



Water, Sanitation, Hygiene and Community Health:

MAHEFA's comprehensive WASH approach for ensuring good health practices



Madagascar Community-Based Integrated Health Program (CBIHP), locally known as MAHEFA, was a five-year (2011-2016), USAID-funded community health program that took place across six remote regions in north and north-west Madagascar (Menabe, SAVA, DIANA, Sofia, Melaky, and Boeny). The program was implemented by JSI Research & Training Institute, Inc. (JSI), with sub-recipients Transaid and The Manoff Group, and was carried out in close collaboration with the Ministry of Public Health, the Ministry of Water, Sanitation and Hygiene, and the Ministry of Youth and Sport. Over the course of the program, a total of 6,052 community health volunteers (CHVs) were trained, equipped, and supervised to provide basic health services in the areas of maternal, newborn, and child health; family planning and reproductive health, including sexually transmitted infections; water, sanitation, and hygiene; nutrition; and malaria treatment and prevention at the community level. The CHVs were selected by their own communities, supervised by heads of basic health centers, and provided services based on their scope of work as outlined in the National Community Health Policy. Their work and the work of other community actors involved with the MAHEFA program was entirely on a voluntary basis.

This brief is included in a series of fifteen MAHEFA technical briefs that share and highlight selected strategic approaches, innovations, results, and lessons learned from the program. Technical brief topics include *Behavior Change Empowerment, Community Radio Listening Groups, Community Score Card Approach, Chlorhexidine 7.1%/ Misoprostol, Champion Communes Approach, Community Health Volunteer Mobility, Emergency Transport Systems, Malaria, Community Health Volunteer Motivation, Family Planning & Youth, WASH, eBox, Community Health Financing Scheme, Information Systems for Community Health and NGO Capacity Building.*

Background

Potable water and other water, sanitation and hygiene (WASH) objectives are among the most intractable challenges facing low- and middle-income countries. Safe and readily available water is important for public health, whether it is used for drinking, domestic use, food production or recreational purposes. With 21 percent of the world's population lacking access to safe drinking water, and 36 percent not having use of a toilet¹, water supply and sanitation coverage pose serious problems. Where water is not readily available, people may decide handwashing is not a priority, thereby adding to the likelihood of diarrhea and other diseases. Globally, an estimated 842,000 people die each year from diarrhea as a result of unsafe drinking and/or poor sanitation and hygiene. Diarrhea, however, is largely preventable, and many of the deaths of 361,000 children under 5 years (CU5) each year could be avoided if these risk factors were addressed².

MAHEFA Context

Poor access to safe water and sanitation services in Madagascar has made it nearly impossible for the country to reach its health goals. Currently, Madagascar is ranked fourth on the list of African countries with the least access to safe water³. Open defecation is practiced widely and sanitation remains a major challenge. National figures reported by the Joint Monitoring Programme (2013) indicate that as many as 54 percent of the population lacks access to improved drinking water sources, while 85 percent of the population does not have access to improved sanitation to hygienically manage human waste. MAHEFA's overall goal is to conduct health promotion activities and ensure delivery of basic health services at the community level through community health volunteers (CHVs) and other health actors. Water, sanitation and hygiene activities are implemented to ensure that community members have access to clean drinking water and practice good sanitation and hygiene.

The MAHEFA Approach

In its entire operation zone in six regions, the MAHEFA program used a combination of three main methods to improve water, sanitation and hygiene: 1) implementing community-led total sanitation approaches (CLTS) aiming to help communities become Open Defecation Free (ODF), 2) increasing access to drinking water supply, and 3) promoting community hygiene actions. The comprehensive WASH approach and key activities implemented by MAHEFA is presented in Figure 1.

Key Activities

1. Community-led total sanitation. MAHEFA used the CLTS (community-led total sanitation) approach revised by the Diorano working group in Madagascar under the leadership of the Ministry of Water, Sanitation and Hygiene (MOWSH). This approach aims

1. Progress on Sanitation and Drinking Water – 2013 Update. World Health Organization and UNICEF Joint Monitoring Programme (“JMP”); WHO, Geneva 2013.
2. GLOBAL HEALTH RISKS: Mortality and burden of disease attributable to selected major risks, World Health Organization, 2009.
3. A Snapshot of Drinking Water and Sanitation in Africa – 2012 Update: WHO/UNICEF Joint Monitoring Programme for Water Supply and Sanitation





to trigger interest and commitment among local authorities and community members to end open defecation in a sustainable, community-owned, and cost-effective way (see Figure 1 for more details). In order to promote good WASH practices, the MAHEFA program put in place the following activities:

Figure 1. MAHEFA's Comprehensive WASH Approach



- a) Trained the following community actors on CLTS in order for them to promote healthy WASH practices among community members using the MOWSH training curriculum. In addition to the training on CLTS, the community actors also received specific training and job aids based on their role.
- Community natural leaders (NL) were mobilized the community to build and use latrines and promote cleanliness.
- Local masons made latrine *dalles sanplat* (concrete slabs or DSP) for sale at the community level.
- Members of the Water Users, Sanitation and Hygiene Associations (WUSHA) promoted good WASH practices, including water treatment.
- Care Group households that adopted good WASH practices themselves were responsible for convincing at least three other households to do the same.
- CHVs provided counseling and conducted education sessions as part of their health services delivery.
- Listening group facilitators conducted weekly sessions to listen to and discuss specially-produced radio programs on health topics, including WASH.

