



The USAID/Kenya and East Africa Afya Jijini Program



Handwashing demonstration to school-going children by a Community Health Worker in one of the facilities supported by Afya Jijini. Access to clean water, sanitation and proper hygiene is one of the program's key areas of focus in Nairobi City County.

WATER, SANITATION, AND HYGIENE TECHNICAL BRIEF

Afya Jijini's technical approach to water, sanitation, and hygiene in Nairobi City County

USAID's Afya Jijini program aims to improve access to and quality of health services in Nairobi City County (NCC). The program strengthens county-level institutional capacity to manage these health services, including water, sanitation, and hygiene (WASH), as a central strategy for overall health care improvement. Managed by IMA World Health (IMA), Afya Jijini is a five-year contract implemented in collaboration with three local sub-contractors: the Christian Health Association of Kenya (CHAK), Mission for Essential Drugs and Supplies (MEDS), and the National Organization of Peer Educators (NOPE).

DATES OF IMPLEMENTATION

September 1, 2015 – August 31, 2020

BACKGROUND

Inadequate water and sanitation remain among the biggest threats to child survival and overall development in NCC. An estimated 60-70% of Nairobi's rapidly growing population lives in informal urban settlements,¹ where they frequently experience water shortages and abysmal sanitation conditions. Only 22% of slum households have water connections, and these are strained and shared across as many as 10 dwellings in a single compound. Most informal settlement residents access water from illegal water connections, high-cost water vendors, and other sources that are often unsafe and easily contaminated.

Poor sanitation also contributes to significant and omnipresent diarrhea morbidity, with 58% of diarrhea cases associated with poor WASH.² Residents frequently lack household access to toilets and regularly use poor quality, pay-per-use communal toilets. They also resort to using “flying toilets” (the practice of throwing human waste onto rooftops or into open footpaths or sewers). Households using flying toilets are associated with a five-fold higher incidence of recent diarrhea than those using toilets in NCC slums.³ The lack of clean water and sanitation contributes to frequent cholera and other diarrheal-borne disease outbreaks. It is a leading contributor to Kenya's slow decline in child mortality through diarrheal disease, malnutrition, and acute respiratory infections.⁴

Nairobi's WASH challenges will persist, as Nairobi's population is growing at the highest rate of any city in Sub-Saharan Africa, thanks to rural-to-urban economic migration. The growth is straining NCC's existing water and sewer infrastructure and efforts to improve it. Besides, the Kenyan government policy prohibits developing infrastructure in informal settlements, preventing improvements and investment. Without access to safe and improved WASH infrastructure and services, NCC residents will suffer from reduced life spans, increased infectious diseases, and higher out-of-pocket health costs for illness.

TECHNICAL APPROACHES

Afya Jijini works closely with NCC to increase access to and utilization of quality WASH services as a core project approach to reducing child mortality. The project uses a dual approach that practically addresses both the supply and demand for safe WASH services in target health care facilities and informal settlements. At the county level, the project helps public health managers navigate and coordinate across sectors to improve awareness of WASH efforts and to mobilize and deploy resources more effectively. It also allows the NCC adapt national WASH-related technical strategies and guidelines to Nairobi's unique urban environment and improve the regulatory/policy environment for WASH issues. *Afya Jijini* ensures that all target NCC health facilities possess clean and functional water and sanitation services that reduce infection spread and attract clients to their facilities. At the community level, *Afya Jijini* works with local non-governmental organizations (NGOs) and community health volunteers (CHVs) to promote the adoption of positive individual, household, and community WASH behaviors that reduce diarrheal disease

¹ Kamau, N. and Njiru, H. WASH Situation in Nairobi's urban slums. *Journal of Health Care for the Poor and Under-Served*, Feb. 2018.

² World Health Organization. *Preventing diarrhea through better water, sanitation and hygiene: Exposures and impacts in low- and middle-income countries*. Geneva: World Health Organization. 2014.

³ Winter, S. et al. *Exploring the complex relationship between women's sanitation practices and household diarrhea in the slums of Nairobi: A cross-sectional study*. *BMC Infectious Diseases*, March 2019.

⁴ Kamau, N. and Njiru, H. WASH Situation in Nairobi's urban slums. *Journal of Health Care for the Poor and Under-Served*, Feb. 2018.

and increase demand for services. These efforts help to improve the overall local ownership and sustainability of WASH interventions, in line with the Journey to Self-Reliance (J2SR).

