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International Organizations

The Role of Water in Avoiding Conflict and Building Prosperity

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Safe Drinking Water, Sanitation, and Hygiene for All

Thank you Chairman Rohrabacher, Chairman Smith, Ranking Member Meeks, Ranking Member Bass and distinguished members of the Subcommittees for the opportunity to provide these brief remarks.

On behalf of WASH Advocates, our many partners, and millions of people across the globe, let me first thank you for your interest and support for safe drinking water, sanitation, and hygiene (WASH) programs throughout Africa, Asia, and Latin America over the years. I also want to recognize and applaud the many American citizens helping meet this challenge. Thousands of civic organizations, churches and other religious groups, student clubs, corporations, academics, private philanthropies, and nonprofits are doing more every year to solve this challenge, frequently in partnership with the U.S. government. And it's working.

Summary

The global safe drinking water and sanitation challenge is both an emerging threat and an emerging opportunity for the U.S. government and private Americans from all 50 states. By continuing to support safe drinking water, sanitation, and hygiene (WASH) as a priority of U.S. foreign policy, Congress has an opportunity to improve human and economic security across Africa, Asia, and Latin America. Since the passage of the Water for the Poor Act in 2005, both Congress and the Bush and Obama Administrations have provided important support for this issue in a nonpartisan and increasingly effective manner, positioning safe drinking water and sanitation efforts at the leading edge of foreign assistance reform by



focusing on strengthening local capacity and increasing accountability. Congress has a clear opportunity to build on this momentum, and should:

- a) continue to provide strong oversight,
- b) increase the amount, effectiveness, and targeting of annual appropriations,
- c) seek additional leverage for U.S. taxpayer dollars through additional partnerships and innovative finance,
- d) make WASH a more prominent piece of our bilateral relationships, and
- e) prioritize water and sanitation as an important sector in its own right and as the foundation of longterm progress toward other related development challenges including public health, conflict prevention and mitigation, food security and under-nutrition, gender empowerment, and economic development.

Introduction

I applaud your Subcommittees' interest and support for global water issues over the past couple of years, particularly for your focus on water as a component of conflict and on the linkages between water, sanitation, and health. Your efforts – and those of your colleagues and collaborators inside the Beltway and far beyond – are saving and improving millions of lives across the globe. I would also like to recognize and applaud the commitment and efforts of the other witnesses from the University of North Carolina and the Orange County Water District for their work toward solutions to the global water challenge.

Safe drinking water, sanitation, and hygiene are about the dignity and personal and economic security of human life. A life without WASH is a very difficult one. As I was preparing this testimony, I learned of an extraordinarily sad situation from my friends at Special Olympics in Nigeria. A 15 year old young woman with an intellectual disability was raped on her way to fetch water from a local river for her school, a state school for persons with intellectual disabilities in southern Nigeria. This young woman – a Special Olympics athlete – faces challenges in life that most of us can hardly imagine, and a lack of safe drinking water should not be one of them.

And I also thought back to the all-too-common tragedy two years ago in Uttar Pradesh, India, where two young women were raped and murdered on their way to go to the bathroom in a field. These two young women lived very challenging, if brief, lives, and a lack of a proper, private place to go to the bathroom should not have been one of those challenges.

A lack of safe drinking water and a lack of proper sanitation facilities are certainly not the sole causes of these two incidents. There are larger, societal challenges involved in both cases, but if these women and their communities had safe drinking water and sanitation, their lives would undoubtedly be – or have been – more secure and productive.



One particular Member of Congress from the House Foreign Affairs Committee has been one of the strongest champions of the linkages between WASH and women across the globe. A brief quote from one of his recent speeches:

[This] is a victims issue and here's why... in parts of the world women spend the whole day – the whole day – seeking clean water.... That doesn't allow them to do other things that they need to do in their families because they spend so much time travelling. And when they usually take their small kids – girls in many cases – to some area to just get a little water, they are met with some bad guys – just waiting there, not doing anything, just waiting for prey. They (the bad guys) control the water system (well, creek), and for that lady to have access to a little fresh water, they do bad things to her...

... that should not occur anywhere in the world. It gets my blood pressure up and it oughta get yours up... We have it within our power to stop that and make sure that woman and her family have access to clean water.

We should do what we need to do as a nation to solve these problems.

Thank you, Congressman Poe, for your ongoing, deeply personal commitment to these challenges, and for showing with your work with Congressman Earl Blumenauer of Oregon and many others that politics does indeed stop at water.

It's not just these headline-grabbing, horrific stories that should hold our attention. There are hundreds of millions of women across the globe who spend an inordinate amount of their time, and tens of millions of families who spend an unreasonable amount of their income, acquiring enough water (often of poor quality) to keep them alive – if not healthy – through each day. It's 2015, and hundreds of millions of women and girls are being used as pipes – as water and even wastewater infrastructure. Hundreds of millions of women and girls have to deal with localized violence, crime, and conflict, in their search for water and a safe place to go the bathroom.

We in the U.S. have thankfully not lived under these conditions for some time, but hundreds of millions of people around the globe face this reality every single day. If freedom from fear is human security, and freedom from want is economic security, there are currently billions of people who are living insecure lives.

