

RECOMMENDATIONS FOR THE

**“STRATEGY OF THE UNITED STATES TO PROVIDE AFFORDABLE AND
EQUITABLE ACCESS TO SAFE WATER AND SANITATION
IN DEVELOPING COUNTRIES”**

As required by PL 109-121
“Senator Paul Simon Water for the Poor Act of 2005”

April 21, 2006

EXECUTIVE SUMMARY

PL 109-121 requires the United States Government, in consultation with other Federal departments and agencies as well as U.S. and international organizations involved in the water and sanitation sector, to develop a strategy within 180 days of the bill's enactment. As a representative group of organizations with significant experience in this sector, we the undersigned, urge the U.S. Government to adopt the following recommendations as part of the required safe water and sanitation strategy.

The recommendations are organized as follows:

- I. Consultations During Strategy Development
- II. U.S. Government Coordination
- III. Donor Coordination
- IV. Implementation
- V. Innovative Practice
- VI. Monitoring and Evaluation
- VII. Funding

This document aims to present a comprehensive set of recommendations gleaned from the combined experiences of all signatories. We encourage the U.S. Government to consider these recommendations as a useful tool in the development of a truly innovative strategy that will transform current practices to bring about real change.

RECOMMENDATIONS

- The U.S. Government must carry out the extensive consultations defined in PL 109-121 and be prepared to learn and adapt to what they hear in these consultations.
- The U.S. Government must strengthen the existing coordination among Federal departments and agencies by setting up a dedicated Water and Sanitation Secretariat reporting directly to the Director of Foreign Assistance.
- All sectors of U.S. foreign assistance programs should seek to incorporate water and sanitation activities into their programs when possible and appropriate.
- There needs to be greater emphasis on donor coordination at the host country-level and on developing, sustaining, and participating in national coordination mechanisms; working with host governments through NGOs and the local private sector; and using flexible contracting mechanisms.
- USAID mission staff should participate in training programs that focus on the impact of water and sanitation as well as integrate water and sanitation into their strategic plans.
- The focus of the U.S. Government's foreign assistance efforts related to safe water and sanitation should be to provide new access to the most vulnerable populations.
- The U.S. Government should seek to implement water and sanitation programs that are environmentally as well as financially and programmatically sustainable.
- The U.S. Government should employ a strategic, coordinated plan to prioritize countries in which to implement pro-poor water and sanitation programs at the national and local levels.

- The U.S. Government should employ innovative approaches whenever appropriate and look to organizations and other entities in the field for further clarification if necessary.
- The U.S. Government should prioritize consistent monitoring and evaluation of U.S. Government-funded water and sanitation projects and regularly review the results to improve program quality.
- Funding for U.S. water and sanitation programs should be aligned with regions of the world that demonstrate the greatest need.
- In implementing the U.S. Government Water and Sanitation Strategy, Congressionally mandated spending targets should only include funding spent on expanding access to the poor. This amount should be reported independently of spending on foreign disaster assistance and infrastructure support and maintenance.
- Life-saving techniques in the form of water and sanitation interventions can be accomplished with minimal investments; however, it is also imperative that opportunities for integrating water and sanitation into other development sectors are identified to effectively implement the U.S. Government Water and Sanitation Strategy.
- A slow, but steady, increase in U.S. Government funding over several years should culminate in a minimum annual investment of \$1 billion by doubling current levels of funding in FY07 and each successive year.
- While funding for core development assistance accounts will need to increase, particularly in regions of the greatest need, U.S. funding for the water sector should seek to leverage, when appropriate, market-based and community financing.

These recommendations are a compilation of best practices and insights gleaned from a breadth of knowledge regarding the water and sanitation sector. We urge the U.S. Government to take these recommendations into account when formulating the strategy for the United States to provide affordable and equitable access to safe water and sanitation in developing countries.

These recommendations are meant to provoke debate and deliberation regarding a U.S. Government Water and Sanitation Strategy and can be considered a living document. We are available for further consultation regarding any of the recommendations set forth in this document and would welcome the opportunity to provide additional information. We look forward to working with the U.S. Government in this and future endeavors related to the water and sanitation sector in an effort to increase and improve access to water and sanitation for the poor around the world.

Introduction

The link between lack of access to water and poverty is well known. Scholars, development practitioners, and the poor themselves consistently list lack of safe drinking water as a primary indicator and cause of poverty. When given the opportunity, poor people cite access to safe water as a priority in their visions for the future.

Around the world, lack of access to safe water and sanitation threatens livelihoods and presents a major barrier to fighting poverty, protecting health, enhancing economic opportunity, and promoting sustainable development. At least 1.1 billion people lack access to safe water, and 2.6 billion lack access to basic sanitation. On any given day, some 3,900 children die as a result of water-related diseases, adding up to more than 2 million preventable deaths a year.¹

These failures are undermining development by keeping children out of school, stopping adults from improving their livelihoods, and denying many people good health. Unless the delivery of water and sanitation accelerates significantly, the Millennium Development Goal (MDG) *to reduce by half the proportion of people without sustainable access to safe drinking water and basic sanitation by 2015* will not be reached.

While there has been some progress and many countries have the potential to meet this goal, Sub-Saharan Africa and Asia are still in the midst of a desperate situation. Of the 1.1 billion people without access to improved drinking water resources 61% live in Asia and 26% live in Sub-Saharan Africa.² Progress towards the sanitation goal across the developing world has occurred at a much slower pace. Today, more than twice as many people lack access to basic sanitation services as lack access to improved water supply.

