

Field Review of USAID's Approaches to WASH in Madagascar

Success Factors and Lessons Learned



The WASHplus project supports healthy households and communities by creating and delivering interventions that lead to improvements in access, practices, and health outcomes related to water supply, sanitation, and hygiene (WASH) and indoor air pollution (IAP). This five-year project (2010-2015), funded through USAID's Bureau for Global Health (AID-OAA-A-10-00040) and led by FHI 360 in partnership with CARE and Winrock International, uses at-scale programming as well as integrated approaches to reduce diarrheal diseases and acute respiratory infections, the two top killers of children under five years of age globally. WASHplus can integrate WASH and IAP activities into existing education, HIV/AIDS, maternal and child health and nutrition programs and build strong in-country partnerships to increase impact. In addition, WASHplus is charged with promoting innovation in the WASH and IAP sectors.

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Table of Contents

Introduction and Context	1
Highlights and Summary of Overall Conclusions	1
Summary of Conclusions by WASH Approach	2
Chapter 1. Background and Methods.....	4
Objective of the Review	4
Review Methods Used	4
Steps Undertaken in Outcome Mapping.....	4
Methodological Constraints	9
Case Studies	9
Chapter 2. Case Studies	10
Case Study 1. Sanitation without Subsidies	10
Case Study 2. Public Sanitation Services	16
Case Study 3. Boosting Markets for Sanitation.....	22
Chapter 3. Success Stories	27
Ending Open Defecation; Convincing Communities to Build Latrines	27
Leading a Community to Healthier Habits	29
Will Rural Communities Pay for Clean Water? The Answer is a Resounding “Yes.”	30
Designing and Marketing an Innovative Latrine Slab	31

Acronyms

AIM	Association Inter-Cooperation Madagascar (local partner organization)
CLTS	Community-Led Total Sanitation
DSP	Dalle SanPlat (latrine SanPlat slab made of cement)
HIP	Hygiene Improvement Project
OD	Open Defecation
ODF	Open Defecation Free
OM	Outcome Mapping
RANO-HP	Rural Access to New Opportunities for Health and Prosperity
RTI	Research Triangle Institute (International NGO)
SAF	Development department of FJKM Church (local partner organization)
VSLA	Village Savings and Loan Association
WASH	Water, Sanitation and Hygiene
WSUP	Water and Sanitation for the Urban Poor

Highlights and Summary of Conclusions

Introduction and Context

This report presents observations from the review of water, sanitation, and hygiene (WASH) approaches applied by USAID partner projects in Madagascar. In May 2012, an international consultant and a local consultant conducted this review to identify and document factors contributing to and hindering program success and sustainability, as well as key lessons learned.

Madagascar is currently facing many challenges, especially in reaching its health goals. This is, among other factors, due to poor access to safe water and sanitation services in the country. National figures reported by the Joint Monitoring Programme indicate as many as 54 percent of the population lacks access to improved water sources, while 85 percent does not have access to improved sanitation permitting to hygienically manage human waste¹.

Since the previous government was overthrown in May 2009, no internationally recognized government in Madagascar has been in place. These political problems sparked the withdrawal of many national and international support mechanisms for the health sector. In addition, most international donor organizations restricted their funding and their interaction with national government structures. The need for private sector and private citizen involvement to boost the health sector became even more urgent.

USAID's response to Madagascar's health challenges is to work with partners to implement various health and WASH programs. In most programs, local authorities, health facilitators, private citizens, and the private sector are mobilized to develop and implement low-cost, sustainable approaches to improve much needed access to water, sanitation, and hygiene.

Highlights and Summary of Overall Conclusions

The four USAID-supported approaches to improve water and sanitation without major subsidies—community-led total sanitation (CLTS), public WASH blocks, village savings and loan associations, and sanitation marketing—are innovative in the Madagascar context. The review team observed numerous examples of how these WASH approaches, including the infrastructure, are operating cost-effectively and sustainably. Highlights include the installation of many new latrines constructed by low-income rural households without subsidy in Santénet and RANO-HP (Rural Access to New Opportunities for Health and Prosperity) communes in central, east, and southeast Madagascar. As a result of these investments, several villages are now open defecation free (ODF).

