



Towards a Water Secure Future for People and Ecosystems



## In Focus



Green Technology at Work in Manila Marketplace



Connecting City Dwellers to Clean Water in Indonesia

## **Real Impact**



WSUP Brings
Water and Dignity
to Africa's Urban
Poor

#### **NEWS FROM THE FIELD**



- Philippines Development Credit Authority Provides Water Financing with Successful Public-Private Partnerships
- South Africa USAID and Coca-Cola Team Up on WADA

02 Perspectives In F

04 In Focus

#### **RESOURCE CENTER**



**In Print** Water Safety in Buildings



Online Making Cities Work



**On Video** Tapping Cambodia's Water Market

08 Real Impact

News From The Field

#### **RECENT & UPCOMING EVENTS**



March 22, 2011
Celebrate World
Water Day!
Cape Town, South Africa

May 14 – 18, 2011
2nd International
Marine
Conservation
Congress
British Columbia, Canada

May 20, 2011
World Water
Summit IV
New Orleans, Louisiana

4 Resource Center Recent & Upcoming Events

Published by the Water Team of the Bureau for Economic Growth, Agriculture, and Trade (EGAT), Office of Natural Resources Management (NRM).





VOLUME 02 ISSUE 02 MARCH 2011

## **Perspectives**

# Our Urban Era - World Water Day 2011



HUMAN IMPACT: Heavily populated urban areas put pressure on already overburdened water resources off the Gulf of Honduras.

In 2008, the world entered the "urban millennium", with over half of the world's population living in cities for the first time in human history. According to WHO/UNICEF's Joint Monitoring Programme, 141 million urban dwellers worldwide lack access to improved drinking water, and one out of four city residents, 794 million in total, do not have access to improved sanitation facilities. A key Millennium Development Goal is to reduce by half those without access to sustainable safe water and basic sanitation by 2015. This is why World Water Day 2011 focuses on Water for Cities: Responding to the Urban Challenge, in the hope that concentrating international attention on these basic service challenges will encourage central and local governments, non-governmental and civic organizations, the private sector, and individuals to work in concert to actively address and overcome these challenges.

#### **Unacceptable Choices**

Poor urban residents face unique challenges in water and sanitation compared to their rural counterparts. While people who live in rural areas in the developing world may often have to travel far to water sources, rural residents can drill wells to tap into potable groundwater and sometimes even rely on surface springs for their drinking water. Urban residents' choices of drinking water sources are more limited because they typically do not have the option of tapping into groundwater, and urban surface waters can be contaminated by commercial and industrial pollution. For urban residents, the most viable source of potable water is typically piped water from the city network. However, piped water systems often are not extended to areas where the urban poor live, resulting in dependence on public standpipes or buying drinking water from private vendors, which can prove up to 20 times more expensive than water available from the city's piped network. This makes the source of drinking water for the urban poor often unreliable, expensive, or both.

Sanitation choices for the urban poor in developing countries are limited as well. Cramped living conditions, insecure or nonexistent tenure, and lack of household purchasing power often preclude the provision of even the most basic latrine options at the household level. Piped sewerage is also





VOLUME 02 ISSUE 02 MARCH 2011

uncommon in poor urban neighborhoods. Poor urban residents' choices are usually reduced to public latrines, or to several households sharing a single latrine (both of which are often poorly maintained), or no access to any kind of publicly provided sewage system.

Despite the best efforts of governments and donors to offer better solutions, the urban poor's need for improved water and sanitation is growing. Unlike progress achieved in improving global rural water supply and sanitation access in recent decades, due to rapidly increasing urban populations, the world is actually making no progress, or losing ground in terms of its efforts to improve access to potable water and sanitation for the urban poor. Globally there was essentially no gain in the proportion of urban residents with safe water access from 1990-2008 and basic sanitation access fell by one percent. Meanwhile, over 10 percent more rural residents gained access to

improved water and sanitation access during this period.

Addressing this challenge now has become even more pronounced because, in this new urban millennium, the historic lack of access to water and sanitation for the urban poor is compounded by the threats confronting urban areas due to climate change, conflict, natural disasters, and rapid industrialization.