On December 1, 2005, President Bush signed into law PL 109-121, the *Senator Paul Simon Water for the Poor Act of 2005*. This landmark legislation has the potential to bring water and sanitation to the forefront of U.S. foreign assistance. Investment in the water sector would also act to make U.S. foreign assistance to other development sectors more effective. When combined with awareness and investment, it is an issue that can produce dramatic improvements in the lives of millions of people in the developing world. PL 109-121 provides the U.S. Government with a unique opportunity – to craft a framework through which the U.S. can provide affordable and equitable access to safe water and sanitation in developing countries by building on field-based experiences and innovations that demonstrate best practices.

PL 109-121 requires the U.S. Government, in consultation with other Federal departments and agencies as well as U.S. and international organizations involved in the water and sanitation sector, to develop a strategy within 180 days of the bill's enactment. As a representative group of organizations with significant experience in this sector, we the undersigned, urge the U.S.

¹ UN Millennium Project Task Force on Water and Sanitation, "Health, Dignity and Development: What Will It Take?" 2005, <http://www.unmillenniumproject.org/documents/WaterComplete-lowres.pdf>.

² WHO/UNICEF Joint Monitoring Programme Report, "Meeting the MDG Drinking Water and Sanitation Target: A Mid-Term Assessment of Progress," 2004, http://www.wssinfo.org/pdf/JMP_04_text.pdf.

Government to adopt the following recommendations as part of the required safe water and sanitation strategy.

The recommendations are presented as follows:

I. Consultations During Strategy Development	p. 5
II. U.S. Government Coordination	p. 6
III. Donor Coordination	p. 8
IV. Implementation	p. 9
V. Innovative Practice	p. 11
VI. Monitoring and Evaluation	p. 14
VII. Funding	p. 16

This document aims to present a comprehensive set of recommendations gleaned from the combined experiences of all signatories. We encourage the U.S. Government to consider these recommendations as a useful tool in the development of a truly innovative strategy that will transform current practices to bring about real change.

I. Consultations During Strategy Development

PL 109-121 requires the development of a U.S. Government strategy on safe water and sanitation to include an extensive consultation process both inside and outside the United States.

On March 28, 2006 the Department of State published Public Notice 5353, which announced both a Town Hall meeting and an e-mail address for comments related to PL 109-121. While these are important steps to begin the formal consultative process, this opportunity could have been leveraged for a more effective outcome. For example, a Department of State-sponsored Town Hall meeting should be preceded by distribution of a draft document available for external review. Public Notice 5353 could have also been more comprehensive in nature by providing a detailed timeline of the consultative process to portray an accurate picture of how the U.S. Government intends to implement PL 109-121.

It is recommended that the consultative process should include posting a draft strategy on the web for comment; holding additional, targeted round table meetings in the U.S. with the participation of international organizations, international financial institutions, international nongovernmental organizations, and the for-profit private sector; and similar meetings organized by USAID Missions with recipient governments and indigenous civil society.

This process should also be extended to other bilateral donors active in the sector such as the British, Dutch, Japanese, and Swiss Governments. Consultations, as required by the law with all appropriate stakeholders, must be serious, engaged, and include ongoing discussions with each group, not merely notification. It is unlikely that this level of consultation can be completed before the first report on the strategy is due to be submitted to the appropriate congressional committees, but it should nevertheless be completed as it is an essential part of the development of an effective and comprehensive strategy.

Recommendation: The U.S. Government must carry out the extensive consultations defined in PL 109-121 and be prepared to learn and adapt to what they hear in these consultations.

II. U.S. Government Coordination

Seven U.S. Government departments and agencies were involved in drinking water programming abroad in the period FY2000–2004 including the Foreign Agricultural Service (U.S. Department of Agriculture), U.S. Army Corps of Engineers (Department of Defense), U.S. Department of Labor, U.S. Department of State, African Development Foundation, USAID, and the U.S. Trade and Development Agency.³ More recently, the Millennium Challenge Corporation has begun to fund water and sanitation as part of their compacts with specific countries, e.g. with Mozambique. In the period FY2000–2004, USAID accounted for the majority of U.S. Government support to freshwater programming abroad⁴ and probably continues to do so. USAID is therefore a key player in U.S. Government coordination in the water sector.

As the newly appointed USAID Administrator, Randall Tobias will also hold the post of Director of Foreign Assistance (DFA) within the Department of State. This dual posting is designed to improve overall coordination of U.S. foreign assistance. In accordance with the amended Foreign Assistance Act of 1961 which is required by PL 109-121, the DFA should give greater priority to water and sanitation and ensure that there are coordination mechanisms in place that have sufficient mandate and funding to operate effectively.

The current coordination mechanisms include three teams:

- The Interagency Water Team led by the Department of State. This team meets irregularly for information exchange and consultation around specific issues;
- USAID’s Expanded Water Team, which includes representatives from the Economic Growth, Agriculture and Trade (EGAT); Global Health; and Regional Bureaus; and from the Department of State; and
- USAID’s Core Water Team, which is primarily staff from EGAT but also has a Global Health representative.