As evidenced over the past decade by the Water for the Poor Act of 2005, the Water for the World Act of 2014, and by statutory and report language in appropriations bills, Congress has understood the fundamental nature of this challenge for some time. The Water for the Poor Act of 2005 first made safe drinking water and sanitation a priority of U.S. foreign policy. The Water for the World Act of 2014 further focuses the Administration's efforts

primarily on the linkages between water, sanitation, and human health across the developing world. FY16 recommended report language also makes clear the House of Representatives' interest in the contributions that WASH makes to public health and to making the lives of women more secure:

“Access to adequate water, sanitation, and hygiene is a critical component of disease prevention. . .” and “The Committee notes that a lack of access to toilets and adequate sanitation impacts women and girls in particular and recommends USAID work to ensure this issue is addressed in the design of WASH programs.”

The good news: this is solvable. The tools exist across the globe to ensure that children, women, and families will soon have the safe drinking water, sanitation, and hygiene that they need to live more secure lives. The tools exist so that instead of water managing women, women will now manage water. The tools exist so that families do not have to pay a disproportionate part of their daily income for safe drinking water. The tools exist to strengthen the dialogues between citizens and their governments across the globe, using water as a step toward more open, democratic societies. The tools exist to allow girl students to carry schoolbooks, not water, on their heads every morning.

A very brief list of just some of these tools includes:

- properly constructed wells and piping systems so that women are no longer used as infrastructure
- rainwater harvesting systems to get families through the dry season so that the next drought does not become the next famine
- latrines and other sanitation facilities that properly capture and dispose of human waste to reduce the transmission of often fatal diarrheal disease, including cholera
- WASH in Schools – single gender school toilets and menstrual hygiene products made by local organizations with locally available material, e.g. banana fiber – to increase enrollment and retention
- programs to strengthen the management of water and wastewater utilities across the globe
- small businesswomen making and selling bars of soap wrapped in hygiene messages to their neighbors (handwashing with soap can reduce diarrheal disease transmission by up to 47%¹),
- providing WASH in hospitals and other health care facilities as a means to reduce infectious diseases, strengthen health systems, and/or prevent the next Ebola, cholera, or other disease outbreak; this is a vital linkage that many stakeholders (WHO, Global Health Council, WaterAid, members of the Millennium Water Alliance) are pursuing aggressively

¹ Curtis, V. & Cairncross, S. (2003). Effect of washing hands with soap on diarrhoea risk in the community: a systematic review. *The Lancet Infectious Diseases*. 3(5), 275-281.



- governments and private sector stakeholders across the globe inventing and commercializing new ways to properly treat human waste and turn it into biogas and fertilizer to both minimize the effects of large amounts of human waste being released into the environment and maximize the economic upside of that waste
- properly functioning community water associations managing their own water and sanitation services with no assistance from any international donor; a women's first experience with participatory democracy may often be her village water committee, and the Avina Foundation, a private philanthropist, and World Justice Project, a U.S. nonprofit, are making those linkages more clear.

The best news: this is being solved. Households, communities, their governments and private sector allies are solving these problems every hour of every day across Africa, Asia, and Latin America. The numbers are improving. The international donor community, in many cases led by the United States, is helping, and I believe can do more and better. Americans are already providing these basic services to millions across the globe. In the most recent report from USAID on the implementation of its Water and Development Strategy, USAID notes that in FY 2014 more than 3.2 million people gained access to improved drinking water supply, and nearly 1.9 million people gained access to improved sanitation facilities. A particularly salient quote from former USAID Administrator Raj Shah opens the report:

"Development is a fundamental part of our national security. It is extreme poverty – the realities of access to water and food – which creates the long-term drivers of our insecurity."

Background

WASH Advocates is a nonprofit education and advocacy effort entirely dedicated to solving the global safe drinking water, sanitation, and hygiene (WASH) challenge. We have been fully funded for our work since 2005 by a small group of private philanthropists that have included the Conrad N. Hilton Foundation, the Wallace Genetic Foundation, the Howard G. Buffett Foundation, the Laird Norton Family Foundation, the Osprey Foundation, and others. We receive no federal funding. Our mission is simply to increase both the amount and effectiveness of U.S. funding and programming in the global WASH sector.

Water and Conflict

You have tasked your witnesses today with illustrating the linkages between water, avoiding conflict, and building economic prosperity. I have reviewed many of the two Subcommittees' recent hearings on water, geopolitical threats, and global health.

You also will recall that the U.S. intelligence community in 2012, via its “*Intelligence Community Assessment on Global Water Security*”², and the classified version to which you have access, identified water as a potential source of significant security challenges to this country and our allies over the next decade. The intelligence report also found that the U.S. is well positioned to help respond to these challenges, and expected by our allies to respond.

Today I would like to address a highly localized type of conflict: the conflict and physical and economic insecurity that hundreds of millions of women and families must deal with on a daily basis around the world because of a lack of safe drinking water or a safe place to go the bathroom. As Administrator Shah said, and as the Members of these Subcommittees understand, these are the conditions that create the “*long-term drivers of our insecurity.*”

It sounds quite intuitive, and there are many anecdotes showing the linkages between WASH and localized violence, including gender-based violence, but this field of study is just beginning to emerge. In preparing this testimony, I found the examples below demonstrate well the linkages between water and localized conflict:

- 1) PLAN, WaterAid, CARE and others contributed to a 62 page document³ filled with case studies that show as clearly as possible the links between WASH and various forms of violence, mostly gender-based:
 - a. sexual violence (rape, assault)
 - b. psychological violence (harassment, bullying)
 - c. physical violence (beating, fighting)
 - d. social-cultural violence (discrimination, political marginalization)

This is an extraordinarily difficult document to read but hopefully will lead to many of its promising good practices being adopted across the globe.

