



## Africa's Water Crises and the U.S. Response

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Chairman Payne, Ranking Member Smith and other Members of the House Committee on Foreign Affairs Subcommittee on Africa and Global Health, I appreciate the opportunity to appear before you today to discuss the growing water and sanitation challenges in Africa and the U.S. response. I will start with an outline of the global water challenge, discuss the situation in Africa, and describe how the United States is responding to these issues.

### The Water and Sanitation Challenge

Today, more than 1.1 billion people lack access to safe drinking water; 2.6 billion people – almost half the total population in developing countries - lack access to proper sanitation.

On any given day, approximately 50% of the world's hospital beds are filled with patients suffering from water and sanitation related diseases. Each year 1.8 million children in developing countries die from diarrheal disease - the second leading cause of death after pneumonia. Globally, diarrhea kills at least as many people as tuberculosis or malaria, and five times more children than HIV/AIDS.

Beyond their direct public health consequences, inadequate water supply and sanitation are especially important issues for women and girls. Women and girls who lack access to sanitation facilities must often wait until dark to relieve themselves or do so in public and risk harassment and/or abuse. Young girls are less likely to attend classes if the school does not have suitable hygiene facilities. This is particularly true after puberty and in areas where girls have access to adequate sanitation at home. One United Nations study estimates that half the girls in Sub-Saharan Africa who drop out of primary school do so because of poor water and sanitation facilities.

The United States supports the two internationally agreed targets related to water and sanitation. These goals are commonly referred to as the Millennium Development Goals (MDGs) on water and sanitation:

- "To halve, by the year 2015... the of proportion people who are unable to reach or afford safe drinking water." – The United Nations Millennium Declaration (Adopted by the UN General Assembly, New York, 2000)
- "...to halve, by the year 2015, ... the proportion of people without access to basic sanitation..." – The Johannesburg Plan of Implementation (Adopted at the World Summit for Sustainable Development, Johannesburg, 2002)

In Mozambique, rural Senegal, and eastern Uganda, the UN reports that women spend on average 15-17 hours per week collecting water – often walking 6 miles or more in the dry season. Each dollar spent on water and sanitation yields \$8 dollars of benefits in saved time, increased productivity, and reduced health costs. Beyond the numbers, increased access to water and sanitation would improve education, empower women, promote human dignity and reduce the pain and suffering associated with high child mortality rates.

The economic benefits of water go beyond the health impacts. Many agrarian-based economies are dependent on water - when it rains, economies can grow; when it does not, those countries that lack the capacity to store and save water face economic decline and food insecurity, even famine. In many African countries, there is a strong correlation between annual rainfall and the percentage change in GDP. We have seen cases where water mismanagement and water pollution can reduce GDP by more than 2% - that's enough to keep a country in poverty, or if remedied, set it on a path towards economic growth. Hurricane Katrina reminded us all of the tremendous economic damage that floods can bring to a region.

Finally, more than 260 watersheds worldwide are shared by two or more countries. As water becomes scarce, tensions over shared resources are likely to rise – both within countries and among countries. Promoting joint management and using water to build trust and cooperation in conflict-prone regions are important tools in reducing the risks of future conflicts.

In addition to building trust and cooperation, water can also be an important tool in building democracies. Everyone wants reliable access to safe water. People want to be invested in decisions that affect their well-being. They welcome participatory decision making, transparency and accountability associated with water use at the local, national and regional levels. We have heard cases where the first time a person has voted, it has been to elect a member to their local water board. Therefore, working on water may also be a means of addressing an array of broader governance and sustainable development challenges.

### The Water Challenge in Africa

The situation in Africa is particularly bleak. In 27 African countries, greater than 30% of the population does not have access to safe water. In nine of those countries, more than 50% of the people lack access to safe water. There are 36 African countries where more than 50% of the population lacks access to sanitation. 40% of all child deaths from diarrhea are in Sub-Saharan Africa. Water and sanitation in schools is also critical problem – in some areas more than 150 children must share one latrine.