However, coordination is constrained because USAID has no high-level strategy focused on water. Those strategies that exist are developed in specific contexts such as economic growth, humanitarian assistance, health, and development credit. For the coordination mechanisms to work effectively there needs to be agreement on an overarching strategic objective for water and a set of intermediate objectives with specific objectives for drinking water and sanitation.

USAID’s Core Water Team has, quite logically, divided up the sector into water and the environment, water for productivity, drinking water and sanitation, and water in the wider integrated water resource management context. Although the Core Team has identified water and sanitation as one of the four sub-sectors, it receives limited attention and virtually no core

³ GAO, “Freshwater Programs: Federal Agencies’ Funding in the United States and Abroad,” March 2005, <http://www.gao.gov/new.items/d05253.pdf>.

⁴ *ibid.*

budget. Within EGAT, water resource specialists drive the water agenda, and there is currently a strong focus on biodiversity. In Global Health, the water-related activities are focused on environmental health and hygiene improvement including point-of-use water treatment, hand washing and latrine use. The two bureaus are limited to water-related activities that can successfully compete within their respective bureaus for funding. Many issues that constrain wider water supply and sanitation coverage and the achievement of the MDGs related to water and sanitation are not addressed or are only addressed in a minor way by the Regional Bureaus or USAID Missions.

It is recommended that a small Water and Sanitation Secretariat be formed to guide and monitor the implementation of the strategy, to carry out assessments and analysis, and to promote integration and coordination in accordance with the requirements of PL 109-121. The Secretariat would also have a focus on sustainability and the application of best practices within a water and sanitation context. The Chief of the Secretariat would report directly to the DFA. The Secretariat would act as a liaison to each of the three Water Teams with regard to water and sanitation issues and be represented on each Team. The Secretariat would have its own water and sanitation budget line but collaborate with EGAT, Global Health and the Regional Bureaus in supporting USAID Missions.

Recommendation: The U.S. Government must strengthen the existing coordination among Federal departments and agencies by setting up a dedicated Water and Sanitation Secretariat reporting directly to the Director of Foreign Assistance.

To be as effective as possible, the Secretariat must be endorsed and supported by the DFA. In this way, the Secretariat will play an important role in acting as a national coordination and information point in relation to U.S. water and sanitation activities overseas. The Secretariat will:

- Act as a single contact point for people within the U.S. and in other countries seeking information on the U.S. water sector;
- Coordinate learning and strategic planning between and among the U.S. private and public sectors in relation to international matters in the water field;
- Create new opportunities for U.S. knowledge and research institutes and private sector organizations involved in the water and sanitation sector; and
- Promote U.S. expertise and experience in the water and sanitation sector.

Aspects of USAID's Global Development Alliance (GDA) can serve as a model for the Water and Sanitation Secretariat. The GDA mobilizes the ideas, efforts and resources of governments, businesses and civil society by forging public-private alliances to stimulate economic growth, develop businesses and workforces, address health and environmental issues, and expand access to education and technology.

It is widely noted that access to safe water and sanitation impacts all levels of development, including health, education, environmental protection, and economic sustainability. By formalizing the concept that the provision of water and sanitation is a cross-cutting issue and should be integrated with other development sectors, U.S. foreign assistance will be delivered in a more comprehensive and integrated manner.

For example, people living with AIDS have little resistance to the disease-causing agents in contaminated water. Additionally, people living with AIDS require safe water in order to take their medicine. Children are more likely to stay in school longer when their home and school have access to safe water and sanitation. The 2003 Nobel Prize for Chemistry winner, Peter Agre, has stated that brain function and learning are severely impaired by dehydration. When water is not available close to home, children, especially young girls are often required to help collect water rather than going to school. Additionally, when schools lack adequate sanitation options, girls often drop out as they reach puberty because of lack of privacy. Adequate safe water supplies closer to home also allow women to more actively participate in income-generating activities because they no longer have to spend hours each day collecting water.

Recommendation: All sectors of U.S. foreign assistance programs should seek to incorporate water and sanitation activities into their programs when possible and appropriate.

By increasing coordination among departments and agencies involved in water programming overseas and seeking to incorporate water and sanitation components in more foreign assistance efforts, the U.S. will be better prepared to address the global water challenges of the future.

III. Donor Coordination

PL 109-121 calls for the strategy to include “methods to better coordinate United States water and sanitation programs with programs of other donor countries and entities” [Section 6(e)(5)]. Good coordination avoids overlapping programs, facilitates synergy, and increases impact.

The Department of State and USAID have become increasingly active in international and donor forums related to the water sector, and have also initiated coordination and collaboration with the private sector through mechanisms such as USAID’s Global Development Alliance and the Millennium Water Alliance. These efforts need to continue and be expanded.

Recommendation: There needs to be greater emphasis on donor coordination at the host country-level and on developing, sustaining, and participating in national coordination mechanisms; working with host governments through NGOs and the local private sector; and using flexible contracting mechanisms.

The Water and Sanitation Secretariat should also meet regularly with the U.S. Executive Directors of the World Bank and the regional development banks, with other international organizations including the UN, and with the U.S. representative to the Development Assistance Committee (DAC). These meetings would serve to coordinate water and sanitation assistance and to encourage the institutions to work in accordance with the policy in Section 3 of PL 109-121.