#### **Better Choices**

In line with this year's World Water Day theme, USAID is working to develop effective business models, which bring together the combined resources of the public, private, and community sectors to address the water and sanitation needs of the urban poor. This edition of Global Waters presents several of the most promising approaches that USAID supports.

USAID's urban water and sanitation programs have two common characteristics: they are designed to offer more and better water and sanitation choices for the urban poor, and, since

Photo Credit: USAID/Kenya

SMALL STEPS: A small boy crosses a dilapidated foot bridge in Kibera, Africa's largest slum in Nairobi, Kenya,

"Despite the best efforts of governments and donors to offer better solutions, the urban poor's need for improved water and sanitation is growing."

the dimension of the problem is huge, they aim to promote scalable solutions.

The articles in this issue highlight some of these interventions: microfinance programs for meter and water connections in Indonesia; a global publicprivate partnership between Coca-Cola and USAID; formalizing entrepreneurial water supply investments in Kenya; and introducing low cost wastewater

treatment technology in the Philippines are all responses designed to offer more affordable water supply and sanitation choices for the urban poor. Encouraging private, corporate, and voluntary organizations to finance water supply and sanitation systems in the Philippines and in a number of African countries are all recent examples of how USAID is helping countries in the developing world respond to the scale of their urban challenges.

World Water Day provides a powerful opportunity to call attention to the world's most glaring water concerns. USAID is committed to not only recognizing those concerns, but continuing to prioritize addressing them, to help the poor attain affordable and sustainable access to clean water and basic sanitation in our rapidly urbanizing world.

Alexandria L. Panehal, Office Director Infrastructure & Engineering, EGAT Bureau, USAID





VOLUME 02 ISSUE 02 MARCH 2011

## In Focus

# The Sta. Ana Public Market Wastewater Treatment Plant Sustainable Green Technology in the Philippines

Throughout history, most major cities sprouted alongside rivers to facilitate trade and transport. The Philippine's Pasig River is the main artery through Metro Manila and nature's pathway between Laguna Lake and Manila Bay. Being at the center of commerce has left the Pasig River with floating trash and oil slicks from the many homes, open markets, and businesses along its banks and canals. Collaboration between local government agencies, community organizations, USAID, and Rotary International has resulted in one modest way to fight the effects of urbanization with the Sta. Ana Public Market Wastewater Treatment Plant.

"The Sta. Ana Plant uses a hybrid system that is easy to operate and maintain and costs less than conventional treatment technologies...It is a good fit for crowded urban settings because of its relatively small footprint."



INNOVATIVE TECHNOLOGY: City of Manila engineering office staff is trained on the operations and maintenance of the treatment plant by Engineer, Lito Santos.

Along the Pasig River's troubled journey through Manila lies the bustling Sta. Ana district's public market with its 220 vendors. Until recently, the market operated by discharging its sewage, grease, and other wastewater into a septic tank, only to have the overflowing tank spill inadequately treated water directly into the already overburdened and "biologically dead" Pasig River. Stakeholders decided to address the pollution from the market as a critical step in the urban waterway's long road to recovery by creating a new wastewater treatment plant.

The market's new plant uses sustainable "green" technology. The plant is part of the USAID-Rotary Pasig River Improvement Project, an effort supported by the USAID-Rotary International H2O Collaboration. Launched on World Water Day in March 2009, the International H2O Collaboration has begun implementing sustainable long-term water, sanitation, and hygiene projects in the Dominican Republic, Ghana, and the Philippines.

More than 60% of the Pasig River's pollution comes from domestic wastewater, mostly from individual households. To address this issue on a larger scale across Metro Manila, two private water utilities are planning to build large sewage collection and treatment systems. The entire city should be covered by 2030.

"In the meantime, Manila's public markets are significant contributors to the river's pollution and easier to address," said Joy Jochico, USAID/Philippines Urban Environment Specialist. "Smaller, decentralized facilities are a good option for public markets because they generate such high-strength wastewater."

The Sta. Ana Wastewater Treatment Plant uses a hybrid system that is easy to operate and maintain and costs less than conventional treatment technologies—factors that make it possible for local governments to sustain this level of treatment. It is a good fit for crowded urban settings because of its relatively small footprint.





