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**DELIVERING WATER, SANITATION AND HYGIENE SERVICES
IN AN UNCERTAIN ENVIRONMENT**

**“Everyone Forever”
Water for people's model for ending Africa's water
challenges**

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Everyone Forever (EF) and Sanitation as a Business are both water and sanitation models respectively being implemented in seven districts of Africa including; Rwanda, Malawi and Uganda. EF is collaboration amongst WASH partners to ensure that every household, clinic and school receives basic water and sanitation services on a sustainable basis. As a result of EF efforts in peri-urban Blantyre, Malawi levels of service for water shifted from 19% in 2010 to 57% in 2012. In Rwanda, EF aims to provide full water coverage for the Rulindo District by 2015. In Uganda, EF has been exploring different approaches to supporting sustainable access to improved water and sanitation facilities as well as working with Business Development Service provider to promote sanitation entrepreneurs. One significant challenge is that many communities view water as a common good that they have been collecting from open springs and which should not be paid for.

Water and sanitation situation in Africa

A recent UN report states that the target of halving the proportion of people without sustainable access to safe drinking water was met by 2010, with the proportion of people using an improved water source rising from 76 per cent in 1990 to 89 per cent in 2010. Between 1990 and 2010, over two billion people gained access to improved drinking water sources, such as piped supplies and protected wells. (United Nations, 2012). But it is estimated that some 884 million people from Africa lack safe water and that 1.8 billion people (28% of the global population) used unsafe water in 2010 (Onda et al, 2012).

The goal to halve, by 2015, the proportion of the population without sustainable access to basic sanitation remains a challenge for the continent. It is projected that by 2015, the world will have reached 67 percent coverage, well short of the 75 per cent needed to achieve the MDG target. There remain 1.1 billion people—or 15 per cent of the global population—with no sanitation facilities at all. According to UN statistics, Sub Saharan Africa struggles with low sanitation coverage at 30 per cent with an estimated 25 per cent practising open defecation (<http://www.un.org/waterforlifedecade/sanitation.shtml>). Yet uncertainty prevails around Africa's natural environment with its changing climatic patterns, social pressures of population growth, and rapid urbanization. Competition for the scarce water resource remains high for domestic use, hydro- electric power generation, and agricultural as well as industrial use.

Paradoxically, safe and reliable water remains a challenge in Africa despite the region enjoying abundant water resources including large rivers and lakes such as the Congo, Nile, Niger rivers and Lake Victoria, with a number of countries enjoying over 1,000 mm of annual rainfall. Similarly scientists have released a comprehensive survey that African underground aquifers contain 100 times more water than the surface water. The British Geological Survey and University College London (UCL) mapped in detail the amount and potential yield of ground water resource across Africa (<http://www.bbc.co.uk/news/science-environment-17775211>).

In spite of these, fourteen countries in Africa are already experiencing water stress; another 11 countries are expected to join them by 2025 at which time nearly 50 per cent of Africa's predicted population of 1.45

billion people will face water stress or scarcity if radical measures are not taken. (www.panda.org/livingwaters).

What could be the problem? What are the lasting solutions? Guardian reported during the World Water Week in Stockholm, 2012, the various reasons given by African governments for not implementing integrated water management policies or meeting commitments they have made to provide sanitation (<http://www.guardian.co.uk/global-development/2012/aug/30/water-sanitation-priorities-african-governments>). The challenges presented by African Governments included lack of formal water policies and requisite legislations, absence of water champion to fight the cause of water provision. Twenty-five countries said they did not have enough human capacity to deal with water issues. Congo-Brazzaville, for example, said it could not get the private sector or civil society interested; others attributed water problems to too many changes in the water ministries, inability to collect revenue from local sources. Eighteen (18) African countries cited money as a constraint to developing water resource management this is due to inability to access donor funds, or slowness in mobilizing financing.

How can the situation be helped to improve water and sanitation coverage in Africa?

Everyone forever

Everyone Forever is a Water for People(WFP) initiative to provide access to improved water and sanitation services in developing countries. **Everyone Forever** seeks to work with other WASH sector players to create a world where women and children are relieved of the burden of walking many kilometers to the nearest water source and girls are no longer forced to abandon an education to collect water or due to inadequate sanitation.