IV. Implementation

Staffing and Training

Effective implementation of a U.S. Government Water and Sanitation Strategy requires expertise in the social sciences, public health, engineering, hydrogeology, finance, and economics. While Secretary of State Condoleezza Rice has pledged that USAID's staff will remain the primary mechanism for hands-on delivery of U.S. foreign assistance, the Department of State and USAID must increase their staffing levels to meet the programmatic requirements of PL 109-121. There should be an appropriate balance between the use of in-house expertise and out-sourcing to consultants.

Training programs for USAID mission-level staff that focus on the impact of water and sanitation and on the potential for integration into other foreign assistance programs and sectors must be created so that every USAID mission in a country where water is an issue has at least one water-proficient senior-level staffer.

Planning

The expanded staff, particularly the Secretariat staff, should promote and provide assistance for the inclusion of water and sanitation into the one-year and five-year strategic plans called for by Secretary Rice's foreign assistance reform plan. This will require a better understanding of and evidence base for the impact of water and sanitation programming on governance, economic development, and women's rights, together with knowledge of the importance of water and sanitation in humanitarian assistance and potential as an entry point for peace-building in fragile states.

Recommendation: USAID mission staff should participate in training programs that focus on the impact of water and sanitation as well as integrate water and sanitation into their strategic plans.

Designating High Priority Countries

The United States is currently providing significant support for the water and sanitation sector in relatively few countries, e.g. Egypt, Jordan, and the West Bank and Gaza. The number of countries supported at this level should be expanded, particularly in Sub-Saharan Africa where projections suggest that many countries will not meet the MDG for water and sanitation by 2015 at present rates of progress.

PL 109-121 states that selection shall be made on the basis of:

- 1) Countries in which the need for increased access to safe water and sanitation is greatest; and
- 2) Countries in which assistance under this category can be expected to make the greatest difference in promoting good health, economic development, poverty reduction, women's empowerment, conflict prevention, and environmental sustainability.

Assistance in water and sanitation will only lead to sustainable and wide-ranging benefits where there is (i) a commitment to water and sanitation by government, e.g. water and sanitation is prioritized in the country's Poverty Reduction Strategy Paper and where Water Resource Management Plans have been prepared; (ii) capacity and resources exist within the local administration to support and regulate implementation in the short term and operation and maintenance in the long term, or there is a willingness to develop those resources; and (iii) there exists or is openness to decentralized, local water governance.

USAID should identify at least five countries each Fiscal Year that meet the above criteria, and revise the USAID Country Strategies in those countries. The revised strategies should incorporate water and sanitation either as a strategic objective or as a key activity contributing to the achievement of a strategic objective. Investment in water and sanitation should be in the range of USD \$5-15 million per country per year and be contingent on countries continuing to meet the criteria in the previous paragraph. Progress should be monitored against the Country Strategy.

USAID should apply the following guiding principles to their assistance in these countries:

- Focus on increased access for the poor;
- Adopt a systemic, sector-wide approach to identify leverage points;
- Place support within the larger context of national plans if they are poor-focused;
- Enhance host-country efficiency in the sector;
- Emphasize the sustainability of interventions;
- Collaborate with the private sector and other donors; and
- Support innovation based on analysis.

There should be a second tier of countries that do not meet the above criteria but have an immediate or chronic need for humanitarian assistance including water and sanitation. In addition, the U.S. Government focus within these second tier countries should be on engagement with local level stakeholders, education on the need for prioritization of safe water and sanitation, and national and local level capacity building.

Moving Beyond System Improvement

Funding for water and sanitation, particularly through USAID, has traditionally overemphasized technical assistance to water authorities to help them better manage the systems that they already have, including, leak detection, improved operation and maintenance, tariff reform, and water resource planning and management. While these are important subjects in and of themselves, they do not result in increased access for the most vulnerable and impoverished populations.

Recommendation: The focus of the U.S. Government's foreign assistance efforts related to safe water and sanitation should be to provide new access to the most vulnerable populations.

Environmental Sustainability for Water and Sanitation

In the past, many water and sanitation systems have often failed to take into account the role of freshwater ecosystems in sustaining the needs of growing populations and changing environments. However, the reality is that the two are interconnected. If water systems do not protect and recharge the watershed on which they lie, communities will, again, be without water. Similarly, if latrines are built too close to the water source, they run the risk of contaminating the system in the future. Unfortunately, there has been a growing divide between those advocating for water supply and sanitation and those emphasizing an ecosystem-based approach. The U.S. Government Water and Sanitation Strategy should therefore recognize that divide and seek to create environmentally sustainable water and sanitation programs.

Recommendation: The U.S. Government should seek to implement water and sanitation programs that are environmentally as well as financially and programmatically sustainable.

Working at Multiple Levels

Interventions should strive to work with as many levels of government as appropriate. When there is a legitimate national government that represents the interests of and invests in its people, including marginal groups, implementation should be based on the strategy of that government as long as the strategy is consistent with PL 109-121. The focus is on creating sustainable water and sanitation delivery systems for the poor, which implies projects from the community to the national government level that include capacity building and support for pro-poor policy and financial frameworks.

Support should be provided to responsible governments and/or civil society groups in the form of grants, loans, investment insurance, loan guarantees, technical assistance as appropriate to the context (urban, peri-urban, rural, presence or lack of domestic resources, and national or sub-national government).

Recommendation: The U.S. Government should employ a strategic, coordinated plan to prioritize countries in which to implement pro-poor water and sanitation programs at the national and local levels.