While much of the world is on track to meet the MDGs on water and sanitation, most of Africa is not. Not only is progress slow, in some countries the proportion of people with access to safe water and sanitation is actually decreasing. To meet the MDGs in Sub-Saharan Africa, more than 23 million people a year will need to gain access to an improved water source; nearly 28 million per year to basic sanitation. The challenge in some countries is particularly daunting: Ethiopia will need to provide access to sanitation for 30 million people – four times the current population with coverage. Ghana will have to increase the rate at which coverage is being increased by a factor of 9. Kenya will have to reach 11.6 million people with safe water, and 16.5 million people with sanitation.

There are a number of challenges to overcome in addressing the water and sanitation issues in Africa. While the proportion of people who lack access is significantly higher in rural populations, urbanization is increasing rapidly (nearly 9% per year) and there is greater pressure on larger scale municipal services. Governance is generally poor and civil strife (and the concomitant displacement of peoples) strain resources and slow progress. The region also suffers from extreme climate variability – improved planning, basin-wide management, and large scale infrastructure and water storage will be critical to meeting long-term needs. Recent predictions suggest that long term climate trends will exacerbate the situation.

Finally, political commitment is low. Many governments in Africa do not prioritize water and sanitation in national development plans and strategies. Fewer provide budgetary support for water and sanitation services, and often that support does not find its way to the local service providers. Without national budgeting sustainable progress is difficult. There are some exceptions: South Africa and Uganda have made access to water and sanitation political priorities and both have achieved significant gains in service provision.

## The U.S. Water Strategy

So what is the U.S. doing to address these challenges? I'm going to let my U.S. Agency for International Development (USAID) colleague discuss specific activities that are happening on-the-ground. What I will do is to give you a sense of our overall approach on water and some specifics on how these might be applied to Africa.

The Senator Paul Simon Water for the Poor Act of 2005 emphasizes the provision of affordable and equitable access to safe water and sanitation in developing countries as a component of U.S. foreign assistance programs. It also requires the Secretary of State, in consultation with the USAID and other U.S. Government (USG) agencies, to develop a strategy "to provide affordable and equitable access to safe water and sanitation in developing countries" within the context of sound water management.

We have been working to develop this strategy over the past few years and have made considerable progress in laying out a framework for how the U.S. will approach the issue of providing access to safe water and sanitation in developing countries, consistent with the Secretary's goal of transformational diplomacy. (We delivered the first Report to Congress on the development and implementation of this strategy last June. A second Report will be available June 1st of this year.) In the strategy, we have defined three goals for U.S. efforts on water:

- First, to increase access to, and the effective use of, safe water and sanitation to improve human health. This includes both short and long-term sustainable access to safe water and adequate sanitation, as well as education activities to improve hygiene.
- Second, to improve the management, and increase the productivity, of water resources. This includes optimizing the benefits of water among competing uses, while ensuring human needs are met and environmental resources are protected. It also includes minimizing the use of, and increasing the productivity of, water used in industrial, agricultural and consumptive sectors, as well as supporting pollution prevention programs that reduce water losses in domestic water systems.
- Finally, our third goal is to improve water security by strengthening cooperation on shared waters. This includes strengthening the institutions and processes to improve basin-level watershed management and public participation in planning and service delivery.

To achieve these goals, we are working diplomatically and through projects and programs to address critical needs, build capacity, and demonstrate innovative approaches that can be scaled up to the levels necessary to meet the tremendous demands. We are focusing our efforts on six areas: governance, mobilization of domestic resources, infrastructure, protection of public health, science and technology cooperation, and humanitarian assistance. Each area addresses a portion of the global water challenge, so I will spend some time describing each.

### Governance:

By governance, we are really talking about two things: The first is managing water properly at the local, national, and regional levels. This means developing the institutional framework and building the capacity to manage water across its multiple uses. Decisions need to be made about how water is allocated and used. The idea is to ensure that people, ministries, and governments are working together to manage shared resources in a fair and equitable manner while optimizing benefits for all. This includes the development of basin or nationwide plans and strategies, as well as promoting policies, processes and institutions to encourage and protect the public's involvement in decision making. Examples in the Africa region would include our work with Nile Basin countries to reach a regional agreement on shared water management, and our work with Ethiopia to implement integrated water resource management plans.

