

Expanding Coverage and Promoting Sustainability of WASH Infrastructure and Hygiene Investments in Madagascar

Background

To meet demand for access to clean water and hygienic sanitation options in a country severely lacking in both, some USAID-funded water, sanitation, and hygiene (WASH) projects in Madagascar have been exploring public-private solutions to increase access to clean water and sanitation facilities. These include newly constructed or rehabilitated fee-for-use public sanitation WASH blocks and water kiosks, provided in strategic locations in peri-urban areas with assistance from Water and Sanitation for the Urban Poor (WSUP) and supplemental assistance from WASHplus. The facilities offer access to hygienic toilets, public showers, and in some cases clean water and laundry facilities to benefit nearby residents who do not have private latrines as well as passers-by in public places such as bus stations and markets. In a country where 54 percent of the population has no access to improved water sources and 85 percent lack hygienic sanitation, the provision of these facilities is a welcome attempt to address an urgent need. Coupled with investment in infrastructure, WASHplus also worked with WSUP to promote healthy hygiene and sanitation behaviors in urban and peri-urban households and institutions through its sanitation marketing approach and WASH-Everywhere* strategy.

This brief discusses how the WASHplus and WSUP partnership in Madagascar increased sustainable access to safe water and sanitation services in ways that promoted environmental awareness, generated employment and income for communities, changed behavior, and built the management and financial capacity of local associations.

Building and Financing WASH Blocks

WSUP activities took place in two peri-urban communes, Bemasoandro and Andranonahotra, west of the capital, Antananarivo, in central Madagascar. Both communes received support under the auspices of USAID's African



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*WASH-Everywhere, a strategy initiated in Madagascar under WASHplus's predecessor the USAID Hygiene Improvement Project, is a commune-wide approach to sanitation and hygiene improvement where all local institutions and facilities agree to meet minimum hygiene standards. These locations may include schools, churches, markets, transport rest stops, food stands and tourist attractions.



Murals painted on school walls illustrate critical times for hand washing as well as other key hygiene practices promoted in Madagascar as part of the WASH-Everywhere approach.

Cities for the Future (ACF) project. WSUP was charged with increasing the sustainability of 21 water kiosks and three WASH blocks constructed under the ACF program. WASHplus provided additional funding to WSUP to construct eight new water kiosks over a six-month period in 2012. The WASH blocks and water kiosks are brightly colored, well maintained, and inviting to users. Several local jobs were created to operate each of the facilities including caretakers for cleaning and maintenance of the facilities and an attendant to collect user fees and record the number of users each day. The blocks and kiosks also have the potential to generate additional revenue for entrepreneurs who collect water for other households for a fee and for women who wash clothes for other households using the laundry facilities. Employment opportunities are likely to increase as environmentally sound sludge removal practices are adopted—an effort that WASHplus is supporting through a pilot activity initiated in 2013 with the Practica Foundation, a Dutch NGO working in Madagascar.

Monthly user fees are set by Water User Associations (WUA), community-based organizations (CBOs) that manage each site. Each fokontany (village) has a representative on the WUA. Under this public-private model, WUAs provide day-to-day management of one or more blocks or kiosks, with oversight provided by the commune's WASH Committee (a subgroup of its Development Committee or DC), comprising local authorities and community residents.

The fees for services (water, toilet, laundry) range from US \$.01 for 20 liters of water to US \$.02–.05 for toilet use. Incomes are regularly deposited in microfinance accounts. In most cases, the monthly revenue from user fees covers fixed and variable

running costs (including the water bill, salaries, cleaning products, office supplies, paper, and maintenance), but revenue varies from site to site depending on the number of daily users. Replacement costs are still to be added to the cost strategy.

As previously detailed, the main aim of the WASHplus/WSUP collaboration was to ensure the sustainability of the existing WASH blocks and new kiosks. To achieve this, members of the DC from each commune were encouraged to take the lead in implementing the project. This included leading the preparatory phase (comprising land identification, confirmation of needs, land tenure process, a social and technical feasibility study, and environmental impact assessment); directing the operation phase; and monitoring usage in key areas.