In urban areas, people are starting to invest in sanitation, as observed in the densely populated Water and Sanitation for the Urban Poor (WSUP) target areas. Households have improved their latrines with hygienic sanitation slabs, or SanPlats, which local entrepreneurs produce in their neighborhood. At least 20 outlets now sell SanPlats to households, schools, and churches. These improved sanitation products are likely to remain on the market even when the projects have ended. Public WASH blocks are providing clean toilets and laundry facilities for an affordable fee. While village saving and loan associations show promise as a

¹ WHO/UNICEF Joint Monitoring Programme for Water Supply and Sanitation. 2012. Progress on Drinking Water and Sanitation. 2012 Update.

mechanism to provide financing to the poor, WASH partners are still exploring ways to use them to promote investments in latrine construction and other WASH improvements.

USAID WASH partners have put much effort into achieving these results. Intense awareness raising and continued monitoring of WASH behavior, by projects' field agents or by community agents, are important. The buy-in of local authorities is vital, too, especially in rural areas where they validate and support interventions such as CLTS.

This review has shown that even in a context of poor socio-economic conditions, it is possible to improve sanitation without subsidizing households. Though each approach contributes in its own way, it is the combination of social mobilization and sanitation marketing approaches that creates momentum for WASH improvements in urban and rural target areas. At the same time, it should be noted that effects are small- to medium-scale, and are mostly limited to project areas. These cover a good part of the country but not all.

Continued, coordinated, and harmonized WASH programming and support remains necessary to enhance the synergies among selected sites, customize WASH approaches to urban and rural contexts, and coordinate the construction or upgrading of public toilet blocks. Although coordination is taking place among USAID WASH partners, it must expand to include the wider realm of WASH implementers in Madagascar.

Summary of Conclusions by WASH Approach

More specific recommendations and lessons learned can be found in the summary of conclusions below and in the case studies.

Sanitation without subsidies through CLTS is effective in Madagascar as an approach that triggers self-motivated behavior change to end open defecation in a sustainable, community-owned, and cost-effective way when the techniques and stages are applied by the CLTS facilitators according to international guidelines, and with participation of a large part of the village population. The CLTS approach could be better coordinated between USAID partners and other WASH implementers to harmonize CLTS timing and steps, monitor the use of CLTS techniques, improve the involvement of children in the triggering stages, mainstream gender issues, and encourage the use of visual aids in monitoring.

The public WASH blocks co-financed by USAID provide crucial sanitation (toilets as well as showers in some cases) and laundry services, especially in peri-urban areas. Though each block has its own strengths and weaknesses in terms of usage, they generally generate revenue for the commune, and the operating costs are recovered by fee-paying clients. In that sense they are operated in a financially sustainable way, regardless of their management structure (private or public). Regular supervision and coaching of managers to ensure proper financial management tools are applied is an ongoing need.

Village savings and loans associations (VSLA) are operational in selected rural areas in Madagascar where poor people have limited access to finance. The VSLA group structure may be useful for the transmission of WASH and other social messages. This review had only limited contact with operational VSLAs in the southeast, and most of those established previously in the east are no longer operational. VSLA members that were interviewed had not yet invested in any WASH products or services. Loans are mostly used for income generation; in the current socio-economic environment many find it difficult (or impossible) to save and the need for cash to survive is critical.

The sanitation marketing approach is functioning in Madagascar with hygienic sanitation slabs, SanPlats, now being produced by autonomous, private entrepreneurs. Clients buy them without any subsidies. However, regular publicity campaigns and intense marketing of SanPlats through home visits appear necessary to ensure their adoption by substantial numbers of households in urban areas.

The SanPlats are too costly for rural households, as inputs such as cement and steel cable are expensive. Alternative locally available materials (wood, stone) could be used to ensure that self-constructed latrines are hygienic and washable. Local masons are consulted for their advice on latrine construction, but they are not often hired to construct a latrine.