VOLUME 02 ISSUE 02 MARCH 2011

The technology has lower operating costs because it significantly reduces organic pollutants, which decreases the energy needed in the aeration stage of treatment. The system harnesses naturally occurring bacteria to break down pollutants; the only chemical used is chlorine for disinfection prior to final discharge to the river.

The project also aims to reduce the pollution entering the Pasig River by integrating effective wastewater treatment with behavior change programs. Activities include improving solid waste management in the market and six neighboring areas to decrease the amount of trash entering the river and implementing sanitation and hygiene programs in nearby schools.

The Philippines' Sta. Ana plant is the culmination of efforts by the Metro Manila Development Authority (MMDA) and the City of Manila. MMDA contributed in-kind labor and equipment; Rotary International District 3810 purchased the construction materials; and the USAID Philippine Sanitation Alliance provided technical assistance.

In January 2010, the partners held focus group discussions and workshops for market vendors, local officials, schools, the neighboring historic church, City of Manila staff, and other establishments around the market in an effort to involve them in project activities.



CLEANER ENVIRONMENT: Children in neighboring communities learn improved hygiene practices.



SUSTAINABLE SOLUTION: Effective wastewater treatment is an important part of the Pasig River's recovery.

In addition, the Lola Grande Foundation, a community organization and grantee of the USAID-Rotary project, has intensified education campaigns to promote improved hygiene and reduce open defecation in the surrounding communities. The hope is that a cleaner environment will bring tourists to historic Sta. Ana and improve public health in the district.

After five months of construction, the plant opened in September 2010 and so far is showing great success. "We hope that Sta. Ana will be a model for other public markets in Manila and the rest of the Pasig River area that need to start treating their wastewater," said Connie Beltran, Immediate Past District Governor of Rotary International District 3810. The MMDA plans to replicate the plant in other areas of Metro Manila. It is an encouraging development for a small program with the potential to make big progress—not only in Manila, but in other urban settings around the world. A. Gambrill

#### For more information, visit:

http://www.usaid.gov/our\_work/cross-cutting\_programs/water/docs/WWF5/International\_H2O\_Collaboration\_FactSheet.pdf

http://philippines.usaid.gov/newsroom/sta-ana-'green'-model-markets

http://www.epa.gov/owm/mtb/sbr new.pdf





VOLUME 02 ISSUE 02 MARCH 2011

## In Focus

## **Environmental Services Program Spurs Water Innovation** for the Urban Poor

More than 100 million people in Indonesia lack access to clean water. In fact, in urban areas, only 40% of citizens receive water from a household tap; the rest collect it from contaminated rivers and lakes, use of which often causes disease, or they buy it from water vendors at inflated prices. These residents are overwhelmingly poor, often living in areas of high unemployment and social unrest. Furthermore, urban women and children expend enormous time and energy gathering clean water from distant sources. But recent innovations in water-for-the-poor programs have water flowing to grateful citizens in crowded urban neighborhoods.

To meet the water needs of the urban poor in Indonesia, USAID's Environmental Services Program (ESP) delivered an innovative approach to increase household water connections. Through the Master Meter program, ESP added water connections to poor households and helped finance the effort through the Micro Credit program.

The town of Belawan in North Sumatra became one of the first successful beneficiaries of the program. Typical of many Indonesian slums. Belawan is home to over 18.000 households



HOUSEHOLD CONNECTION: A woman whose house benefitted from the Master Meter program, fetches water from her own tap.

on the banks of the polluted and muddy Deli River, and three quarters of its citizens live in poverty. Many of its inhabitants live in non-tenured shacks perched on stilts above the flood-prone, garbage-filled, muddy Deli River. In 2006, ESP piloted a Master Meter program in Belawan to link lowincome households to water utilities through a community based



WATER FOR THE POOR: Communal meter in Yong Panah Hijau area, Medan, North Sumatera serving poor communities, giving them access to piped water 24/7 like never

"To the surprise of officials, the community based organization and its households proved to be responsible and reliable customers."

organization (CBO) water system. In such arrangements, a local utitlity enters into an agreement with the CBO and pipes water to a single, metered access point. From there, the CBO distributes water to individual households whose members pay a fee for using it. In its role, the CBO, often in partnership with a non-governmental organization, organizes local households, maintains the system, and collects fees.