Box 1. Five Stages of Community-led Total Sanitation (CLTS)*

- 1) Pre-triggering preparation work and announcement (“triggering”);
- 2) Triggering with CLTS techniques and developing an action plan for latrine construction;
- 3) Post-triggering and follow-up of latrine construction and usage;
- 4) Self-declaration of ODF when all households in a village are using latrines; and
- 5) Official ODF status after evaluation and certification by the Regional WASH Directorate that the village has been ODF for at least 6 months.

*Source: Ministry of Water, Sanitation and Hygiene.

- b) Provided monitoring support to make sure that the above-mentioned actors carry out and report their activities on a monthly basis. The onsite supervisions for members of the WUWSA, natural leaders and local masons were done jointly with the technicians from the Regional Directorate for Water, Sanitation and Hygiene (*Direction Régionale de l’Eau, de l’Assainissement et de l’Hygiène* or DREAH) while the onsite supervisions for all the other groups were jointly conducted by MAHEFA team, the basic health centers (*centres de santé de base* or CSB) heads, and members of the District Level Management Team (*Équipe Management du District* or EMAD) of the MOH.

2. Access to drinking water. Through partnerships with the Regional Directorate for Water, Hygiene and Sanitation, MAHEFA conducted the following activities.

- a) Identified sites for construction of wells and water kiosks. Using the region master plan for drinking water construction, MAHEFA’s water engineers and the technicians from DREAH made site visits to carry out a final site evaluation, conduct an environmental review using USAID’s form, and discuss with the community leaders their roles and responsibilities in the construction and management of the wells or water kiosks.
- b) Selected and made contract with construction companies and engineering firms for supervising the construction. Local communities provided unskilled labor and local materials. The regional water engineers from MAHEFA and DREAH provided the overall



supervision of the construction.

- c) Assisted communities establish the WUSHA using the MOWSH's curriculum. The MAHEFA program provided training on how to : 1) manage water use; 2) maintain the functionality of the wells through regular maintenance and repairs; and 3) promote key WASH messages in the community including moving the community towards, or maintaining, ODF status.
- d) Conducted water quality tests. MAHEFA contracted the Institute Pasteur Madagascar (IPM), the only group who could perform bacteria tests for drinking water. The water from all wells and kiosks under the program was sent to the IPM lab at the capital within 24 hours. The results of the tests were shared with the community so they could take actions based on the IPM's recommendations.
- e) Made a final and official transfer of management responsibilities to the *commune*, or the smallest territorial division as defined for administrative purposes. Based on the MOWSH guidelines, the *communes* would become responsible for the wells and kiosks built in their *communes*. At the end of the program, MAHEFA conducted a final transfer of management responsibilities for all wells and kiosks constructed under the program to the *communes*.

3. Community hygiene actions. WASH messages were provided through many different communication channels. The program used mass media outlets like radio and television announcements to reach different audiences. Community actors, such as Care Group households, used individual education sessions and radio listening group meetings to communicate WASH messages with different populations. CHVs supported various activities during the health days and conducted individual counseling during the consultations in their health hut and home visits. These activities were conducted and reported to the CSB and the program on a monthly basis.

Results

MAHEFA found that even in the context of extremely poor socio-economic conditions in its program areas, it is possible to improve sanitation without subsidizing households. By December 2015, a total of 142,456 WASH community actors were trained, equipped and supported to regularly promote good WASH practices in their communities. These actors consisted of 1,556 NLs, 684 trained local masons, 3,692 WUHSA members, 6,052 CHVs, and 130,472 Care Group households. Data from the last two years has shown that every quarter, approximately 900,000 people were reached with key WASH messages through several communication channels.

The work of these community actors has resulted in a substantial increase in the number of improved latrines built and utilized in program areas (Figure 2). At the end of the program, 684 MAHEFA trained local masons produced a total of 17,494 DSP in the six regions. There was similar progress in the number of MAHEFA communities that were ODF certified: ODF communities rose from 14 at the end of FY2013 to 472 at the end of February 2016.