* * *

Chapter 1. Background and Methods

Objective of the Review

The overall objective of this field and documentation review is to take a closer look at four different WASH approaches currently implemented by USAID partners in Madagascar. The review was conducted through the WASHplus project, which continues activities implemented under the C-Change project and the Hygiene Improvement Project (HIP). C-Change provided follow-on funding to bridge the gap between the two projects.

The WASH approaches or themes reviewed include:

- 1) Community Led Total Sanitation or CLTS without subsidy
- 2) Different approaches to establish and manage public toilet and WASH blocks
- 3) Use of village savings and loan associations to improve access to WASH services
- 4) Sanitation marketing to engage the private sector in production and sales of water and sanitation products

The observations from this review will serve to document the U.S. government's investment in the WASH sector in Madagascar. The review may also advise WASHplus on future directions for support to USAID/Madagascar to make it a national-level resource and capacity-building entity.

Review Methods Used

To identify the key successes and challenges of the four WASH approaches, the researcher used elements of the outcome mapping methodology.² Outcome mapping (OM) is a method for planning, monitoring, and evaluating programs, which aims to describe and map out desired behaviors that enable project success. Focusing this review on behaviors, rather than on impacts, allows for a relatively quick overview of how the particular WASH approach is working, and why—in other words: what are the factors that enable adoption of a behavior, or not. Outcome mapping is more about contribution than about attribution.

It should also be noted that this is not a project evaluation. The planning and specific execution methods of the implementing partners—the systems, staff, or strategies—have not been assessed. The review puts the approaches in the spotlight, not the projects.

Steps Undertaken in Outcome Mapping

Step 1. Courtesy visits to all involved USAID partner projects

The researcher visited four major WASH partners (RANO-HP, Santénet, WSUP, WASHplus/C-Change) to introduce the review and its objectives, as well as obtain more details about how, where, and with whom the WASH approaches are being implemented.

Step 2. Workshop with program specialists of the various USAID partner projects

During a one-day workshop, the USAID WASH partners defined and described the key desired behavior of all groups of actors involved in the WASH approaches. The different actor groups were defined, including end-users, facilitators, managers of infrastructure, and local authorities for each approach. Participants then selected two key desired behaviors, or good practices, for each actor group. This led to the development of the following overview, which formed the basis of the field

² See <http://www.outcomemapping.ca/>

review. In this chart, the actors appear in the rows, the topic area in the columns, and the desired behaviors in the cells.

Table 1: Good Practices/Behaviors of Various Actors in Selected WASH Approaches

Theme → ↓ Type of actors	Subsidies	Management of Infrastructure (including WASH Blocks)	Loan Associations	
1. End users	<ul style="list-style-type: none"> Wash hands with soap Use latrines 	<ul style="list-style-type: none"> Use the public infrastructure Pay the rates Provide feedback 	<ul style="list-style-type: none"> Deposit savings Use loans (for Watsan) 	<ul style="list-style-type: none"> Buy DSP, Sur'Eau Use products according to rules
2. Managers of infrastructure	N / A	<ul style="list-style-type: none"> Have/follow business plan Perform proper and transparent finance management 	N / A	N / A
3. Facilitators and community agents	CLTS facilitators: <ul style="list-style-type: none"> Know/apply CLTS techniques and approaches and key messages Conduct CLTS sessions and facilitate follow-up 	N / A	<ul style="list-style-type: none"> Conduct awareness raising on WASH with VSLA members 	N / A
4. Input suppliers	Local masons: <ul style="list-style-type: none"> Locate prospective customers Construct latrines 	N / A	N / A	<ul style="list-style-type: none"> Produce products of good quality Sell at affordable prices while making profit
5. Authorities, leaders	<ul style="list-style-type: none"> Support CLTS activities Be involved in monitoring 	<ul style="list-style-type: none"> Give appropriate authorizations Perform good contract management Monitor infrastructure 	<ul style="list-style-type: none"> Encourage VSLA set up Be a member/model 	<ul style="list-style-type: none"> Encourage marketing of products Use products

Step 3. Defining methods, creating interview templates, and pretesting

For each approach, the consultant designed an interview format that contained both observation questions and discussion topics. All tools were shared with WASHplus program staff. They were then tested in the field in two pilot sites. The research instrument (in French only) is available at:

<http://www.washplus.org/sites/default/files/madagascar-data2012.pdf>

The consultant also selected a few specific data collection techniques, which were applied during the field work where appropriate.