To the surprise of utility officials, the CBO and its households proved to be responsible and reliable customers. "Late payments hardly ever happen," explained Pak Julian Syah, a regional community manager from the ESP North Sumatra team. "The community would not dare to jeopardize clean piped water access." With the new connections, utilities are expected to increase customers and revenues, while avoiding the risks of non-payment often associated with urban slums.





VOLUME 02 ISSUE 02 MARCH 2011



WATER AT HOME: Ibu Emah of Desa Pabuaran is among the first customers to receive a new connection under the PDAM Subang's Micro Credit program.

Since the first pilot project, CBOs have grown to include 30 organizations that operate 100-200 house connections each. By 2009, the Master Meter program expanded to serve over 7,000 households in Belawan and the surrounding villages near the city of Medan. In addition to providing clean water, the role of CBOs expanded as empowered citizens used them to address other issues such as hygiene, sanitation, and solid waste management.

Observers attribute Master Meter success to the effective collaboration among CBOs, volunteer organizations, and the Environmental Services Program. These organizations worked in complementary roles to operate, finance, and maintain a community-managed water system. In Belawan, the program provided capacity building and training; the volunteer organization took responsibility to maintain the water system; and the CBO spearheaded community participation and design of the network.

To complement Master Meter, ESP's Micro Credit program introduced an innovative approach to finance low income water connections. Since many poor people cannot pay for the household connection fee in one payment, ESP worked with local banks and water utilities s to offer micro loans to

customers seeking to set up a household connection. In this arrangement, a utility and the bank sign a Memorandum of Understanding so that the utility guarantees the customer loan that allows the bank to loan customers up to five million rupiah (about \$500), for up to two years, to pay water connection fees. By adding new customers and increasing revenues, the program's Micro Credit has grown to include 12 water companies and several local banks.

In reflecting on the factors behind the program's success in delivering water to the poor, Trigeany Linggoatmodjo, a senior environmental program manager for USAID/Indonesia pointed to the participation of government, utilities, and banks. "These organizations provided institutional and financial support and they helped to roll out and expand these innovative models," she said. As for lessons learned, Ms. Linggoatmodjo emphasized the value of the participatory process and stressed the importance of carefully aligning program objectives with those of strategic government plans. "Fortunately, we were able to establish collaborative relationships that created win-win benefits for all partners," she concluded.

USAID contractor DAI implemented the Environmental Services Program from 2004 to 2010. Although the USAID ESP program is now closed, their legacy for innovation and success lives on in a partnership with the Government of Indonesia that continues for the next five years through project Indonesia Urban Water, Sanitation, and Hygiene. In addition, USAID/ Indonesia is preparing to give a grant directly to the government via an existing agreement between the Australian Agency for International Development and the Government of Indonesia. This agreement will extend water services to poor urban households by providing incentives to local governments to use their own funds for water sector investment in pursuit of the overall goal of improved water supply governance. With these new programs, USAID/Indonesia continues to assist the Indonesian government in making significant progress toward achieving Indonesia's safe water and sanitation goals. S. Nelson

#### For more information, visit:

http://www.usaid.gov/our work/cross-cutting programs/water/ success\_stories/indonesia\_environmental\_services.html





VOLUME 02 ISSUE 02 MARCH 2011

## Real Impact

# USAID's African Cities for the Future Program Improving WASH for Urban Africa

Urban and peri-urban communities in Africa have grown rapidly in recent years posing serious water, sanitation, and hygiene (WASH) challenges for low income residents.

In Kenya, WASH stresses are severe and correspond to a rapidly expanding urban population, which the United Nations estimates as 40,863,000 for 2010 and expects to grow to over 57,000,000 by 2025. Yet, Kenyan Kariuki Mugo has reason to be optimistic about what he views as significant progress for WASH in Kenya through USAID's African Cities for the Future Program (ACF), a WASH grant specifically targeting the special needs of Africa's expanding urban areas.

Mugo is a Program Manager for Water and Sanitation for the Urban Poor (WSUP), a not-for-profit multi-sector partnership based in London, which implements the grant program in five African nations: Ghana, Kenya, Madagascar, Mali, and Mozambique.