V. Innovative Practice

- i. Increasing influence of stakeholders.** In increasing access to improved water and sanitation for vulnerable populations, direct service delivery is inadequate. Structural barriers often exist that make increased access, operation and maintenance, and water system-management problematic. By involving all relevant segments of civil society in each country, donors can ensure that at local and national government decision-making in water project design will be better informed by local realities, leading to policy frameworks that support decision-making at lower levels. End-users will thus have a better chance to take ownership of, and accountability for, the management of local water resources. Programming should seek to place an increased focus on consultation with local and national civil society as well as local governments to improve the contextual environment for water programming. This approach has the added

advantage of taking into account local contexts and sensitivities in the day-to-day use of water as it engages the beneficiaries during project design.

ii. Improving behavioral change and financing through demand creation. To create sustainable projects, it is important for communities to express demand for improved water and sanitation systems. Communities have shown that when they understand the important benefits of water and sanitation systems, they are more likely to use them appropriately and to maintain them after the initial construction is complete. It has also been shown that with increased demand for sanitation, comes an increased willingness to pay for these services. This willingness can allow donor-funded water projects to use local entrepreneurs as force multipliers. Demand creation projects from the developing and industrialized world suggest that such efforts can achieve, at the least, cost recovery. Effective cost recovery can free up outright subsidies and grants to reduce costs to the poorest members of society. Therefore, it is important for water and sanitation projects to include hygiene education lessons that explain the benefits of increased quantity and quality of water in the community and the disease-reduction associated with improved sanitation. Paired with this, donors can play a significant role in lowering the barriers to market entry for local entrepreneurs and that governments in developing countries have the capacity available to play a coordination role.

iii. Point-of-use water treatment. Point-of-use (POU) water treatment refers to treatment of drinking water in the location it is used, such as a home, school, health facility, or place of work to remove fecal pathogens, heavy metals, and other particulates. Especially when combined with safe storage methods to avoid recontamination, POU water treatment has been shown to greatly reduce the incidence of often deadly diarrheal diseases, particularly in young children.

POU water treatment methods fall into two categories – chemical and physical, including chlorination, flocculation, filtration, and solar radiation. Often, these methods can be used jointly to reinforce effectiveness. POU water treatment should be viewed as an important and cross-cutting programmatic option not only for more traditional drinking water programs, but also as an important component of a comprehensive approach to child survival, nutrition, and improved HIV/AIDS care. POU methodologies offer a key advantage in that they put treatment in the hands of the primary beneficiaries. This also means that behavioral change through education is an essential component of any successful POU treatment program.

POU treatments should be viewed through the lens of local enterprise creation and market integration. Effective distribution markets are vital to maintaining cost-effectiveness of POU treatment, and locally produced products should be encouraged whenever possible. This has shown to be especially true in the production of effective containers for post-treatment water storage. As with any technology, consideration of local context and sustainability of particular POU treatments is required.

iv. Microloans for water and sanitation. Leveraging financial resources is critical, because the cost of meeting the water supply needs of the world's poor far outstrips the donor aid available. Providing microloans to poor communities enables them to purchase water and sanitation systems that will help millions more people by leveraging new financial resources from the

bottom up as well as the top down. Because many developing countries lack a culture of saving, there are communities that can afford to purchase a water system over time, but that may not have all of the money available in a lump sum before the project begins. Although there are several ways that microloans can be used to provide water systems and sanitation, one method is to provide loans through existing water supply organizations and micro-credit organizations. Organizations then repay loans with funds generated by water fees, which will be far less than the price paid by the world's poor to private water vendors. These funds can then be re-loaned for new water projects, thereby stretching limited dollars. Microloans allow communities to spread payments out over time through a loan.

- v. **Small scale private water providers.** Evidence exists from projects in Paraguay, Haiti, and West Africa that further exploration of the role that small private water providers is needed. These distribution or infrastructure networks are typically run by small-scale entrepreneurs in their immediate local communities. One advantage of this approach is that it often involves direct provision of water to homes, which end-users have been shown to be most willing to pay for. It also leverages local capital with little need for continued management and operating costs from governments. Such approaches have been shown to have lower operating costs and very high client/provider ratios. These small networks could work especially well in unincorporated, peri-urban, and water-scarce areas. Most importantly, the time horizon for building small networks can be much shorter.⁵ There is room for donors, including the U.S. Government to aid in lowering credit and official barriers to small entrepreneurs, coordinating small water networks, and training would-be investors in best practices for water management.
- vi. **Large-scale leveraging of private and market-based funding.** In the expansion of infrastructure of large-scale urban settings, it will be important to explore ways to leverage private and market-based financing beyond micro-credit schemes. Some of the more successful efforts at alternative finance and management schemes have emerged from the Indo-USAID Financial Institutions Reform and Expansion Project (FIRE-D). FIRE-D focuses on leveraging private capital and improving cost recovery of water and sanitation infrastructure development. Market-based financing options that have been introduced under the project include: municipal bonds, tax-exempt bonds, and pooled financing development facilities (e.g. land pooling and re-allotment to raise capital). The project has also worked to develop reforms in management of finance and accounting practices. Significantly, heavy emphasis is placed on shared learning, and many of the more promising approaches are being spread to other municipal areas.