The second aspect of governance is strengthening domestic utility management and regulation. Countries can not rely on development assistance to meet their water and sanitation needs. Resources will have to flow from the private sector – particularly the domestic private sector. Water utility reform and sustainable capital market financing will play a key role in meeting future needs. Many water and sewerage utilities do not recover even basic operations and maintenance costs. Significant reforms are needed in how these utilities are run, how they are regulated, and in the pricing and tariffs charged by these service providers if we are to attract private capital. Corporate governance also needs to be addressed, including the issues of increasing transparency and fighting corruption. Addressing these issues will encourage public and private investment in the water sector.

### Mobilization of domestic resources:

Development assistance alone will not meet these needs – we will need private investment. We have found that even when you have utilities that are being operated in a sound manner in a supportive regulatory environment, the risks involved in the water sector often discourage private investors. Thus we need to develop mechanisms that encourage private investment by reducing the risks. We have been exploring a number of tools that we have used successfully here in the United States including:

- Partial loan guarantees – that use the faith and credit of the United States to support private, local capital investments;
- Revolving funds – which lend repayments from previous loans to new borrowers, creating a cycle of investment; and
- Pooled financing – which allow several communities or municipalities to pool their debt, which reduces risks to the investor. This allows communities which need small amounts of capital and often fail to attract investor interest an opportunity to receive financing. We have had great success using these approaches in places like India, Egypt and South Africa. We are now exploring the possibility of using some of these approaches in other countries – like Uganda.

### Infrastructure Investment:

The third focal area for U.S. activities is infrastructure investment. Infrastructure at all levels is required to meet basic needs and to ensure water is available for multiple uses. These projects range from large-scale water systems and wastewater treatment, to small-scale community projects providing access to water and sanitation services and managing long-term water needs for agriculture and other purposes. A good example is our West Africa Water Initiative, where we are working with a number of partners, including the Hilton Foundation, to provide potable water and sanitation to rural villages in Ghana, Mali, and Niger.

### Protecting Public Health:

The fourth focal area is protecting public health. While increasing access to infrastructure is critical, improved hygiene and household-level interventions are important complementary activities to maximize the positive public health impact of improved hardware, and to protect public health in the case that hardware isn't sufficient – such as contaminated wells. One approach that has proven effective in Africa has been our work with a number of partners to develop distribution networks and provide education and social marketing for technologies to disinfect and safely store water at the household level. Programs like this are currently underway in six African countries.

### Science and Technology Cooperation:

A fifth focal area for the U.S. work on water is science and technology cooperation. There are a number of places where science and technology cooperation in areas like pollution prevention, remote sensing, and global information systems can improve water management and environmental protection. We will continue to seek opportunities to work with others in these areas.

### Humanitarian Assistance:

The sixth and final focal area is humanitarian assistance. The U.S. will continue to respond to natural disasters and human-caused catastrophes abroad. Conflict and natural disasters can damage water systems and destroy access to water, reducing the supply required to meet the basic needs of affected populations. Many of these

situations represent an important opportunity to address key needs in many critical regions – especially in Africa. A key focus of these activities is to ensure transition from what is often seen as short-term solutions to long-term sustainable service provision. Historically, humanitarian assistance has been a key part of our efforts on water and sanitation in Africa.

**Conclusion:**

The development and implementation of this strategy is still a work in progress. These are challenges that are well beyond what the U.S. alone can address. We have been working closely with intergovernmental organizations, other governments, international financial organizations, non-governmental organizations, the private sector, foundations, and faith-based groups to raise increase national level commitment to address these issues and to catalyze global action. A key part of this strategy is working to identify where we can fit in, and where we can make the most effective contribution. In some cases, there are others who can provide more meaningful support. In these situations, we have been working to develop and strengthen partnerships where by working together we can deliver more.

Perhaps most important, the local and national governments in developing countries are going to have to take primary responsibility. Governments will need to prioritize water and sanitation in national development plans and strategies and create an environment supportive of public-private partnerships. The reality is that domestic investment is going to be necessary to ensure the sustainability of these services. Where we can contribute most is by building capacity and demonstrating new and effective approaches that can be scaled up to meet these critical needs.

Thank you for this opportunity to testify before this subcommittee on behalf of the Department of State. We look forward to continuing our work with Members of the Committee, USAID, other U.S. government agencies, and other interested stakeholders to improve water resources management and get safe water and basic sanitation to the billions who are currently without.



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