The program works to raise regard for the urban poor as viable customers. "WASH for the poor is my passion," said Mugo, who trained as a civil engineer, and worked on rural WASH until 2005 but now focuses on pro-poor urban WSUP projects. Some of the WASH successes Mugo points to in Kenya include

providing new water service for the poor, addressing technical deficiencies such as water leakage, and bringing low income consumer representation into new distribution relationships.

"We intend to demonstrate to institutions and policy makers that these WASH successes can be taken to another level." The partnership teams with service providers and communities in Kenya and other ACF countries to create new business and institutional arrangements. One way of achieving this is by having representatives for the urban poor serve on stakeholder steering committees for WASH projects.

Outside the Kenyan capital, too, in Naivasha, WSUP is demonstrating concrete progress in all WASH areas. The African Cities for the Future Naivasha project, which Mugo directs, focuses on three peri-urban settlements around the famous Lake Naivasha in the Great Rift Valley. The Naivasha settlements sprang up because of new agri-business, much of which grew out of Kenya's flower exporting industry. Unable to fulfill the employment hopes for Kenyans drawn to this area, these settlements were even less equipped to provide for the WASH needs of Naivasha's approximately 300,000 new residents.

Mugo describes three central challenges the partnership faced for water service in Naivasha: the undeveloped state of the local water company; the weak and informal institutional relationships between the regional regulator, small service providers, and consumers; and the fact that Naivasha is, in fact, "a water scarce town with too much fluoride in the water," which is especially unhealthy over time.

Local water peddlers, who drew from the lake or drilled wells, serviced most of Naivasha's new residents but charged exorbitant prices for unsafe water. The African Cities for the Future program brought these informal servicers into a restructured water provision system, with formalized relationships with Rift Valley Water Services Board, the official water supply asset owner and regional service provision regulator. By formalizing these relationships, Mugo and his



GAINING NEW GROUND: WSUP Kenya coordinator Kariuko Mugo visits Navaisha frequently and presents on all aspects of WASH.

SUBSCRIBE

UNSUBSCRIBE

Click here to receive the weekly USAID newsletter!





VOLUME 02 ISSUE 02 MARCH 2011



WORKING TOGETHER: Working on water, fluoride, service, and sanitation in new settlements; USAID technical adviser Tony Kolb visits Naivasha with WSUP Naivasha Program Officer Gertrude Solano.

team demonstrated that low income Naivasha residents are genuine customers with real market potential.

The results are encouraging. "We have managed to mainstream informal water supply businesses into a regulated structure," said Mugo. "Now, people drink potable water much more cheaply." In fact, in Naivasha, more than 11,000 people now have more regular and higher-quality water service and pay 80% less for it.

USAID's ACF technical representative, Tony Kolb added, "In Naivasha they are taking a very interesting approach with local entrepreneurs having the partnership step in, organize them, and link all to a water utility service. This approach has great potential in other similar small African communities."

Mugo also has not shied away from the sanitation challenge for Naivasha. So far, WSUP-ACF has helped establish approximately 50 latrine centers and raised hygiene awareness and demand for sanitation goods and services. Additionally, Mugo is working with small local entrepreneurs to develop a sanitation market and begin addressing the sanitation needs of poor Naivasha households. "With adequate funding," Mugo explained, "we can now pull different components into a sanitation market and drive sustainable, market-based sanitation forward."

The real impact of the partnership's work is also being felt in the other ACF countries. For example, in Maputo, Mozambique, WSUP has facilitated new piped water access for almost 30,000 people and reduced the price residents pay by over 50%. In Kumasi, Ghana, WSUP-ACF is teaming up with WSUP member-

"We have managed to mainstream informal water supply businesses into a regulated structure. Now people drink potable water much more cheaply."

company Unilever to develop local entrepreneurs that will sustainably service latrines in urban neighborhoods.

WSUP's Andy Narracott, the ACF program coordinator, said that ACF efforts in Nairobi are already very encouraging. "As a result of the grant program, plans are being made by the water company to extend low-cost sewered sanitation approaches to all informal settlements across the city," he said.

For Narracott, the upshot of African Cities for the Future is a new WASH approach for Africa's urban poor. "At the beginning of the process, water companies or local governments saw extending services to the poor as high risk. With USAID's ACF grant we are bridging that gap by demonstrating that the poor can be viable customers."