- 2) Dr. Robert Dreibelbis, Assistant Professor from the University of Oklahoma, writes “*....there is a link between WASH access and conflict and violence. However, we are only now beginning to document and quantify this association. We do know that this association is much more complicated than just having access to infrastructure - poorly designed, poorly positioned, and poorly managed infrastructure can often compound and/or magnify violence and conflict. Further, the link between WASH and violence is inherently bound within broader systems of gender inequities.*” One of the studies he sent me details a study of women and sanitation in India⁴. It states in part “. . . women encountered three broad types of stressors - environmental, social, and sexual - the intensity of which were modified by the woman's life stage, living environment, and access to sanitation facilities. Environmental barriers, social factors

² Office of the Director of National Intelligence (2012). *Global Water Security – Intelligence Community Assessment*. Retrieved from the US Department of State website: <http://www.state.gov/e/oes/water/ica>

³ <http://violence-wash.lboro.ac.uk>

⁴ <http://www.sciencedirect.com/science/article/pii/S0277953615300010>

and fears of sexual violence all contributed to sanitation-related psychosocial stress. Though women responded with small changes to sanitation practices, they were unable to significantly modify their circumstances, notably by achieving adequate privacy for sanitation-related behaviors. . . .”

- 3) I would also direct the Subcommittees’ attention to USAID’s “*Water & Conflict: A Toolkit for Programming*,⁵” which begins with “*Water is an essential ingredient for human security [i.e. security for the individual, not the state] and sustainable development,*” and then states “. . . *disputes over water, whether scarce or abundant, do not always result in violence. In fact, the management of water often brings parties together and encourages cooperation; it can be an integral factor in conflict prevention, peacebuilding, and reconciliation processes. Since fresh water is irreplaceable and indispensable to life, it is a valuable and contested resource that requires careful, conflict-sensitive management to ensure that it will continue to fulfill its purposes over the long term.*” Many of the Program Options within the document focus on various ways to strengthen dialogues between citizens and their public officials to stay ahead of potential conflict due to water- and sanitation-related challenges.
- 4) There are myriad other examples of where water and sanitation are being developed in part to prevent or mitigate localized conflict. Those examples come from across northern and sub-Saharan Africa, South and Southeast Asia, and Central and South America, and from organizations such as Catholic Relief Services, Millennium Water Alliance, CARE, International Rescue Committee, and more, many of whom are USAID partners. One of the most compelling is a gravity-fed water system (funded by USAID, and implemented by CARE and local partners) with ten water points contributing to both peace and stronger market opportunities between Muslim pastoralists selling livestock and Christian agriculturalists selling cereal crops in Ethiopia.

Inadequate water and sanitation multiply, magnify, and accelerate related threats across the development spectrum. However, if we look at water and sanitation more as an “emerging opportunity” than as an “emerging threat” we find WASH makes significant contributions to public health (including HIV/AIDS and Neglected Tropical Diseases), primary and secondary education, opportunities for girls and women, food security and under-nutrition, poverty alleviation, and others. This is an emerging threat that is also clearly an emerging leadership opportunity. WASH also contributes heavily to the prevention and mitigation of the next disease outbreak (e.g., Ebola or cholera), and to strengthening healthcare facilities and systems across the globe. Long-term success with these related development priorities is more likely if those initiatives are built on a secure foundation of safe drinking water and sanitation. And the reverse also holds true: without

⁵ USAID (2014). *Water & Conflict: A Tool for Programming*. Retrieved from USAID website: <https://www.usaid.gov/sites/default/files/documents/1866/WaterConflictToolkit.pdf>

water and sanitation, long-term progress toward these other development objectives will likely be stunted.

The global water, sanitation, and hygiene challenge is grave. An estimated 663 million people currently live without safe drinking water, and 2.4 billion live without sanitation – without a safe place to go to the bathroom⁶. Many of the best minds in the WASH sector anticipate that those numbers are low as they insufficiently include water quality measures, and infrastructure resilience metrics. This lack of safe drinking water and sanitation sickens, stunts the physical and cognitive development of, and reduces the economic productivity of billions, and kills millions, including a significant number of children under five years of age.

WASH and Economic Prosperity

Safe drinking water, sanitation, and hygiene (WASH) help children, families, communities and economies survive and thrive throughout the developed and developing world. The challenges associated with unsafe water and sanitation are grave but solvable. The key is getting the solutions to where they are most needed.

And it is important that it be solved: above and beyond the lives that safe drinking water saves and improves, every dollar invested in water and sanitation in developing countries returns at least \$4 for that \$1 investment⁷. This return comes primarily in the form of increased economic productivity (time savings) and decreased healthcare costs. Imagine what each of us could do with an extra four to six hours each day not spent hauling water around on our heads. You will hear more about this from Dr. Whittington of the University of North Carolina, but a couple of quick data points follow.