Cost sharing and creative financing helped the project achieve greater coverage than initially expected. Though the initial plan was to construct five new water kiosks, eight were built owing to the injection of public funds from the communes. Andranonahoatra Commune agreed to mobilize extension surtaxes (*fonds de travaux*) to contribute to the connection costs, which represented major savings for the project. In Bemasoandro, the WUA used a surplus balance in its account (income from existing water kiosks) to purchase some of the connection pipes and equipment for one of the water kiosks, representing a further saving to project costs. In addition, JIRAMA agreed to let the project purchase construction materials without passing through the complex procurement process, leading to further costs savings. These sources of leveraging worked so well that WSUP plans to replicate this as a best practice in other projects and in other ACF countries.

Capacity Building

To support project efforts WASHplus provided technical and capacity building assistance to WSUP, including an assessment of WASH sanitation blocks to identify constraints and corrective actions for the management of the facilities. The initial assessment concluded that support was especially needed in connection to environmental and sustainability issues. Given the high demand for WASH block services, pits are filling up more quickly than expected. Pit emptying, sludge transportation, and treatment have been identified as issues that some of the WASH blocks must address in the near future.

Also in relation to sustainability, customers must continue to be motivated to abide by existing operational rules, and the management structures put in place must continue to provide the appropriate maintenance and oversight that will enable these blocks to continue to attract and retain customers and become financially viable. Therefore, building management capacity of the various stakeholders was critical to both the current and future sustainability of the facilities. WSUP convened meetings with WUAs and others involved in facility management—fokontany and municipality representatives, WASH committees, DCs, other CBOs, JIRAMA—to discuss usage levels vs. original forecasts, project planning, financial management, environmental mitigation, daily operations, and users' level of satisfaction to identify shortcomings and to brainstorm how to take corrective action.

Leading a Community to Healthier Habits



Claudine is an active woman and a true pillar of her community. She is the only woman, among seven men, with a seat on the development committee of Andranonahoatra, a densely populated commune of Madagascar's capital. The committee gathers twice a year to decide on municipal projects. She was also recently elected to chair the WASH Committee, one of the DC's subcommittees. Speaking of her reasons for involvement in the WASH group, which was established under the WSUP project, Claudine explains, "My neighborhood is poor, our living environment is dirty; we do not have enough water."

The WASH committee oversees three associations, which together are responsible for four main activities: encouraging people in the area to adopt three key WASH messages; facilitating the production, sale, and payment of sanitation slabs; organizing the collection of solid waste; and managing 12 water kiosks. The first of these important tasks is carried out by the Valisoa Association of which Claudine is a member. She is also a mother of two, married to a military officer, and the owner of a taxi business. Women like Claudine who are firmly based in their community, and who have strong convictions and leadership skills, are indispensable in the sustainable development process.

"The laundry facility is very well used," Claudine says of her local WASH block. "It helps women generate income. Many of them are washing clothes for a living." What about the hand washing or latrine use? "We have sold over 350 slabs, all produced by local cement producers." What is her marketing secret? "We first target people with higher living standards and better education levels. They are easier to convince," she says. "I don't know much about marketing," she admits, "but I do know what works in our community."

Once the facilities and management structures were in place, WSUP's and WASHplus's role shifted to supporting the sustainability and continuity of the facilities and their impact. Key to this effort was working with the communes to develop and implement exit strategies once WSUP/WASHplus support concluded. Activities included: putting in place an efficient and effective communication system; strengthening the control and monitoring system and improving the management of infrastructure; exchanging and sharing best practices among stakeholders; advocating for effective municipal authorities (good local governance); and consolidating institutions (mainly WUAs and DCs) to enable sustainable development and participative ways of working.

Sanitation Marketing

Under its mandate to improve household-level sanitation facilities and practices, WSUP used a community-based approach to promote the production and sale of sanitary latrine slabs known as SanPlats. WASHplus provided technical and financial support to this sanitation marketing effort to raise demand, improve supply, and facilitate financing so that sanitation purchases could be made without subsidy. Training sessions were organized with the help of WaterAid to examine the effectiveness of the supply chain, field agents, and communication materials. Private cement entrepreneurs were trained in the production of SanPlats, and CBO-managed payment facilities were established to provide finance options.

WSUP supported the Valisoa Association in Andranonahoatra to encourage people to adopt the three key messages of hand washing with soap, proper use of a hygienic toilet, and treating drinking water. Working closely together with the WUA that manages the public WASH blocks, the association employed 11 field agents and promoted WASH messages by visiting homes, schools, markets, church gatherings, and community meetings to show people how they can adopt more hygienic habits and upgrade their latrines. Over the course of a year, the field agents refined their promotion techniques and door-to-door efforts improved sales. Households needed to be visited an average of three times before a SanPlat purchase was concluded. To further trigger demand at the household level, a SanPlat movie was shown in the communes and a latrine catalogue was developed for the door-to-door sales campaign.