Cautions associated with the FIRE-D approach are that it requires a significant amount of existing capacity and that leveraging of private funds through issuance of bonds often relies on the past financial performance of the city, excluding the poor-performers. These approaches might well be more applicable to urban areas in middle-income countries.⁶ An additional caveat to the approach is that unincorporated peri-urban zones of rapid industrialization, particularly slum areas, will likely not be prioritized, leaving the poorest members of

⁵ Herve Conan, "Small Piped Water Networks: Helping Local Entrepreneurs to Invest," Asian Development Bank. Printing date not available.

⁶ "Indo-USAID FIRE-D Case Study: Improving Access to capital Markets through Performance Enhancement of Local Governments and their Utilities," <http://www.worldwatercouncil.org/index.php?id=1071&L=0>.

communities under- or un-serviced. In this case, the donor community can play a bridging role in assuring that funds are also used to expand access to the most vulnerable populations.

- vii. Accounting for the multiple uses of water.** Water has many uses in poor communities. It is critical for overall health, but it is also necessary for domestic uses such as for watering kitchen gardens, bathing, and washing. Water also has many productive uses such as for drinking water for livestock, irrigation, and for local enterprises. It is therefore necessary to design water supply programs that deliberately meet all of the water needs of poor communities.

The multiple water use approach acknowledges that water use is complex because people use whatever water source is available to meet their water multiple water needs. Presently, people's multiple uses of water do not match the organization of the water sector. Traditionally, the water sector provides water to address single-use needs. For example a program addressing access to drinking water provides enough water only to address drinking water needs, but because beneficiaries also have livestock and agricultural water needs, the drinking water supply is often over-extended. A program designed to improve agriculture provides water only for agricultural purposes, but because beneficiaries lack drinking water, they use the irrigation canals for their water needs, which contributes to waterborne disease. Programs designed to promote multiple use empower beneficiaries to direct their water system to address each of their water use needs. It also builds beneficiary capacity to operate and maintain their water systems without ongoing support from the water sector implementers. It is a holistic, participatory process that enhances the water sector's ability to work towards poverty-reduction. By designing water systems that will support multiple uses of water, water systems can greatly reduce poverty, increase gender equity, and improve health at little additional cost.⁷ These systems have been shown to enhance willingness to pay, thereby enhancing the likelihood that the intervention will be sustainable.

Recommendation: The U.S. Government should employ innovative approaches whenever appropriate and look to organizations and other entities in the field for further clarification if necessary.

VI. Monitoring and Evaluation

Traditionally, the water and sanitation sector has been poor at systematizing learning from implementation and measuring the longer term impact of improved water, hygiene, and sanitation in a simple and concise fashion. When adequate monitoring and evaluation efforts are made, the results are rarely published in a way that may be shared across the sector and used to influence government and donor policy and investments. For that reason, NGOs, private sector providers, government actors, and donors are often left searching for best practices and must frequently "reinvent the wheel."

It is, therefore, important for the U.S. Government to demonstrate a larger commitment to monitoring and evaluation, and to invest in monitoring and evaluation accordingly. The U.S. Government should develop a systematized approach to monitoring and evaluation that allows

⁷ International Water Management Institute, "Water Policy Briefing: Taking a multiple-use approach to meeting the water needs of poor communities brings multiple benefits," Issue 18, Colombo, Sri Lanka, 2006.

the efficiency and effectiveness of water and sanitation programs to be determined. This approach should focus on the effects and the impact of programs (e.g. reduction of disease and increased latrine usage) rather than on program outputs (e.g. number of wells constructed and number of people served). Furthermore, indicators should be standardized across programs, thereby allowing programs to be compared. The results of monitoring and evaluation should reflect both the implementation process and the impacts of the programs. The learning should be systematized and made available so that future programs can be designed to produce better results.

Indicators

There are several indicators that will be useful in measuring the progress of attaining the MDG for water and sanitation as well as the impact of U.S. dollars on improving water and sanitation conditions. Every water and sanitation program should focus on increasing the quality and quantity of water supply, increasing the quality and quantity of sanitation, and improving hygiene behavior. As such, program evaluations should use indicators that measure those outcomes. Another very important part of any program is its ability to be sustained over time. Therefore it is also necessary to measure the likelihood for sustainability of the project.

USAID has done considerable work to establish a set of appropriate indicators to reflect program impact.⁸ Impact indicators can be used to measure both the number of people with access to water and sanitation services, but also to measure behavior change. Furthermore, impact indicators can be used to measure the health impacts resulting from water and sanitation programs. In addition to overall program impact, it is important to regularly monitor and measure the long-term sustainability of water and sanitation programs. Water and sanitation programs are successful when they provide regular and long-term access to water and sanitation services. Furthermore, if the system breaks down, it should be quickly repaired and returned to normal service delivery. These indicators are useful for evaluating individual programs.

However, a set of indicators to evaluate the overall efficiency and efficacy of PL 109-121 should also be established. These indicators should be measurable, and they should allow the U.S. Government to audit program impact. Some suggested indicators are:

- Does the program have a monitoring and evaluation plan? Where were the results published?
- Does the program specifically address gender and diversity? Does it recognize the different roles of both men and women?
- Does the program work specifically with marginalized groups?
- Were local organizations strengthened as a part of the program? To what extent?
- How many local, national, and international organizations were involved in program implementation?
- Does the program address governance issues?