"The African Cities for the Future legacy," Mugo added, "will be to raise the standard of work and how we do our WASH business." R. Blaustein



HYGIENE MESSAGES: WSUP Kenya Program Manager, Kariuki Mugo talk to Naivasha residents about hygiene.

For more information, visit:

http://africancitiesforthefuture.wordpress.com/





VOLUME 02 ISSUE 02 MARCH 2011

## **News From the Field**

# Innovative Funding Removes Barriers to Water and Sanitation in the Philippines



A STRONG FOUNDATION: A construction site for the water storage reservoir in Puerto Princesa City Water District built through the PWRF (Philippines Water Revolving Fund).

When Eduardo and Belen Armington moved to the town of Silang 30 years ago, they recall having to walk more than one hour to the river to wash their clothes and fetch water. The trip back to town was even worse with wet clothing and jugs of water in tow. Conditions improved when a community-based water tap was installed in 1984, but its limited hours meant residents had to line up as early as four in the morning to collect water for morning activities. Water financing was secured in 2009 through the Philippine National Bank as a result of a USAID co-guarantee with a private Philippine guarantor, the LGU Guarantee Corporation. Today, the Armingtons enjoy access to clean water 20 hours a day from the convenience of their home.

Limited water financing is one of the primary obstacles to improving access to clean water for millions of people throughout the world. Finding diverse and sustainable water financing is never a luxury and always a necessity. People who lack direct access to water in their homes typically pay a much higher rate for water than those who are connected to a piped water system. Apart from the financial cost to these families, there are also economic costs due to productivity lost from time spent collecting water, or health costs from illnesses or deaths brought about by drinking unsafe water. In the Philippines alone, over 11,000 residents die prematurely each year from water-borne diseases.

PAGE 10



VOLUME 02 ISSUE 02 MARCH 2011

## "This financing structure allows the public-private partnership funds to stretch in order to provide safe and accessible water for more Filipinos."

Financing from private banks in the water sector, except for the two Metro Manila concessionaires, was practically nonexistent in the Philippines, as many water utilities relied solely on public resources. This type of financing was inadequate considering the government could provide only 50% of the required investment to meet its country's water supply targets. USAID realized the missing link was leveraged funding from the private sector.

To encourage private investors to enter the water sector, USAID utilized its Development Credit Authority, a mechanism that allows risk sharing through partial loan and bond guarantees. The model worked: The Philippines Water Revolving Fund (PWRF), launched in 2008 with the support of USAID, Japan International Cooperation Agency, the Development Bank of the Philippines, and other contributing partners, successfully attracted private financing for water and sanitation projects. The new public-private financing model forever altered the dynamics of water financing in the Philippines.

In 2010, a Development Credit Authority-backed, \$2.6 million private loan leveraged \$10 million in public financing under the PWRF for water rehabilitation in the Puerto Princesa City Water District. This rehabilitation will mean improved water delivery for 117,000 people in 36 villages and the development of new water sources that would grant additional access to 48,000 people by 2014. USAID's PWRF Program Manager, Joy Jochico, said, "This marks the beginning of more water projects in the Philippines being co-funded by the government and private banks. This financing structure allows the publicprivate partnership funds to stretch in order to provide safe and accessible water for more Filipinos."

To date, USAID has used the Development Credit Authority to co-guarantee ten loans for water districts in the Philippines totaling over \$42 million of private sector funding. These



BUILDING BRIDGES: Representatives of the Puerto Princesa City Water District with USAID's Program Manager, Joy Jochico.

projects have benefited close to one million Filipinos. Eduardo, one of those individuals, described the impact, "When we first arrived here in the resettlement area, life was extremely difficult and we had to make great sacrifices to fetch water every day. Today our lives have really improved because the water lines are now extended inside our homes."