Figure 2. Improved latrines built in MAHEFA regions by year

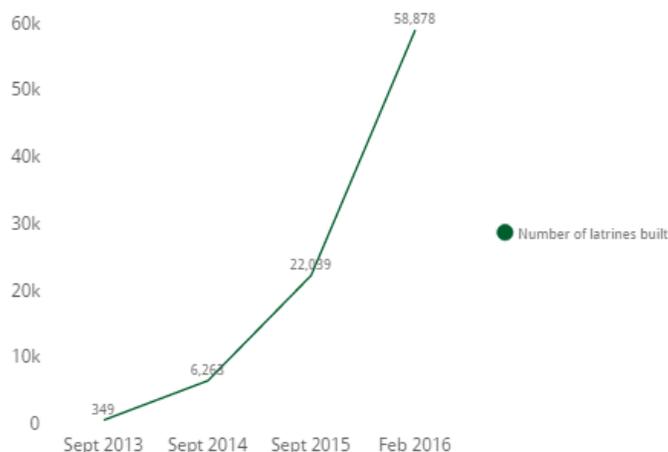
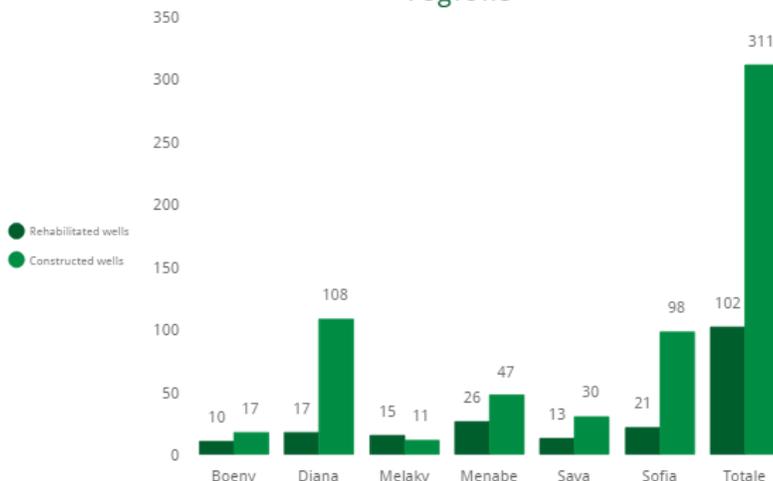


Figure 3. Wells and water kiosks constructed or rehabilitated in MAHEFA regions





MAHEFA built or rehabilitated a total of 413 wells in the six program regions (Figure 3). Cumulatively, 103,250 people benefited from the wells provided through MAHEFA.

Challenges

Implementation in areas with minimal prior exposure to WASH interventions. The populations in the program areas had not participated in any WASH programs before MAHEFA; therefore it took time for people to understand the link between WASH and health.

Commitment of local leaders. Some local leaders did not take full responsibility in managing the wells and water kiosks and consistently promoting good WASH practices in their communities.

Late engagement of MOWSH. For the first three years of the program, MAHEFA was officially restricted by the US government from working with the Government of Madagascar, including the MOWSH. The late involvement of the MOWSH resulted in delays in construction activities in some sites. Similarly, the evaluation and certification of ODF status in the program areas was late because only the Regional WASH Directorate could perform the evaluation and provide ODF certification.

Short construction season due to climate conditions. Many MAHEFA districts suffer serious access issues during the rainy season because roads are often washed out. The risk of flooding prevents wells and latrines from being constructed, rehabilitated, and/or ODF certified during these periods.

Lessons Learned and Recommendations

Apply complementary WASH approaches. Using a combination of approaches reinforces the importance of WASH concepts through various channels and increases the likelihood of success and sustainability. Examples of complementary WASH approaches implemented through MAHEFA include product availability through water supply (wells and water kiosks) and molds for latrine slab construction, building community knowledge and skills through behavior change empowerment activities and CLTS, and setting feasible goals via the ODF certification process.

Advocate for coordination at the national level. To stimulate effective adoption and translation of key WASH messages into actions, promotion of community understanding of the links between WASH actions themselves, in particular water and latrine use, and health, needs to be reinforced from the highest levels. Integrating the water supply component directly in the community health program facilitated a close collaboration and coordination of the MOH and MOWSH, which MAHEFA was able to more fully support after the lifting of restrictions.

Support community WASH actors. In addition to ensuring support from national and regional levels, community participation and ownership of WASH activities is essential. A program should encourage and strengthen the link between the public sector and the community to reinforce integration of health and WASH concepts. The effective link will lead to the community having the commitment, skills, and tools to mobilize their families, neighbors and friends to adopt and sustain good WASH practices.

Plan for transfer of WASH activities. WASH activities should have an integrated approach in which responsibility is ultimately transferred to the communes but still require close collaboration between the communes and the MOWSH. Ongoing collaboration with the commune and MOWSH during roll-out of activities will increase the ease of transfer. In addition, holding an official handover workshop is crucial for sustainability to demonstrate that the public sector will continue supporting WUHSAs and community WASH actors through the communes in carrying out their activities.

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This document is made possible by the generous support of the American people through the United States Agency for International Development (USAID). The contents are the responsibility of JSI Research & Training Institute, Inc. and do not necessarily reflect the views of USAID or the United States government.