The World Bank's Water and Sanitation Program leads an effort called the Economics of Sanitation Initiative. Its first study – in 2007 – found that "*the economic costs of poor sanitation and hygiene amounted to over US\$9.2 billion a year (2005 prices) in Cambodia, Indonesia, Lao PDR, the Philippines, and Vietnam. The groundbreaking study was the first of its kind to attribute dollar amounts to a country's losses from poor sanitation. The report sparked public awareness and Government action in several countries.*"⁸ A related study in Africa indicated that "*eighteen African countries lose around US\$5.5 billion every year due to*

⁶ WHO/UNICEF (2015). *Progress on Sanitation and Drinking Water – 2015 Update and MDG Assessment*. Retrieved from WHO/UNICEF Joint Monitoring Programme (JMP) for Water and Sanitation website: http://www.wssinfo.org/fileadmin/user_upload/resources/JMP-Update-report-2015_English.pdf

⁷ WHO. (2012). *Global costs and benefits of drinking-water supply and sanitation interventions to reach the MDG target and universal coverage*. Retrieved from the WHO website: www.who.int/water_sanitation_health/publications/2012/globalcosts.pdf

⁸ Hutton G, Rodriguez UE, Napitupulu L, Thang P, Kov P. (2008). *Economic impacts of sanitation in Southeast Asia*. World Bank, Water and Sanitation Program. Retrieved from the World Bank website: http://www.wsp.org/sites/wsp.org/files/publications/Sanitation_Impact_Synthesis_2.pdf

poor sanitation, with annual economic losses between 1% and 2.5% of GDP.⁹ And in India: “The total economic impacts of inadequate sanitation in India amount[ed] to a loss of \$ 53.8 billion in 2006. These economic impacts were the equivalent of about 6.4% of India’s gross domestic product (GDP) in 2006.¹⁰”

These studies are becoming dated, and the good news is that sanitation coverage has increased in coverage since they were done, likely leading to reduced economic impacts of inadequate sanitation.

Another way to approach the linkages between water and economic prosperity is to take a look at new business and financial models underway in the sector. Water.org, a U.S. nonprofit led by Gary White, who is on WASH Advocates’ Global Advisory Council, is building microcredit facilities in the WASH sector in India and elsewhere. A woman in Bangalore, India was paying approximately \$0.70/day (40 rupees) for water and sanitation services for her family, a significant portion of the family’s income. Her payments for a WaterCredit loan for a toilet and water connection for her home are the same as what she was accustomed to paying for water and sanitation previously. However, once that loan is paid off (two years), her family’s income will increase significantly, even after she pays for the ongoing maintenance for the water and sanitation services. Water.org writes *“WaterCredit is boosting family income, and boosting how much time women have. Women are now able to invest more in other family health issues. It elevates the economic standing of the person taking out the loan, and it preserves charity for those most in need.”* Water.org also has significant such work underway in India in collaboration with the PepsiCo Foundation and its local financial partners.

Another prominent U.S. nonprofit, PSI, is working with USAID to jumpstart WASH markets, creating jobs for sanitation and water providers in Ghana, Benin, Cote d'Ivoire, and Senegal, creating more business opportunities for WASH entrepreneurs and growing these economies.

The Water Supply and Sanitation Collaborative Council’s Global Sanitation Fund in Senegal has been using handwashing to empower women and generate income. One of their programs trained women to make and sell soap, increasing their personal income and generating significant health benefits.¹¹

⁹ World Bank Water and Sanitation Program (2012). Retrieved from World Bank website: <https://www.wsp.org/content/africa-economic-impacts-sanitation>

¹⁰ Tyagi, A. (2011). *Economic impacts of inadequate sanitation in India*. World Bank Water and Sanitation Program. Retrieved from the World Bank website: <http://www.wsp.org/sites/wsp.org/files/publications/WSP-esi-india.pdf>

¹¹ <https://wsscafrican4.wordpress.com/2015/05/27/engaging-communities-in-matam-senegal/>

Highlights relevant to the WASH / economic prosperity nexus from USAID's recent Safeguarding the World's Water report¹² include:

- Through USAID's Development Innovation Ventures, Sanergy is building 700 toilets that will serve 90,000 residents of Kenya's informal settlements. Sanergy franchises toilets to residents of these settlements who collect the waste from the toilets and convert it to nutrient-rich organic fertilizer; the operators create a profit of up to \$2,000/year.
- USAID's Sustainable Water & Sanitation in Africa (SUWASA) works to promote commercial solutions and financial sustainability for the water and sanitation sectors in the urban areas of sub-Saharan Africa. In Kenya, SUWASA worked with local banks and utilities to mobilize previously unavailable local private finance. Improvements in the financial sector reduce aid dependence and can fundamentally change the way water and wastewater utilities work.
- The Tanzania Integrated Water, Sanitation, and Hygiene (iWASH) Program supports the delivery of sustainable, market-driven WASH services to improve health and increase economic resiliency of the poor. iWASH is part of USAID's Global Water for Sustainability program and receives support from the Water and Development Alliance, a public-private partnership between USAID and the Coca-Cola Foundation. In FY 2013, iWASH brought first-time access to clean, safe drinking water to more than 53,500 people, over 50 percent of whom were women or girls. The program also provided hygiene and sanitation education to close to 64,000 people and access to improved sanitation facilities to over 11,500 people, mostly through the construction and rehabilitation of school latrines.