COUNTY COORDINATION AND OVERSIGHT: *Afya Jijini* revitalized the County WASH Coordination Forum as a critical platform for WASH management and organization. The WASH coordination forum now regularly convenes multi-sectorial partners – including the USAID KiWASH program, UNICEF/Concern Worldwide, Catholic Relief Services, AMREF, Sanergy, and Child Fund – enabling NCC to capture their inputs into the overall work plan and improve collaboration on WASH efforts. The project also introduced two new WASH technical working groups (TWGs), urban sanitation and school health/WASH, at the request of the county, which provides essential technical leadership and coordination in these areas. The TWGs were instrumental in helping to advocate for and draft the first-ever county-level environment and sanitation bill. The bill establishes the institutional framework for environmental health and sanitation, detailing citizen rights and county responsibilities in regulating and providing a clean and healthy environment (including sanitation licensing and regulation). At the sub-county level, *Afya Jijini* worked with NCC to identify, orient, and support sub-county WASH focal persons, who are responsible for oversight and WASH capacity strengthening for health facilities and catchment communities. Since their introduction, WASH activities have scaled-up in their respective areas, and there is improved sub-county level coordination with public health officers and non-WASH unit heads.

FACILITY-LEVEL WASH STRENGTHENING: *Afya Jijini* works with sub-counties to assess and monitor health facilities to ensure they are equipped with clean running water, safe and accessible latrines, handwashing stations, and proper waste segregation and disposal. This is a persistent challenge in Kenyan health facilities, with nearly a third of facilities facing water shortages and only 77% of health facilities offering point-of-care handwashing.⁵ The project provides training, on-the-job mentorship, continuing medical education on infection prevention and control (IPC), and health care waste management while working with sub-counties. It also provides job aids and social and behavior change communication materials to reinforce critical handwashing and waste segregation practices for health care workers (HCWs). The project works with sub-counties and hospitals to develop and execute health care waste management plans – which include waste referral to other sites – and to monitor their implementation. Health care waste is a severe and persistent challenge in Kenya, with only half of sites safely disposing of medical waste, and only a third of health facilities having essential health care waste management.⁶ As a result, 30 *Afya Jijini*-supported facilities are now advocating and budgeting for health care waste management within their annual work plan. *Afya Jijini* collaborates with Sub-County Health Management Teams (SCHMTs) to conduct joint supportive supervision visits reviewing IPC and health care waste management as part of other ongoing supportive supervision. At minimum, supervision teams do a quarterly visual audit to ensure there is: 1. Proper medical waste segregation and disposal, 2. Clean and functional latrines, 3. Running water, and 4. Handwashing stations with soap.

ORAL REHYDRATION THERAPY (ORT) CORNERS: *Afya Jijini* scaled up facility-based ORT corners as a proven, cost-effective approach for reducing diarrhea-related mortality among children.⁷ Children with diarrhea are quickly triaged to these corners at health facilities, where they are treated with ORT while their caregiver receives education on how to manage diarrhea episodes. With ORT corner

⁵ WHO and UNICEF. *WASH in health care facilities: Global Baseline Report 2019*. 2019.

⁶ *Ibid.*

⁷ Fontaine O, Garner P, Bhan M. *Oral rehydration therapy: the simple solution for saving lives*. *BMJ*. 2007.

treatment, children who may have spent days in the hospital are released within a matter of hours. *Afya Jijini* worked with NCC to identify and train lay WASH champions who run the 29 ORT corners. The WASH Champions also provide health education to parents and caregivers of children who visit the ORT corners, conducting handwashing demonstrations, providing home point-of-use water treatment tabs, mixing and administering oral rehydration solutions, and monitoring WASH activities at the facility daily. The ORT corners and health facilities have treated more than 129,786 children for diarrhea since the project's inception.

URBAN COMMUNITY-LED TOTAL SANITATION (UCLTS): *Afya Jijini* introduced UCLTS as a transformative approach to behavior change around sanitation in NCC. *Afya Jijini* modified the traditionally rural CLTS approach to be more appropriate for an urban environment, where there is limited social solidarity and landlords play a significant role in influencing sanitation. UCLTS is currently implemented in 39 urban neighborhoods within informal settlements. *Afya Jijini* developed an innovative public-private partnership for UCLTS with a private company, Sanergy, to complement UCLTS behavior change.

CLTS is a participatory approach that mobilizes communities to improve hygiene and sanitation through the elimination of open defecation. Communities are inspired to end open defecation through the UCLTS methodology, which encourages exceptional pride in one's community and collective social awakening on the risks of open defecation and poor sanitation.

Using a market-based approach, Sanergy provides franchised Fresh Life toilets that offer high quality, clean, pay-per-use latrines for communal use. Their sustainable sanitation cycle engages local entrepreneurs in urban slums to collect the waste that is then processed into fertilizer for smallholder farmers. Through the partnership, *Afya*

Jijini UCLTS villages create demand for sanitation services while Sanergy supplies the services. As a result, 166 new Sanergy Fresh Life toilets have been constructed in triggered villages.