Beneficiaries of USAID water guarantees are not limited to the Philippines. Globally, USAID has used the Development Credit Authority to make available \$177 million in private financing for water and sanitation services in India, Egypt, Bulgaria, Serbia, Albania, Honduras, and Kenya. USAID is optimistic about working with other municipalities and private financial institutions to improve access to water and sanitation services through partial credit guarantees. S. Grosser, S. Gudnitz

#### For more information, visit:

http://www.usaid.gov/our\_work/economic\_ growth\_and\_trade/development\_credit/

http://www.usaid.gov/our work/economic growth and trade/development credit/detailed description.htm

http://www.usaid.gov/our work/economic growth and trade/development\_credit/recent\_activities.htm





VOLUME 02 ISSUE 02 MARCH 2011

## **News From the Field**

# WADA Works to Improve Water Supply and Sanitation



SCHOOL SPIRIT: At an interschool hygiene forum, Bofu Primary school children share experiences on good sanitation and hygiene practices including hand washing, use of latrines and urinals, personal hygiene, and school cleanliness.

The Coca-Cola Company and USAID have created a unique partnership to address community water needs in developing countries. In conjunction with local USAID missions, Coca-Cola system partners, and the Global Environment & Technology Foundation, the Water and Development Alliance (WADA) contributes to improving the sustainability of watersheds, increasing access to water supply and sanitation services, and enhancing productive uses of water. With a combined investment of \$28.1 million since 2005, WADA is impacting the lives of people in 22 countries throughout Africa, Asia, the Middle East, and Latin America.

Kenya's rural areas desperately need improved access to water, sanitation, and hygiene services. To address these challenges, WADA's Mombasa Kenya Project partners constructed water storage facilities and communal water points, installed 10 km of pipeline, and planted 36,000 trees around water sources to improve watershed management. WADA partners helped communities shift from burning trees to produce charcoal for income, to earning income by growing vegetables near reservoirs. Beneficiary communities were involved in the planning and implementation of WADA-supported activities.

"...by working together we will ensure that at least 1,000 families get the clean and potable water they deserve."

Project partners also constructed 32 ventilated improved pit latrines and installed hand washing facilities in 35 Kenyan schools. They promoted improved hygiene practices in the project areas. In December 2010, WADA formally handed over project management to the community at an event in Chanzoi Village—one of the 20 villages that benefited from the project. An estimated 37,000 Kenyans have been positively affected by these and other project changes.

"I am happy that I can now easily draw water from this hand pump, which we can see is cleaner," said Mariam Milton Zuma, a project beneficiary. "We previously used to dip all our containers and also step into the water while drawing water. We have learnt that this practice was contributing to... diseases, especially for our children, who used to complain of stomach problems."



COMMUNITY EFFORT: Mariam Milton Zuma and other women in Mabesheni Village, Kinango District, Kenya draw water from a filtration gallery installed at a community-managed small farm reservoir fitted with a hand pump.





VOLUME 02 ISSUE 02 MARCH 2011

In South Africa, limited access to safe water presents a significant health challenge, especially for the poor and people suffering from HIV/AIDS. In the Eastern Cape, WADA is supporting the refurbishment of the Elliotdale water treatment works, extending 20 km of pipelines, and constructing communal standpipes to improve drinking water services to over 1,000 households.

WADA partner, the Mvula Trust, works with a water committee made up of representatives from beneficiary villages. This committee ensures that the community voice is heard in allocation and siting of tapstands and that local people benefit from employment opportunities. Mvula also improves hygiene awareness through interactive theatrical performances.

"Clean drinking water is not just a necessity, it is a right, and by working together we will ensure that at least 1,000 families get the clean and potable water they deserve," said Dr. Alberta J. Mayberry, U.S. Consul General in South Africa.

In discussing the WADA partnership, Dr. Sharon Murray, Water Resources Program Manager with the USAID Water Team, said, "The continued expansion of our alliance with Coca-Cola attests to the energy and force a development agency and a private sector partner can, and have, put forth to address our common concern about the global water crisis. Our



WELCOMED RELIEF: Welamlambo Primary School students in Johannesburg, South Africa line up at the tap with a new awareness about the importance of water conservation. Training was provided by the Alliance to Save Energy as part of a Water and Development Alliance project funded by The Coca-Cola Company and USAID.

efforts bring tangible benefits to communities in the developing world and we are excited that WADA has increasingly permeated the culture and operation of each organization." A. Pruitt



WATER WORKS: Newly installed filters at the refurbished Elliotdale Water Treatment works are helping bring clean water to over 5,000 people in the Mbashe Rural Area of the Amathole District Municipality.