Integrating WASH and Other Development Sectors

WASH is its own important development sector, and has positive, corollary impacts on related development objectives:

WASH and Health:

- Diarrhea is one of the leading causes of child death in the world today, and is predominantly caused by poor sanitation, hygiene, or dirty drinking water.¹³
- Simple handwashing, an element of hygiene programming, can reduce the incidence of childhood respiratory infections, such as pneumonia, by at least 23%,¹⁴ and

¹² USAID (2015). *Safeguarding the World's Water: Report for USAID Fiscal Year 2014 Water Sector Activities*. Retrieved from USAID website: <https://www.usaid.gov/documents/1865/safeguarding-world's-water>

¹³ WHO, *Safer Water, Better Health: Costs, Benefits and Sustainability to Interventions to Protect and Promote Health*, 2008

¹⁴ Rabie T and Curtis V (2006) "Handwashing and risk of respiratory infections: a quantitative systematic review" in *Tropical Medicine and International Health*, 11(3), 258-267.

diarrheal disease by approximately 45%.¹⁵ Awareness of the health benefits of handwashing is still low in many poor communities.

- People living with HIV/AIDS and others with compromised immune systems, are more prone to common illnesses and diseases such as diarrhea. As such, access to improved sanitation and water supply is essential to the overall health of people living with HIV/AIDS.¹⁶
- Adequate nutrition—compromised by diarrhea, which reduces the body’s retention of nutrients—is fundamental for people taking antiretroviral drugs. Water and sanitation can improve the efficacy of the significant U.S. investment in HIV/AIDS treatment. One study of people living with HIV/AIDS in Uganda found that the presence of a latrine reduced the risk of diarrheal disease by 31%.¹⁷
- WASH and Neglected Tropical Diseases (NTDs): Chairman Smith, at a hearing two years ago, stated: “Generally, Neglected Tropical Diseases affect the health of the poor in developing countries where access to clean water, sanitation and healthcare is limited.” Congressional colleagues are listening, and FY16 recommended appropriations report language from the House includes: *“Access to adequate water, sanitation, and hygiene is a critical component of disease prevention, and the Committee directs the USAID Administrator to consult with the Committees on Appropriations on its efforts to incorporate the goal of clean water across health and development programs.”*
- “In low resource settings, WASH services in many healthcare facilities are absent. Data from 54 countries, representing 66,101 facilities show that, 38% of health care facilities do not have an improved water source, 19% do not have improved sanitation and 35% do not have water and soap for handwashing. This lack of services compromises the ability to provide basic, routine services, such as child delivery and compromises the ability to prevent and control infections.”¹⁸
- “For those living in rural areas, primary health care facilities are frequently the first point of care. As such, these facilities play a critical role in maternal and newborn health, and in responding to disease outbreaks, such as cholera or Ebola. Yet, without WASH, the ability of health care workers to carry out proper infection prevention and control measures and demonstrate to communities safe WASH

¹⁵ Curtis V and Cairncross S. Effect of washing hands with soap on diarrhoea risk in the community: a systematic review. *The Lancet Infectious Diseases* 2003; 3:275-281.

¹⁶ Obi, CL, B. Onabolu, M.N.B. Momba, J.O. Igumbor, J. Ramalivahna, P.O. Bessong, E.J. van Rensburg, M. Lukoto, E. Green, and T.B. Mulaudzi. The interesting cross-paths of HIV/AIDS and water in Southern Africa with special reference to South Africa. South African Water Research Commission, Vol. 32 No. 3, July 2006.

¹⁷ Weinger, Merri. Dignity for All: Sanitation, Hygiene and HIV/AIDS. USAID, 2008

¹⁸ WHO/UNICEF (2015). *Water, sanitation and hygiene in health care facilities: Status in low- and middle-income countries and way forward*. Retrieved from WHO website:

http://www.who.int/water_sanitation_health/publications/wash-health-care-facilities/en



practices is greatly compromised.”¹⁹ These are vital linkages that many stakeholders (WHO, Global Health Council, WaterAid) are pursuing now – and key to preventing or reducing the severity of the next Ebola, cholera, or other infectious disease outbreak.

We encourage the water team at USAID to continue its efforts to work with its agency counterparts in global health to position water and sanitation as a means toward meeting public health objectives across the developing world, reducing the need for additional humanitarian assistance.

WASH and Women: Surveys from 45 developing countries show that women and children bear the primary responsibility for water collection in the vast majority of households. This is time not spent generating income, caring for family members, or attending school, and as I mentioned earlier often leads to physical security threats to these women and girls.²⁰ The World Health Organization estimates that women and children spend 140 million hours each day collecting water.²¹

WASH, Under-Nutrition, and Food Security: Malnutrition and diarrheal disease are closely linked. When it doesn’t kill, repeated bouts of early childhood diarrhea can negatively impact physical and cognitive development.²² Reductions in diarrheal disease, which could be achieved by providing improved sanitation and water supply, can prevent long term morbidity and at least 860,000 child deaths a year caused by malnutrition.²³

We also encourage the water team at USAID to continue to strengthen their partnership with ongoing nutrition and food security efforts. This collaboration, as outlined in USAID’s Water and Development Strategy and USAID’s Multi-sectoral Nutrition Strategy 2014-2025²⁴, should include efforts focused both on water in agriculture and on efforts to make sure that people in Africa, Asia, and Latin America have the safe drinking water they need