⁸ Patricia Billig, Diane Bendahmane, and Anne Swindale, "Water and Sanitation Indicators Measurement Guide. Food and Nutrition Technical Assistance," USAID, 1999.

- Does the program address the local and national policy environment for water and sanitation?
- Does this program address issues in other sectors (e.g. HIV/AIDS or education)?
- Does the program take into account environmental sustainability?

Recommendation: The U.S. Government should prioritize consistent monitoring and evaluation of U.S. Government-funded water and sanitation projects and regularly review the results to improve program quality.

VII. Funding

PL 109-121 amends the Foreign Assistance Act of 1961 by stating that increasing affordable and equitable access to safe water will promote good health, economic development, conflict prevention, and environmental sustainability [Section 135]. To accomplish this, the legislation also recognizes the need for additional resources:

“the United States should greatly increase the amount of Official Development Assistance made available to carry out section 135 of the Foreign Assistance Act of 1961” [Section 4(2)].

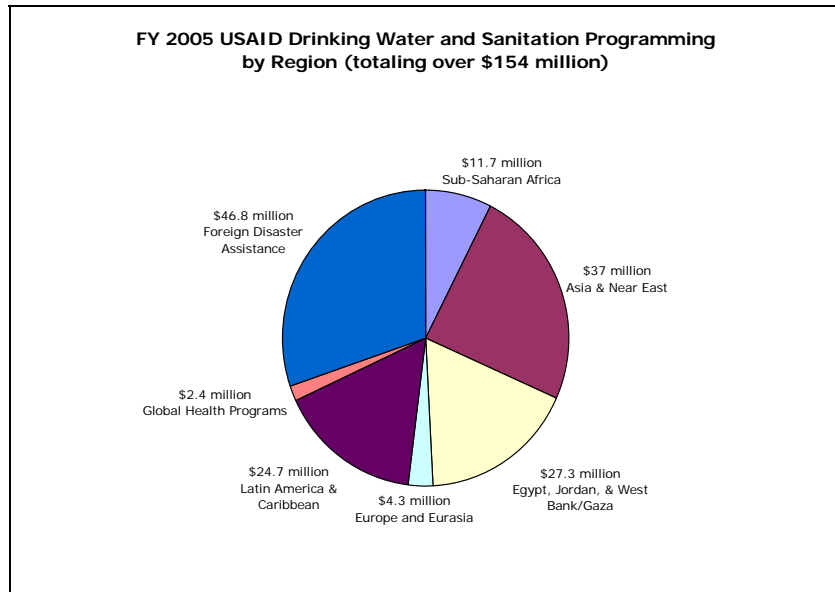
In the past, the U.S. has dedicated considerable resources to addressing global water problems, yet it is unclear if these commitments adequately reflect the importance of water and sanitation in all U.S. foreign assistance efforts.

In USAID’s March 2005 Report to the U.S. House and Senate Appropriations Committees, an estimated \$543 million was to be obligated to a variety of water-related activities in FY05. This estimate included more than \$154 million for drinking water supply and sanitation-related activities. The chart below demonstrates how this amount is distributed by geographic region, highlighting the fact that Jordan and West Bank/Gaza, along with Egypt, have represented a disproportionately large percentage of USAID’s total water supply obligations in recent years.

Recommendation: Funding for U.S. water and sanitation programs should be aligned with regions of the world that demonstrate the greatest need.

The chart below also shows that almost one third of total spending on drinking water and sanitation in FY05 was the result of foreign disaster assistance. While important, this spending does not expand permanent access to safe drinking water and sanitation to the poor. Further, current U.S. Government spending on improvement of access to water and sanitation to the poor is difficult to calculate even outside of emergency spending as much of the money is absorbed by support to extant infrastructure, much of which overwhelmingly benefits the urban middle class. This percentage is difficult to calculate given current USAID accounting practices.

Recommendation: In implementing the U.S. Government Water and Sanitation Strategy, Congressionally mandated spending targets should only include funding spent on expanding access to the poor. This amount should be reported independently of spending on foreign disaster assistance and infrastructure support and maintenance.



Source: USAID Investments in Drinking Water Supply Projects and Related Activities in 2005: A Report to the U.S. House and Senate Appropriations Committees. March 2005.

As the effort is made to integrate water and sanitation programs into other appropriate development sectors, funds from those earmarks should be available to pay for projects that are both related to that particular sector and water (for example, a school with drinking water and sanitation). This may require new budgeting or reporting procedures to account for what is considered water spending, but it will increase the extent of water projects and enhance effectiveness in other sectors.

Recommendation: Life-saving techniques in the form of water and sanitation interventions can be accomplished with minimal investments; however, it is also imperative that opportunities for integrating water and sanitation into other development sectors are identified to effectively implement the U.S. Government Water and Sanitation Strategy.

If changes to the Congressional earmark, transfer authority, new account structures, or reporting requirements are necessary to facilitate integration of water programming with other sectors, this need should be conveyed to Congress.

Estimating the cost of meeting the water supply and sanitation MDG varies widely depending on technologies adopted and country-specific preferences and conditions. Yet, it is clear that minimal investments in this sector have a significant impact on overall development efforts. The current investment in water supply and sanitation in the developing world is approximately \$14 billion to \$16 billion a year⁹ and some estimate that an additional \$10 billion per year is needed to reach the water and sanitation MDG.¹⁰

Current U.S. Government appropriations for water and sanitation have taken the form of an annual earmark, most recently in FY06 at the level of \$200 million, including \$50 million for

⁹ Global Water Partnership, "Financing Water for All," March 2003.