By **Everyone**, WFP means **every family, every school, and every clinic** in the areas of operation. The idea is to work in those areas, for improved water and sanitation, before resting or moving to a new place. **Forever** means: we look beyond the work of installing hardware-tanks, pipes, pumps, and latrines, and focus on building local knowledge and institutional systems that support sustainable water and sanitation services **always**. (<http://www.waterforpeople.org/media-center/videos/>)

Why Everyone Forever? For years, NGOs and governments have constructed taps and toilets in developing countries and after some time, they no longer function. The toilets fill up or break down and the family is again left without a hygienic sanitation facility. Taps get spoilt or break up and cease to flow. Or new families move to towns where toilet projects have been completed and they do not have a way to get access for themselves. Thus, the new water/sanitation development *paradigm* to end water poverty that is being promoted by WFP. We need to think about solutions that can provide sanitation in the long-term for both the family with the full latrine and the family who is new to town.

Why is Everyone Forever needed?

EF is an alternative to the dominant charity-driven model of installing water and sanitation infrastructure in a scattershot of communities in rural and peri-urban areas, and expecting each individual community to create, manage, and sustain services around that infrastructure over time. In most communities, the truth is that there is no underlying market to support lasting services, which requires regular and routine maintenance, spare parts, customer relations, and funding mechanisms. This is a key reason why between 30% and 70% of water and sanitation systems fail within 3 years of installation.

Progress in the African Countries covered

Malawi

The Joint Monitoring Program (JMP) report by UNICEF and WHO, states that 95% of people in urban areas and 80% in rural areas have access to safe water. Access to sanitation is much lower, with 49% of urban and 51% of rural dwellers using improved sanitation facilities. These statistics, however, are considerably inflated. Water For People–Malawi’s current understanding of the water situation in the 21 low-income areas of peri-urban Blantyre is that only 62% of people have access to water that meets government standards, while in the rural district of Chikhwawa, only 45% have access to safe drinking water. More striking is that an estimated 15% of people in Chikhwawa and 60% of people in peri-urban Blantyre have access to improved sanitation facilities.

WFP has been in Malawi since 2000. In 2006, WFP changed its strategy from small projects widespread in many areas to concentrate efforts in two regions of Blantyre, and Chikhwawa. WFP’s innovative and sustainable approach to the provision of safe water and improved sanitation facilities engages the private sector while challenging traditional, subsidy-driven approaches,

Sanitation as a business

WFP–Malawi’s *Sanitation as a Business* program shifts away from traditional, subsidy-driven sanitation approaches to a business-driven model. Conventional approaches suffer because they focus on the toilet; Sanitation as a business focuses on the service, demonstrating that if an entrepreneur develops an ongoing relationship with a customer, he or she can make a profit. WFP works with sanitation entrepreneurs to encourage their investment in sanitation, develop their skills, and see every household without a toilet as a potential client.

In peri-urban Blantyre, households can take out a loan from a microfinance institution and use it to purchase a toilet; sanitation entrepreneurs not only provide the household with a toilet, but can also establish an ongoing contract for pit-emptying services. The “Gulper”—a manual pit-emptying machine suitable for narrow, peri-urban alleyways—is a practical way for Blantyre entrepreneurs to offer a solution to the current sanitation problem, while building a business. Through this program, sanitation entrepreneurs are motivated to increase sanitation coverage.

Circuit Rider Program

WFP is developing alternatives to water committees being solely responsible for water point maintenance in Chikhwawa. The problem of relying only on water committees to provide maintenance is that these volunteer groups are fragile, deteriorating over time due to families moving in and out, local politics, illness, and lack of skills transmission. The Circuit Rider Program trains local mechanics to provide regular maintenance and timely repair of water systems for a fee paid by the water committees. This private sector approach has the potential to provide better service, less downtime, and greater efficiency. In addition, WFP–Malawi is helping establish distribution points for pump spare parts by working with local shop owners to carry spare parts that communities can purchase.

Water Users Associations (WUAs)

WFP–Malawi is working in the low-income areas of Blantyre to establish Water-User Associations (WUA) to manage communal water points (water kiosks). A WUA is generally composed of an elected board, an executive committee, and paid staff, including a bookkeeper, water sellers, water inspectors, and plumbers. It sells water to people through communal water kiosks, where people purchase by-the-bucket water from sellers. WFP–Malawi helps establish the WUA and provides it with the technical (water point maintenance and repair), financial (tariff development and financial accountability), and human resource skills necessary to manage the water system. WFP–Malawi also helps the WUA to set up a contract with the Blantyre Water Board (BWB), so that the WUA is responsible for paying the BWB for all the water piped to the water kiosks under its management (usually 25 to 50 water kiosks). Because the WUA is paying for the water, it is in its best interests to ensure that the water points are well maintained (no leakages or outages) and serving the community.