Sub-county WASH focal persons participate and observe pre-triggering and post-triggering field visits, which measure progress toward open defecation free (ODF) status in target villages. The project is also conducting in-depth sanitation assessments to additionally measure outcomes from UCLTS and make recommendations for future scale-up and adaptation. To date, two villages have claimed ODF status. However, it is hard to achieve ODF in informal settlements due to land tenure, frequent migration, population dynamics, and difficulty in tracking “flying toilets.” As such, the project is measuring reduced open defecation and increased cleanliness.

COMMUNITY WASH INTERVENTIONS: *Afya Jijini* implements several additional community-level WASH interventions that increase access to clean water and improve positive individual WASH behaviors. *Afya Jijini* ensures that households in target villages can access potable water through supporting sub-county-led water quality checks and the provision of chlorine powder to sub-county health offices for distribution. In addition, the program procures and distributes water disinfection agent *Aquatabs* at public water points, to households in targeted villages, and to parents who bring children to ORT corners for diarrhea treatment.

Afya Jijini also coordinates with other organizations implementing WASH activities to develop culturally-appropriate, evidence-based messaging to ensure that residents have easy access to accurate information about sanitation and hygiene. Messaging emphasizes handwashing with soap at critical times, safe disposal of excreta, proper food hygiene, and safe household water storage and treatment. The program holds

community dialogue forums to engage communities in promoting sanitation and hygiene and collaborates with SCHMTs to sponsor cleanup activities. Additionally, *Afya Jijini* identifies and trains CHVs who function as WASH champions who enforce proper sanitation, link community members to health facilities when in need of medical support, and support WASH activities in early childhood development (ECD)/daycare centers. CHVs worked with triggered and non-triggered UCLTS villages to hold Community Clean-Up/Action Days, where households clean their plots and the areas surrounding their compounds. CHVs provide handwashing and water treatment demonstrations as well as messaging. CHVs also work with area daycares and ECDs within informal settlements to provide WASH education, handwashing stations, and demonstrations on handwashing and sanitary food preparation.

COUNTY AND SUB-COUNTY HEALTH SYSTEM STRENGTHENING

Afya Jijini strengthens the overall county health system to improve the availability and quality of WASH services as well as advance Kenya's J2SR. The project coaches sub-county WASH focal persons to track, monitor, and advocate for WASH commodities, which are often viewed as lower priority items compared to essential medicines. These include waste segregation supplies (bins, bin liners), sanitation items (soap, handwashing stations), and water treatment commodities. The project also strengthens WASH data collection, analysis, and use, providing training and reporting tools/registers as well as follow-up mentorship to sub-county WASH focal persons, Health Record Information Officers, and community health assistants. As a result, WASH-related data and reporting has increased within DHIS2 and the online UCLTS portal. The project is now working on improving data sharing across WASH partners and actors at the sub-county level and using it for program improvement.

RESULTS

- Achieved a 6% reduction in open defecation in targeted informal settlements.
- Triggered 39 villages reaching more than 700,000 people, who have constructed 486 new communal sanitation facilities with in-kind funding and volunteer labor.
- Villages participating in UCLTs are seeing reductions in cholera disease outbreaks⁸ and are increasing their social cohesion and ownership of their neighborhoods.
- Scaled up ORT corners to 29 facilities that have helped treat more than 129,786 children under five treated with ORT.
- More than 26.4 million liters of water treated with point-of-use water treatment products to improve household water quality for 57,600 households.
- Trained more than 600 HCWs and CHVs in WASH.
- J2SR: Launched two new WASH-related TWGs, increasing overall WASH coordination and strengthening. Engaged local community-based organizations in WASH-related activities.

⁸ *Afya Jijini* data shows that 80% of cholera cases at NCC health facilities are coming from outside triggered villages.

LESSONS LEARNED

Afya Jijini is continually learning and improving its impact through robust Collaborate-Learn-Adapt approaches. Thus far, the program has identified several lessons learned for WASH programming in NCC:

- The urban WASH environment requires distinct technical strategies and adapted approaches to be successful. The regulatory environment, intense population pressure, and lack of social networks are just a few factors that complicate traditionally rural-focused WASH implementation.
- It is critical to ensure the supply of WASH services before or during demand creation. Promoting behavior change at the individual, community, or household level without the infrastructure to use it creates frustration and wasted efforts. However, there is a shortage of supply-side partners, requiring increased funding and public-private partnerships to be successful.
- The coordination of stakeholders is critical. WASH works across many sectors, and close collaboration, sharing, and joint planning are essential to connecting demand and supply with limited resources.
- CLTS can be adapted successfully for an urban setting and create measurable behavior change in urban slum environments thought to be too challenging in which to work.

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