¹⁰ Henri Smets, "The Cost of Meeting the Johannesburg Targets for Water," Water Academy, 2004.

programs in Africa.¹¹ While it is important to retain this funding which is specifically dedicated to water and sanitation programs, it is also necessary to act on earlier recommendations that call for a greater integration of water into other U.S. foreign assistance programs. In recognition that funding for water and sanitation will increase the effectiveness for overall U.S. foreign assistance, increases to this sector should not come at the expense of other development spending, but instead should result in an increase in core development assistance accounts.

Latest statistics from the DAC¹² show a sharp increase in the allocation of Official Development Assistance to water and sanitation in 2004. While three quarters of total bilateral aid to water and sanitation in 2000-2004 was extended by Japan, Germany, the United States, France and the Netherlands, funding has been concentrated in a relatively few recipient countries. Indeed, the increase in aid to water and sanitation in 2004 is largely explained by the United States' program for the reconstruction of Iraq.

An acceptable U.S. share to address global water and sanitation needs would be \$1 billion a year in U.S. Government funding, representing approximately 6.3 percent of the global amount needed yearly to reach the MDG for water and sanitation.¹³ This share is especially reasonable given that the United States accounted for over 20 percent of global GDP in 2005. To put this in perspective, the proportion of the global aid needed from the United States to help in halving the proportion of the world's population without access to safe water and sanitation by 2015 is less than the cost of half of one B-2 stealth bomber per year.¹⁴ This amount is a significant increase over current funding levels and would help ensure that the U.S. Government Water Strategy can be effectively implemented. By replicating the levels of funding and commitment demonstrated by successful U.S. water and sanitation programs implemented in the Middle East and Latin America, it will be possible for the U.S. Government to truly make a difference in other areas of the world.

Recommendation: A slow, but steady, increase in U.S. Government water and sanitation funding over several years should culminate in a minimum annual investment of \$1 billion by doubling current levels of funding in FY07 and each successive year.

Alternative Funding and Management Mechanisms for Urban and Peri-Urban Environments

It is not expected that overall U.S. Government and world foreign assistance funding will increase at the rate required for meeting the water needs of the poor in the near future. It will therefore be necessary to leverage existing funds more effectively both for project launch and management. Private financing for water infrastructure typically suffers due to the need for high levels of initial capital, long investment horizons, and lack of transparency within many water institutions in the developing world. In spite of this, several models for raising community and private funding and contracting water infrastructure management through public-private

¹¹ While steadily increasing, water and sanitation investments in Sub-Saharan Africa have been limited to \$8 million in FY03, \$12 million in FY04, \$12 million in FY05, and \$50 million in FY06.

¹² OECD, "Has the downward trend in aid for water reversed...? – Measuring Aid for Water," 2006, www.oecd.org/dac/stats/crs/water.

¹³ Based on a figure of \$16 billion in yearly global spending necessary to meet the MDG for water and sanitation, the mid-range of estimates.

¹⁴ GAO, "B-2 Bomber: Status of Cost, Development, and Production," GAO/NSIAD-95-164, August 1995.

partnerships exist, some of which are already used to a limited extent within USAID-funded projects (see “Innovative Practice” above).

In many areas of Sub-Saharan Africa where need is greatest, financing mechanisms, private or public, often run into more basic problems. In these areas, increased donor funding will be essential for education on the importance of water sector advancement, initial capacity-building, and management training in transparent financial and accounting practices. Once initial capacity hurdles are cleared, however, alternative funding mechanisms can and should be explored.

Recommendation: While funding for core development assistance accounts will need to increase, particularly in regions of the greatest need, U.S. funding for the water sector should seek to leverage, when appropriate, market-based and community financing.

Endorsement of Recommendations

The organizations listed below have endorsed these recommendations, a compilation of best practices and insights gleaned from a breadth of knowledge regarding the water and sanitation sector. We urge the U.S. Government to take these recommendations into account when formulating the strategy of the United States to provide affordable and equitable access to safe water and sanitation in developing countries.

These recommendations are meant to provoke debate and deliberation regarding a U.S. Government Water and Sanitation Strategy and can be considered a living document. We are available for further consultation regarding any of the recommendations set forth in this document and would welcome the opportunity to provide additional information. We look forward to working with the U.S. Government in this and future endeavors related to the water and sanitation sector in an effort to increase and improve access to water and sanitation for the poor around the world.

Organizations

Africare
Agua Para La Vida
The Aquaya Institute
CARE
Center for Global Safe Water at Emory University
Christian Children's Fund
Citizens for Global Solutions
Emmanuel International Mission
Global Water
Global Water Trust
Green Empowerment
Healing Waters International
Hernandez, Inc.
Institute for Multi-Track Diplomacy
Islamic Relief
Lifewater International
Living Water International
Mercy Corps
Millennium Water Alliance
New Forests Project
Population Services International
Sister Cities International
TCG International, LLC
Unitarian Universalist Service Committee
U.S. India Business Alliance
U.S. Indian Political Action Committee
WaterAid America
Waterlines
WaterPartners International
WaterPlus
Water Advocates
Water Environment Federation
Water For People
Water Missions International
Winrock International