



A farmer works in a greenhouse at a KIWASH-supported agriculture and nutrition demonstration farm in the largest health facility in Kisumu county. Photo credit: Eric Onyiego/USAID KIWASH

WASH is a Key Ingredient in Tackling Poverty in Kenya

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Picture a rural household in Kisumu, Kenya. Kale, cowpeas, tomatoes, and butternut grow in a kitchen garden fed by a drip irrigation system. Family members harvest these vegetables for the stew that complements their diet, formerly reliant on maize and sorghum. Handwashing stations adjacent to the cooking hut and the improved latrine remind everyone to wash with soap at critical times. Thanks to a new community solar-powered borehole, the family is no longer solely dependent on what the rain provides for drinking water. The family garden produces more food than is needed, and the remainder is sold to provide additional income.

Unlike millions of Kenyans, this family is overcoming the cycle of food insecurity, diarrheal disease, malnutrition, and poverty with the support of USAID's Kenya Integrated Water, Sanitation, and Hygiene (KIWASH) Project. Working to improve the lives and health of one million Kenyans in nine counties, the five-year project (2015–2020) focuses on the development and management of sustainable water, sanitation, and hygiene (WASH) services and increased access to irrigation and nutrition services.

In the past, nutrition, WASH, and agriculture programs worked independently to

tackle poverty and malnutrition, whether it be improving diet or promoting breast-feeding, addressing sources of diarrheal disease such as contaminated water or poor sanitation, or increasing the productivity of smallholder farmers. “We realized that if we want to find sustainable paths from poverty we have to be able to coordinate WASH, nutrition, and income-generation activities deeper than a geographic convergence and down to the beneficiary level,” notes Kenya and East Africa Office of Economic Growth Chief Mark Carrato.

Building on this realization, USAID’s Water and Development Strategy calls for increased integration of WASH and food security programs and coordination with Feed the Future, the U.S. Government’s global hunger and food security initiative.

“KIWASH is the first large-scale USAID WASH project designed to integrate water and sanitation services with WASH and nutrition education for households already supported by an existing Feed the Future agriculture extension project,” explains KIWASH Chief of Party Joe Sanders. “In most programs, nutrition, agriculture, and WASH activities have mainly been implemented vertically, or in a combination of two program activities. KIWASH is implementing all three under one integrated program and building value to already existing Feed the Future-funded programs.”

Why is this coordination important? The complexities and ramifications of stunting, an outcome of malnutrition that affects 35 percent of Kenyan children, are becoming better understood. Improving the quality of food and increasing its production is one step toward tackling malnutrition. But without WASH improvements, diarrhea and gut dysfunction prevent these nutrients from being absorbed. Stunting doesn’t just make children smaller; it also affects their cognitive development and puts them at risk of having stunted children of their own. This cycle is a drain on the nation’s economy and growth.

Expanding Access to Water and Sanitation

Integrating WASH, nutrition, and agriculture practices is just one component of this multipronged project that also improves service delivery and business operations of water service providers (WSPs) to expand access to water supply; reduces open defecation; improves access to finance and credit for WASH; and strengthens private sector WASH enterprises.

KIWASH focuses on achieving sustainable WASH service delivery through market-based approaches. To improve water services, KIWASH is assisting WSPs to expand household connections and extend their networks to unserved communities. KIWASH works with county governments, WSPs, and private entrepreneurs to expand and improve operations and management of existing community drinking water systems in rural areas. Service provider operations are improved through KIWASH-provided technical assistance focused on strengthening their business practices and service delivery operations, developing new opportunities to expand service coverage, and establishing or strengthening linkages with financial institutions.

KIWASH is also supporting the Government of Kenya to achieve increased access to sanitation by generating demand through community-led total sanitation campaigns and engagement with private sector providers to expand access to appropriate, affordable household latrines. KIWASH communities benefit from these multiple

interventions that overlap in critical ways.

Demonstration Farms Bring the Pieces Together

In the target counties where KIWASH works, crops often fail due to unpredictable rains that can bring either flooding or drought. Crop failure coupled with a lack of potable water may, and often does, lead to diarrhea and malnutrition. So KIWASH is working with agriculture extension workers from county ministries and the private sector to improve access to water through the use of small-scale irrigation and agricultural water management techniques at the household level. Demonstration farms are being established at health centers and in communities to showcase kitchen garden technologies such as multi-story, keyhole, recycled tire, and hanging gardens as well as water-saving systems like rainwater harvesting, hydroponic container gardens, shade nets, and open drip irrigation.

The idea is to have mothers of children under 5 who visit maternal and child health clinics stop by the co-located demonstration farms to learn how to produce more nutrient-dense, diverse foods at a low cost. KIWASH-trained agriculture extension agents then follow up with these mothers during home visits to help set up and maintain kitchen gardens. Home economics extension workers are deployed into targeted communities to conduct cooking demonstrations that emphasize a varied diet, nutritious complementary feeding, and the importance of WASH.

For farmers, training sessions are being carried out at community-based demonstration farms to promote good agricultural practices, farm management, and new irrigation technologies. “Those who’ve visited our demonstration farm have been very impressed and are sending the word out to other farmers to come and learn about the various farming methods on display here, especially the open drip irrigation and the kitchen gardens. It is a snowball effect,” says Naomi Okong’o, chairlady of Hope for Kisumu Youth Achievers, managers of an agribusiness and nutrition demonstration farm in Kisumu.

Connecting with Mothers Where They Live

Kenya embeds health volunteers into communities to serve as a link between mothers and the local health facility. KIWASH trains these community health volunteers (CHVs), as it does the agriculture extension workers, to incorporate hygiene messages and essential nutrition actions into visits to households, markets, women’s group meetings, and community meeting places.

KIWASH encourages a small, doable action approach to behavior change in which CHVs negotiate improved practices with mothers and help them anticipate and overcome barriers to change over a six-month period. The WASH messaging promotes handwashing with soap at appropriate times, treatment and safe storage of household drinking water, adequate sanitation/feces management, and food hygiene. KIWASH is promoting these same messages through multiple channels at the county and subcounty level.

To provide mothers with easy access to health and nutrition education and counseling, the project is helping establish or refurbish oral rehydration therapy corners in health facilities, training their staff in WASH promotion. KIWASH also distributes safe water and hygiene promotion kits to expectant mothers who visit the clinics. The

kits consist of a bucket with lid and tap for water storage, a bar of soap, oral rehydration salt and zinc sachets, and WaterGuard liquid to treat water.

An Expansive Mandate

Given the scope of the project, KIWASH's first year of implementation has focused on locating gaps in capacity, selecting and engaging key partners, and ensuring a path for sustainability by working through government mechanisms already in place. The project's integrated WASH, nutrition, and agriculture practices will inform an evolving approach to the challenges of diarrhea and malnutrition, saving up to a million lives in the process.

By Wendy Putnam



Additional Resources:

- [USAID/Kenya](#)
- [Kenya Integrated Water, Sanitation, and Hygiene Project](#)

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