Photograph 1. WEDC - - Eco – San toilet



Photograph 2. WEDC - Gulper

In 2012, in Malawi, through Water For People's work with a BDS:

- Seven sanitation entrepreneurs were trained, established businesses and invested their own equity to empty toilets and/or construct latrines. Business is picking up and in the first couple of months,
- 49 toilets have been emptied and families now have access to a toilet again. In peri-urban Blantyre,
- WFP has facilitated the establishment of eight Water Users Associations (WUAs) to improve management and maintenance of water systems in 19 low-income areas.
- Over 887 toilets have been built this year (2012) by sanitation entrepreneurs trained in 2011.

- 336 new jobs have been created for women
- In 2010 only 19% of people in Blantyre had adequate water and this improved to 41% access to adequate service water.

Rwanda

In June 2008, WFP opened an office in Kigali, Rwanda's capital and largest city. Since then, WFP-Rwanda has worked with various stakeholders to determine how best to provide sustainable drinking water, sanitation, and hygiene education. Because of the disparity between urban and rural coverage, WFP-Rwanda has focused its work on the districts of Kicukiro and Rulindo.

Everyone Forever in Rwanda

Regions

Rulindo occupies an area of 567 square kilometers, with approximately 285,000 people. Springs and rivers are typical water sources. According to data from a recent hydraulic study in 2011, approximately 30% of people have access to water that meets government standards.

Kicukiro District has approximately 255,000 people. This semi-urban district has rolling hills and the main water sources are streams, rivers, and groundwater. With the support of Water For People-Rwanda, Kicukiro is close to full water coverage in communities, but work still needs to be done to increase access in schools and health clinics.

Partners

Lasting water and sanitation solutions can only be achieved when local role-players—the private sector, civil society, and local government—are supported. As such, Water For People is deeply involved with key local stakeholders,

Rulindo Challenge In October 2010, WFP-Rwanda partnered with the Rwandan government for the “Rulindo Challenge,” a bold and game-changing initiative to provide full water coverage for the Rulindo District. The ambitious goal is safe water coverage for all villages, schools, and health clinics. The government has agreed to provide 30% of the program cost, while the communities will provide 15% and WFP-Rwanda the remaining 55%. In peri-urban Kicukiro, WFP-Rwanda works together with the national utility, Energy, Water and Sanitation Authority (EWSA), to extend and manage water systems, while in rural Rulindo the staff partners with private operators, the district, and EWSA to provide communities with access to safe drinking water. This includes the extension of water distribution systems with communal water tap stands.

The critical aspect of this program is establishing a management system that ensures the new tap stands are well maintained and communities are provided with reliable access to safe drinking water. In rural Rulindo, a private operator is selected by the district to manage the water system and is responsible for selling water to users through employed water sellers, minor maintenance of the system, and reporting any needed major repairs to the district. Through this approach, the private operator is motivated by profit to ensure that regular service is provided, routine maintenance is conducted, and downtime is limited. In urban and peri-urban areas, EWSA is responsible for managing the water systems including all major and minor repairs. As a result 37,582 people benefitting from Community Water Supply in Kisaro, Burega and Ntarabana; 14 schools benefitting from improved sanitation facilities, including latrines, hand washing. From 2009 to 2012, the following projects have been completed:

- Water supply systems benefitting 37,582 people in Rulindo District and 33,600 people in Kicukiro District.
- Water and sanitation infrastructures and hygiene education in 24 primary and secondary schools in Kicukiro and Rulindo districts.
- Capacity building of private operators from 7 companies in monitoring and evaluation of water and sanitation projects, project planning and financial management to;
- Capacity building of community health workers in sanitation and hygiene education
- Conducted Mapping survey in all 17 sectors of Rulindo district on sanitation and water coverage;
- Construction of rainwater harvesting systems in Murinja, Gahanga Sector, and Gako, Masaka Sector – Kicukiro District) ;

School water, sanitation, and hygiene promotion program

WFP-Rwanda works in schools throughout the districts of Rulindo and Kicukiro to increase their access to sustainable water and sanitation facilities and promote sound hygiene practices among students. Working with local NGO partners, WFP-Rwanda facilitates the construction of urine-diversion ecological toilets for

girls and boys and rainwater catchment tanks for hand washing and cleaning. In light of girls' needs, sanitation facilities are separated by gender; girls' facilities include a "showering" area that allows them the privacy they require to attend to their needs during menstruation. Each sanitation facility has a hand-washing station with water provided by the rainwater catchment system. Incinerators are also installed in the girls' facilities for disposal of sanitary products.

A key component of this program is teaching students proper hygiene behaviors. In schools, WFP–Rwanda capitalizes on the already established and highly regarded HAMS (Hygiène et Assainissement en Milieu Scolaire, or Hygiene and Sanitation in School) program to promote health and hygiene education.

