits-all approach would not be effective, the GWF should tailor the terms of its funding to reflect local needs and conditions by negotiating with developing nations country-specific implementation agreements that would guide project implementation.

Expand Service in Ways that Unlock Dead Capital. Aside from lacking access to clean water and sanitation, the poor often do not have legal property rights to their assets such as their homes and places of business. Since the poor do not have title to real property, they cannot convert these assets into liquid capital that could be used in socially beneficial ways, such as expanding water services. Also, the poor often have difficulty connecting to water systems because utilities are reluctant to provide service to buildings without proof of ownership and payment guarantees. Since the poor are the principal beneficiaries of expanding access to clean water and their assets are grossly underutilized, the GWF should pursue policies to help unlock and pool their assets as this would not only help with water and sanitation but also provide large sustainable development dividends in other areas. The GWF should fund community-based property surveys, as well as the creation of local land-use registries for slums and other informal property arrangements. Understanding ownership (in the practical sense) of the slums will help make it possible to provide piped water and sanitation service to the poor, in addition to improving repayment prospects. Further, these property surveys and registries would be the first steps toward integrating the poor into the official economy, thereby allowing them to use property for loans, pay taxes and be more easily tracked and assisted by the government.

Build Local Capital Markets. The GWF should set aside a portion of its funding to help eligible nations improve their local capital markets for water projects. Improved capital markets would help ensure that water authorities, municipalities, and national governments could fund water infrastructure projects by issuing bonds or other financial instruments. In practice, this means capacity building assistance for poor nations to strengthen their security exchanges, financial registries, banking systems, securities laws, public disclosure regimes and judicial systems. In some countries, this would also entail the repeal of laws that inhibit water authorities from raising capital, as well as laws intended to reduce the liquidity of private utility investments. Once again, an emphasis on the role of private investment and capital markets would appeal to the United States.

# **Summary of Benefits**

The strategy presented in this paper creates a clear vision of how the L20 can overcome the financial obstacles to increasing access to safe drinking water and sanitation among the global poor. A new Global Water Facility (GWF) would be a focal point for building political will at all levels of government. Specifically, this means higher levels of aid from donor governments and private charities alike, as well as needed policy reforms from recipient nations. Providing clean water to all is an expensive proposition. Full donor financing is not realistic. The only durable solution is to use limited development aid to unlock underutilized capital in developing countries. In this manner the GWF could finance water infrastructure expansion on the scale required to meet global goals. The GWF would help local water authorities and developing nations reduce the cost of capital by spreading political risk through partial guarantees and interest rate supplements. In return, the GWF would control other political risks by insisting on governance and pricing reforms in the water sector. The GWF would also help poor nations deepen their capital markets through technical assistance and capacity building efforts, which would provide many benefits beyond the water sector. This approach would also begin the long process of regularizing property rights in the 'informal sector' and unlocking 'dead capital.'

The proposed L20 strategy stands a good chance of success and broad acceptance because it would benefit all key players. The world's poorest citizens would secure reliable access to water and sanitation services at lower prices. The property surveys and registries required to deliver water would also move the poor a step closer to government recognition of their informal property rights. Private investors would profit from higher rates of return and partial guarantees against political risk. Water authorities and municipalities would increase revenues through higher prices and more customers. National governments in poor nations would receive enormous credit for alleviating poverty and promoting economic growth.

International donors would achieve their humanitarian objectives at an affordable cost and limited risk. They would also have confidence their funds would be used wisely because grants would be directed initially to top performing nations, which in turn would create incentives for lagging countries. The United States, potentially the most reluctant L20 donor participant, could find the approach attractive as it is an extension of President Bush's own private sector-oriented and performance-based approach to foreign aid. This in turn would increase the chance that other donor nations would sign up as well.