¹⁹ WHO/UNICEF (2015). *Water, sanitation and hygiene in health care facilities: Status in low- and middle-income countries and way forward*. Retrieved from WHO website:

http://www.who.int/water_sanitation_health/publications/wash-health-care-facilities/en

²⁰ WHO/UNICEF Joint Monitoring Programme (JMP) for Water Supply and Sanitation. (2010) *Progress on Sanitation and Drinking-Water, 2010 Update*

²¹ World Health Organization and UNICEF Joint Monitoring Programme (JMP). (2014). *Progress on Drinking Water and Sanitation, 2014 Update*. And World Health Organization. (2012). *Global costs and benefits of drinking-water supply and sanitation interventions to reach the MDG target and universal coverage*. And WHO/UNICEF Joint Monitoring Programme (JMP) for Water Supply and Sanitation. (2010). *Progress on Sanitation and Drinking-Water, 2010 Update*

²² Guerrant, RL, et al. Early Childhood Diarrhea Predicts Impaired School Performance. *The Pediatric Infectious Disease Journal*. 2006; 25(6): 513-20.

²³ WHO, *Safer Water, Better Health: Costs, Benefits and Sustainability to Interventions to Protect and Promote Health*, 2008.

²⁴ USAID (2014). *Multi-sectoral Nutrition Strategy 2014-2025*. Retrieved from USAID website: <https://www.usaid.gov/nutrition-strategy>

to consume and digest their food so that those calories and nutrients are not wasted by preventable waterborne diarrheal disease. An important new component of food security and nutrition may be preventing waste. This type of collaboration may well lead to better educational outcomes as well, as children would be healthier both physically and mentally. I applaud USAID's Deputy Assistant Administrator and Global Water Coordinator Chris Holmes for his passionate support for this approach.

WASH and Education: I was once asked: "How do you know if a primary school in Africa has water and sanitation facilities?" The answer: There are flowers outside the school, and students – girl students in particular – inside the school. "WASH in Schools" is an emerging priority in the WASH sector, with evidence becoming more clear about the extent to which WASH increases both enrollment and retention rates, particularly for girl students. Young girls should be carrying schoolbooks instead of dirty water on their heads, and older girls should have access to both privacy and menstrual hygiene products so that they are able to remain in school during puberty.

Improving WASH conditions in schools can help to prevent worm infestations, of which the vast majority of annual cases globally can be attributed to poor sanitation and hygiene.²⁵ Studies have shown that the average IQ loss per worm infestation is 3.75 points, representing nearly 633 million IQ points lost among students living in the world's lowest-income countries.²⁶ Research shows that for every 10 percent increase in female literacy, a country's economy can also grow by 0.3 percent.²⁷ This is because girls who can stay in school can become better educated and this, in turn, improves their economic output.

There is a great deal of work underway on the "WASH in Schools" front by many stakeholders in the U.S. and far beyond. One example: I would draw the Subcommittees' attention to the support that Coca Cola is providing through its "Support My School" program in India, and in particular to its work to provide boy/girl sanitation facilities and safe drinking water to Kheadaha High School's (near Kolkata) students, over 95% of whom come from poor tribal communities. Indrani Mondal, a student who is the "Prime Minister" of the "Child Cabinet" at the school credits the program with an increase in student enrollment. This is one of the 600 schools that Coca-Cola's "Support My School" has supported to date throughout 22 states in India.

²⁵ Prüss-Üstün, A, et al. (2008). *Safer Water, Better Health: Costs, benefits and sustainability of interventions to protect and promote health*. World Health Organization, Geneva.

²⁶ WHO. (2005). *Report of the Third Global Meeting of the Partners for Parasite Control: Deworming for health and development*.

²⁷ Brocklehurst, C. (2004). *The Case for Water and Sanitation: Better water and sanitation make good fiscal and economic sense, and should be prominent in PRSPs and budget allocations*. Sector Finance Working Paper, no. 11. World Bank Water and Sanitation Program. Retrieved from: http://www.wsp.org/sites/wsp.org/files/publications/af_makingcase.pdf

Menstrual hygiene management is also an important and severely under-recognized part of WASH in Schools efforts. Female students who have reached puberty, as well as female teachers, require a private, clean, and dignified place in which to take care of their personal needs. When schools do not offer such facilities, many girls have reported being unwilling or unable to attend school while menstruating resulting in absenteeism 10-20 percent of the time.²⁸ Providing private, safe, and improved sanitation facilities for girls at school is one important solution for improving girls' education around the world.

WASH and Democracy: I spent last week in South America with the Avina Foundation meeting with hundreds of community water association leaders from 24 countries across Latin America. After working with and learning from these groups for four years, I would assert that oftentimes the best primary school for democracy is the village water committee. This is particularly true for women who often first experience participatory democracy when they are voting for local leaders on such a committee. The World Justice Project out of Seattle, Washington has also explored the increasingly clear linkages between development and democratization.