Uganda

WFP began work in Uganda in September 2008, building relationships with the government and local development organizations and learning about the population's water and sanitation needs. Working in partnership with local governments in the districts of Kyenjojo, Mukono, and Kamwenge, WFP–Uganda strives to provide sustainable access to improved water and sanitation facilities. Sanitation as a Business programming is also being promoted, primarily in Kampala.

As the youngest WFP program in Africa, WFP–Uganda has been exploring different approaches to supporting sustainable water systems. A critical aspect of the program is examining and working to establish different management models so that systems are well maintained and communities are provided with reliable, uninterrupted access to safe drinking water.

WFP-Uganda is also promoting a market-based approach to sanitation and is investigating opportunities for local sanitation entrepreneurs, primarily in Kampala. WFP has contracted with the Business Development Service (BDS) provider *Captiva*, who is leading the sanitation business support process in Uganda. To identify possible sanitation entrepreneurs, in late 2011 *Captiva* held a sanitation forum to recruit sanitation entrepreneurs and learn more about the different ideas for sanitation businesses already in existence. After a weeklong forum, the pool of entrepreneurs was narrowed down to about 12-15 priority enterprise ideas, and these are now being moved into the business plan creation stage.

Monitoring Everyone Forever

Akvo Flow

An innovative approach known as Akvo FLOW is used to monitor the Everyone Forever approach. Akvo, a Netherlands-based non-profit organization, has joined WFP in leading the way in water and sanitation monitoring technology. FLOW (Field Level Operations Watch) is used to collect, manage, analyze and display geographically-referenced monitoring and evaluation data. FLOW has been used mainly to track the condition of water points such as wells and pumps but it could be used to monitor any kind of local infrastructure.

Akvo FLOW brings together three elements: **Handheld data collection** – the FLOW Field Survey, application runs on Android phones and devices with integrated GPS, camera, and custom adaptive surveys; **a web-based dashboard** where users manage and analyze FLOW surveys and data and **visual map-based reporting** tools displayed in Google Maps and Google Earth. The technology is still under improvement. An Akvo flow-mapping of peri-urban Blantyre showed progress with levels of service for water supply from 19 per cent in 2010 to 57 per cent in 2012.

World Water Corps

World Water Corps volunteers visit all of our country programs to check on the progress made in the field and determine if the taps, hand pumps, and toilets co-financed by WFP are functioning as designed. The data and lessons learned from previous work allow the organization to improve, learn, and adapt.

Naked Truth series – We do not shy away from the scenario on the ground, but truthfully acknowledge the situation on the ground with a series of candid videos on the situation on the ground.

Conclusions and lessons learnt

- Many communities still view water as a Social good which should not be paid for therefore it is harder to convince communities that have been collecting water from open springs to pay water in comparison to those who fetch water from afar:
- Government will remain a key player in water and sanitation infrastructure development due to a number of factors such as the nature of water (a basic human right), infrastructure, land issues and its crucial relationship to other sectors

- Political buy in is needed in the development and management of waters and sanitation infrastructure. For instance political interference proves to be a major hindrance to WASH solutions in peri-urban areas and rural areas e.g. where politicians pronouncement that water is free only for the taps and infrastructure to break up leaving communities buying expensively or trekking long distances once again:
- Every One Forever addresses the issues of equity and inclusion that has been a challenge over the years by the very disadvantaged members of society getting excluded in projects development.
- Operation and maintenance of water and sanitation systems is beyond many communities and better done by private service providers who manage on behalf of communities at a fee.
- We must believe in people's ability to change, for example, in communities where there is open defecation and open sewers:
- With regard to sanitation as a business, there is need to give flexibility in repayment for households who have taken loans for different pit latrines
- There is need for flexibility and not look for "one fit all" solution to funding for water and sanitation enterprise
- In persuading communities to invest in water and sanitation; fear appeals on health and cost of disease need to be accompanied by other appeals such as prestige/status, convenience, love for ones family etc
- Sanitation is a multi-billion business. For example Studies by Captiva in Uganda indicates that sanitation sector can generate up to 130 billion annually in latrine construction, emptying waste and reuse of manure. Nairobi has a number of sanitation millionaires.
- The process of establishing sustainable water systems and sanitation is through is, by empowering local community members to build, maintain and replace systems as well as ensure that spares are stocked in nearby shops.
- If various groups in the community participate then the water and sanitation problem would be resolved i.e Government ;facilitate and legislation, civil society; religious institutions, business sector, commercial sector, schools and students, in any case every body has a role to play in the sustainable use of water resources and in ensuring that water resources remain clean and healthy.

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