The association also created an incremental payment mechanism that enabled consumers to purchase a slab in three installments of 5,000 Ariary (US\$2.50) each. While this is 3,000 Ariary more than the over the counter purchase price in a shop, this plan makes the investment in a hygienic and safe latrine easier and more affordable to poor households by spreading the cost over a longer period. Three hundred SanPlat slabs were sold during the intervention period.

Accomplishments by the Numbers

- Sustainable access to two WASH blocks benefitted 420 residents.
- The construction of eight new water kiosks improved access to drinking water for 19,419 people.
- The sale of 300 SanPlat slabs improved access to sanitation facilities for 1,500 people.
- The establishment of nine new WASH-Friendly Institutions (seven schools and two churches) improved access to drinking water for 11,225 people (including 326 teachers and staff and 7,198 pupils at school level and 3,691 attendees at church level).
- The same 11,225 people also have improved access to sanitation facilities.

WASH-Friendly Institutions

Another key element of the WASH-Everywhere approach that WASHplus asked WSUP to support was the “WASH-Friendly” approach, which emphasizes greater access to WASH infrastructure in schools and public spaces to promote the practice of safe sanitation and hygiene habits among children and the general public. WSUP targeted elementary schools and churches with this approach. Nine institutions (seven schools and two churches) were selected to participate in the rehabilitation of their WASH infrastructure. The installation of hand washing stations, taps, toilets, doors, and painting all improved the function and appearance of the facilities.

Frescoes painted on the school walls illustrated the three key WASH messages, which were further reinforced by mobile puppet shows. School staff, church leaders, and community decision makers received capacity building training to advocate for sustainable practices and develop action and implementation plans. All three of the elements discussed above—WASH blocks, sanitation marketing, and WASH-Friendly institutions—contributed to improved hygiene practices promoted under the umbrella of the WASH-Everywhere strategy that operates in conjunction with Madagascar’s national Diorano-WASH platform.

Lessons Learned

Some of the key lessons learned through this WSUP and WASHplus experience that can be applied to future WASH programming in Madagascar and elsewhere include:

- The choice of location of WASH blocks and kiosks proved critical to ensure a high level of use. Consumers value convenience over perceived health risks. If a facility is further from a household than an alternative source of

water, such as wells (even if untreated) or an open field for defecation, customers will be less likely to use and pay for the services offered at WASH blocks/water kiosks. Other factors that affect the level of water consumption are water pressure and the availability of other alternatives, such as water vendors or free public tap stands in the vicinity of the service providers.

- Customers of water kiosks tend to reduce their consumption when their income is low, and the average daily water consumption per capita of the two communes is lower than 20 liters/capita/day. These factors threaten the financial viability of certain blocks/kiosks, particularly in areas where income is highly dependent on seasonal agriculture.
- The importance of data collection cannot be overemphasized. Accurate financial data collected by the WUAs on the use of facilities is critical to develop business plans and shed light on the viability and risk associated with managing these facilities. More analysis could be done to guide future planning, increase understanding of customer needs, and paint a clearer picture of operating revenue versus cost.
- Engagement of local leaders: when approval or formal decisions relating to development activities require a decision from the Municipal Council, or members of the council express interest in WUA and DC activities, members should be encouraged to attend meetings and workshops regularly, as was the case in Andranonahoatra. This ensured the aims and needs of the stakeholders as well as possible solutions were effectively communicated to key decision makers.
- Future capacity building programs should address the following issues: ensure that projects identify local stakeholders’ needs for capacity building more effectively, improve clarity of management tools and their importance for the transparent management of infrastructure, and amend contracts and agreements to reflect changes.
- The household visit is proving to be an effective strategy for SanPlat promotion. When household sanitation is viewed as a low priority, the combined approach of media and communication messages alongside household visits has improved sales. WSUP and the promoters needed to consider how to get households to prioritize investments in sanitation when faced with competing priorities and stretched household incomes.
- Product diversification is needed under sanitation marketing promotion. There is an opportunity to diversify the range of products to reflect the diverse needs and demands of consumers and enable households to progress up the sanitation ladder over time.

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