Momentum on Capitol Hill and at USAID

My colleagues, partners and I are grateful for the continued and growing congressional support for this issue at the least since the Water for the Poor Act of 2005 and for the continued and growing support from the Bush and Obama Administrations. We are optimistic about the current momentum for WASH on both ends of Pennsylvania Avenue:

- 1) USAID is nearing the end of the second year of its five-year Water and Development Strategy, launched in 2013 with strong bipartisan support.²⁹ Under the leadership of former Administrator Shah and Acting Administrator Lenhardt, USAID is making steady progress toward increasing the effectiveness of its programming on global WASH. The vast majority of its work focuses on the linkages between WASH and human health, and the agency is also positioning both water and sanitation as pivotal to meeting other important development challenges: food security and under-nutrition, Neglected Tropical Diseases, primary education, poverty alleviation, and opportunities for girls. My colleagues and I look forward to continuing to work with USAID and the Department of State to further prioritize WASH as an important sector in its own right, and to demonstrate the contributions WASH can continue to make to related programs across U.S. foreign policy.
- 2) The Water for the World Act was passed without objection late in 2014 and signed into law. This legislation significantly strengthens the Water for the Poor Act of 2005 in part by ensuring that our WASH programming is targeted to help the

²⁸ Lopez-Quintero, C., Freeman, P., & Neumark, Y. (2009). Hand Washing Among School Children in Bogotá, Colombia. *American Journal of Public Health*. 99(1), 94-101.

²⁹ <http://www.usaid.gov/documents/1865/usaid-water-and-development-strategy-2013-2018>

world's poorest, and by increasing the monitoring and evaluation of projects, particularly after the technical phase of the implementation. It also reinforces what I perceive to be the ongoing sense of Congress that the vast majority of these water and sanitation efforts should continue to focus primarily on the linkages between WASH and public health across the developing world.

- 3) We are seeing more meaningful, more leveraged programming by USAID and its partners, positioning WASH at the forefront of modernizing foreign assistance. Our job in the international donor community is to get out of the aid business by helping to move countries to aid-independence. The examples I have shared above show how, with your support, the WASH sector is driving toward foreign assistance reform principles, including *"accountability through transparency, evaluation and learning; and country ownership of the priorities and resources for, and implementation of, development"* as advocated for by the Modernizing Foreign Assistance Network.³⁰
- 4) We continue to see strong support for global water and sanitation challenges from Americans across the country. Private philanthropists like the Bill and Melinda Gates Foundation, Conrad N. Hilton Foundation, and Skoll Foundation; civic groups like Rotary International; thousands of church groups, primary and high schools; large corporate philanthropies, social entrepreneurs, universities (including the University WASH Network), Americans leading global efforts such as the Global Sanitation Fund, and thousands of nonprofits are making significant contributions.
- 5) We are also pleased that, even in a difficult budget climate, Congress continues to appropriate the funds necessary to maintain its commitment to the Water for Poor Act of 2005, now as amended by the Water for the World Act of 2014. This year the House Appropriations Committee has maintained level funding, and urged that \$135 million of the total be directed to sub-Saharan Africa (recommended). Its Senate counterpart has recommended a funding level of \$400m – a welcome increase of \$17.5 million – further underscoring the importance that Congress places on safe drinking water and sanitation as a priority of U.S. foreign policy.
- 6) Most importantly, we see leadership on water and sanitation from developing countries themselves, leading toward self-sufficiency and an eventual end to U.S. and other aid. In the Financing For Development³¹ meeting in Ethiopia recently, we saw significantly increased interest in Domestic Resource Mobilization that would increase the amount of public and private resources in developing countries themselves going to development priorities. We are likely to see increasingly strong commitments from countries throughout Africa, Asia, and Latin America to meet the Sustainable Development Goals, including universal coverage of water and sanitation by 2030. Also, the scale and scope of the Sanitation and Water for All Partnership³² (a global partnership to ensure that all people have access to basic

³⁰ <http://www.modernizeaid.net/thewayforward.html>

³¹ <http://www.un.org/esa/ffd/ffd3>

³² <http://www.sanitationandwaterforall.org>

sanitation and safe drinking water by improving government prioritization and accountability, strengthening in-country planning processes, and enhancing monitoring and evaluation) is increasing, and we are seeing increased budgets and strengthened national policies for WASH across the globe. Those budgets and policies increasingly meet the needs of everyone in their countries – rural, urban, and peri-urban - not just relatively wealthy people on or near the grid. Particularly impressive are the efforts of Indian Prime Minister Narendra Modi. He has announced the Swachh Bharat Abhiyan³³ (Clean India Campaign) through which he aims to achieve universal coverage of sanitation by Mahatma Gandhi's 150th birthday – October 2, 2019 - leading to a much more secure India from a health and economic security standpoint.

Recommendations

To accomplish these WASH and related goals requires a dedicated, focused water team at USAID, and continued strong leadership from Capitol Hill. To support and strengthen these efforts, and knowing of the Chairmen's and the Subcommittees' desire for tangible recommendations, we respectfully request that the U.S. Congress:

- *Continue to provide strong congressional oversight.* From the Water for the Poor Act, signed into law by then-President Bush in 2005, to the Water for the World Act of 2014, through annual appropriations, it appears that the sense of congress remains quite consistent and bipartisan. These laws and the funds appropriated to implement them are very much about improving public health through WASH. For example, the priority of the Water for the World Act is the list of countries in the WASH Needs Index, i.e. those people who suffer most from water- and sanitation-related health challenges. I encourage the Subcommittees to reach out to the Administration more frequently, including an additional hearing. A partial list of questions I would encourage Congress to ask:
 - As called for by recent legislation and appropriations bills, is the vast majority of this funding going to the countries and communities suffering most from a lack of access (including but not limited to first-time access) to WASH and therefore from high WASH-related disease burdens? A continued focus on people and their health may best position water and sanitation as a means to preventing and mitigating the severity of emerging threats and building economic prosperity.
 - Is the funding being invested in longterm, viable WASH programs as envisaged by the Water for the Poor Act and the Water for the World Act? Is the Administration continuing in its trajectory to build capacity in developing countries, not just provide services? Have we drilled our last well as an

³³ https://en.wikipedia.org/wiki/Swachh_Bharat_Abhiyan

international donor? Are those funds being invested in programs that decentralize project ownership to the most local possible level? Are we investing U.S. taxpayer funds in programs that are viable and appropriate from technical, financial, and socio-cultural standpoints?

- Are those funds being spent in a way that positions WASH as the path toward more effective foreign assistance, including the aims of the Modernizing Foreign Assistance Network - accountability through transparency, evaluation and learning; and country ownership of the priorities and resources for, and implementation of, development?
- *Congress should urge USAID to be a more catalytic stakeholder in water and sanitation, focused more on outcomes than on inputs. USAID and its partners have an opportunity to focus less on direct service provision, and more on capacity-strengthening. The goal is to leave behind capacity so that the local communities can solve their own problems long after we leave. A key part of this is to support monitoring and evaluation particularly “post project,” so that any problems after the technical end of the project are resolved – ideally by local communities - in a longlasting fashion. Effective, appropriate programming like that envisioned in USAID’s water strategy leads not only to water and sanitation successes, but to aid independence and stronger trading partners.*
- *Increase appropriations for WASH to the greatest extent possible. WASH is a pivotal, fundamental issue. Success in WASH leads to better outcomes for related development objectives (health, education, gender empowerment, economic development, etc.) A lack of WASH impedes progress across the development spectrum. Specifically for FY16, we ask the House to recede to the Senate-recommended level of \$400m for water and sanitation.*
- *Please visit a WASH program in the field – take your families and your colleagues in Congress with you. Become a WASH storyteller. Nothing compares to seeing firsthand the results achieved by U.S. public and private support for WASH.*
- *Find a way to provide USAID the authority to hire additional qualified staff in the Water Office and throughout the agency, in DC and beyond. WASH is both an emerging threat and an emerging opportunity and USAID could build significant additional capacity in this area.*
- *Use WASH as an opportunity to strengthen ties between the U.S. and our strongest allies (e.g. continue to build on the sanitation programs currently underway in India, funded by USAID and the Bill and Melinda Gates Foundation) and between the U.S. and fragile states (e.g. make WASH a more prominent piece of our relationship with governments across the Sahel).*
- *Encourage more partnerships between the U.S. Government and Americans in all 50 states, e.g. Rotary and other civic groups, faith-based organizations, and American schoolchildren.*
- *Look for leveraged and innovative finance opportunities to increase the impact of taxpayer funds. Two examples: 1) efforts are underway to assist Domestic Resource*

Mobilization in developing countries, and to make sure those domestic funds (both increased taxpayer revenues and private capital) are used for fundamental development needs including WASH, and 2) USAID's Development Credit Authority, where limited U.S. taxpayer exposure makes available a great deal of local credit.

- *Support and urge the Administration to do even more to support the Sustainable Development Goals* (to be finalized in September 2015) and their likely focus on universal coverage of WASH by 2030.
- *Continue to look for ways to clarify and support legislatively the linkages between WASH and many other development challenges*, including but not limited to the:
 - o Global Food Security Act
 - o Reach Every Mother and Child Act
 - o Neglected Tropical Diseases Act
 - o African Health Systems Strengthening Act

A former colleague of yours, Rep. Jim Leach, said a few years ago:

"In our interactions with the world the US basically only has two options. We can emphasize our capacities to project military might and be a global policeman or we can emphasize our humanitarian concerns and be a global doctor or engineer...American leadership in the 21st century will be judged on whether the US chooses to be a superhumanitarian power rather than principally a military interventionist... One of the myths of our time is that realism is about might. Actually realism is about the human condition. It is the human condition that must be improved if national security is to be strengthened. Impoverished nations are breeding grounds for radicalism. Where there is no hope there is nothing to lose."

Your actions on the Hill make a meaningful difference to the lives of millions across Africa, Asia, and Latin America, and comprise a very small piece of the federal budget. The WASH sector is well-placed to work with you to get the biggest bang for our buck from these programs by increasing the effectiveness of U.S. foreign assistance, and contributing to the success of related development sectors – health, girls' education, poverty alleviation, hunger/under-nutrition, and others. I also feel confident that your leadership will catalyze more support from U.S. citizens via their civic groups, faith groups, private and corporate philanthropies, school groups, and academia.

I am grateful for the progress being made, and encourage you to explore ways to do even more, in partnership with the Administration and Americans from across the country. The global water and sanitation challenge is indeed an emerging threat, but more importantly it provides a genuine leadership opportunity for America. This challenge is serious but solvable. It is being solved as we speak, and with your continued leadership we can ensure that the millions of people in the world who lack safe drinking water and sanitation can live their lives with dignity, safety and economic prosperity.