#### For more information, visit:

http://www.thecoca-colacompany.com/citizenship/ community\_initiatives/USAID.html





VOLUME 02 ISSUE 02 MARCH 2011

## **Resource Center**

## In Print

## Water Safety in Buildings



### Meeting the Urban Challenge: A Guide to the Efficient Management of Water **Systems in Buildings**

According to the World Health Organization an alarming 93% of urbanization occurs in poor or developing countries, and almost 40% of the world's urban expansion is occurring in growing slums. As global urbanization continues to rise, so will the increase of the population's overall exposure levels to outbreaks of disease resulting from poorly designed or managed water systems in buildings. Reducing the risk of preventable disease should be treated as a public health priority and all steps towards a viable resolution should be considered in order to avoid an epidemic. Poorly designed buildings and inefficient management of water systems in these structures have been identified as the two main causes of disease outbreak. Although these health risks are avoidable and can be readily controlled, evidence of outbreak indicates a steady climb.

This 164-page resource provides guidance for managing building water supplies. Readers will find this an especially useful training and informational tool to help advocate for overall safe management of building water supplies.

Publication Date: March 2011

http://whqlibdoc.who.int/ publications/2011/9789241548106\_eng.pdf

## **Online**

## Making Cities Work



#### http://www.makingcitieswork.org/

This website provides a portal to better understand the enormous challenges affecting today's growing urban populations. USAID is increasing its commitment to urban areas to ensure that it adequately addresses the many associated challenges which include climate change, health, water and sanitation, and natural and man-made disasters.

## On Video

## Tapping Cambodia's Water Market



#### **USAID's Water Investment Strategy**

USAID/Cambodia's Micro, Medium, and Small Enterprise Project has provided 30,000 Cambodian residents with safe, year round, piped drinking water systems. This video, in both two minute and ten minute lengths, supports the project's water investment strategy by encouraging the private sector to invest in local water providers.

http://www.youtube.com/watch?v=hSQf\_mB4dHU (two minute version)

http://www.youtube.com/watch?v=aUlchUglvyw (ten minute version)





VOLUME 02 ISSUE 02 MARCH 2011

# Recent & Upcoming Events



#### Celebrate World Water Day!

#### March 22, 2011 | Cape Town, South Africa

Since its inception on March 22nd, 1993, World Water Day has proven instrumental in shedding light on the importance of freshwater and advocating for the sustainable management of freshwater resources on a global scale. This year's theme is Water For Cities: Responding to the Urban Challenge. Cape Town, South Africa will provide the backdrop for this year's official events, with other activities scheduled in many cities around the globe.

Hosted by the Government of South Africa in collaboration with the City of Cape Town and the West Cape Provincial Government, co-organizers for the 2011 official events include the African Ministers' Council on Water (AMCOW), UN-HABITAT, and UN-Water. Held at the Cape Town International Conference Center, the three-day exhibition and fair will feature cultural events, speeches, interviews and worldwide video conferencing. The fair is expected to attract 1,500 international visitors as well as local visitors from South Africa. World Water Day 2011 will culminate with a plenary program including presentations and debate.

#### **Attend a World Water Day Event in Your Community**

Visit **www.worldwaterday2011.org** to learn about the many activities scheduled around the globe.

### 2nd International Marine Conservation Congress May 14-18, 2011 | British Columbia, Canada

"Making Marine Science Matter" is this year's theme at the 2nd International Marine Conservation Congress (IMCC) scheduled for May 14-18 in British Columbia, Canada. This year's Congress seeks to unite the marine conservation community and develop innovative tools to further marine conservation science and policy. This year's event will feature plenaries, contributed presentations and posters, interactive symposia, workshops, focus groups, and debates, and will draw attendees from science, management, policy, and public sectors.

### http://www.conbio.org/IMCC2011/about/about.cfm

#### **World Water Summit IV**

#### May 20, 2011 | New Orleans, Louisiana

May 20, 2011 marks the annual World Water Summit IV to be held in New Orleans, Louisiana. Organized by the Water & Sanitation Rotarian Action group, this one-day event is titled Bridging Continents/Building Communities. Attendees will be encouraged to explore new ways of thinking to empower communities and bridge continents by building strong teams to support sustainable change.

http://startwithwater.org/page.aspx?name=world-water-summit