Data Collection Methods and Techniques in Action

Outcome mapping with WASH partner project staff

For each theme, actors were identified as well as key desired behaviors for each of the actor groups in a participatory way.



Group interviews and group discussions

Whenever a group of respondents was available (VSLA, community agents, CLTS facilitators), the consultants facilitated a focus group discussion.



Observations

The consultants made physical observations of infrastructure as well as tools (notebooks, records, business plans) used by actors.



Transect walks/surprise visits

The consultants, where applicable, conducted rapid transect walks to randomly visited end users and beneficiaries to assess their WASH situation, or to obtain feedback from residents about WASH blocks.

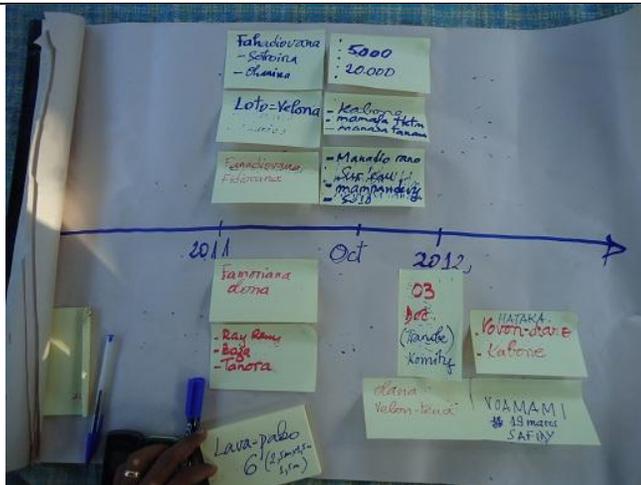


“Time lining” during focus group discussions

Participants were asked to write on sticky notes events that have occurred in their community and place them along a time line.

Once the time line is outlined with events, the groups discuss how useful they were.

This technique only worked partially as the groups were often large and consisted of mixed actors.



Step 4. Final selection of beneficiaries and development of field work schedule

During the workshop the researcher also collected details and opinions about the sites to be selected for the field work. To enable a purposeful sampling that includes information-rich cases, the criteria included:

- Project sites where more than one WASH approach is applied
- Project sites where all different actor groups are involved/available

For practical reasons of time and resource management, a third selection criteria was included:

- Project sites that are accessible within driving distance

Based on these criteria, a three-week field schedule was devised. It should be noted that respondents were not paid or compensated for their participation to avoid bias and (socially) desirable answers.

Step 5. Field work and data collection

During three and a half weeks, the research team (both the international and national consultant) visited 12 different sites, conducting 28 direct interviews (six in groups) with 78 respondents (52 percent women, 48 percent men). In addition, they conducted direct observations and 10 transect walks, and held informal chats with approximately 40 users. This includes a review of CLTS activities in seven villages, one “certified” open defecation free, five “declared,” and one that had yet to be evaluated.

Although the subjects of toilet use, personal hygiene, etc. may appear a little sensitive, the interviewed parties were cooperative. After an initial five minutes of laughter, respondents proudly showed their latrines and readily shared their experiences.

Table 2. Overview of Types of Actors Included in the Field Visits

Type of Actor	# of Data Collection Interventions	# of Respondents
End users/beneficiaries (transect walks/mini interviews)	10	40
Managers (interviews + observation) <ul style="list-style-type: none">• Private or associations	10	18
Facilitators (interviews) <ul style="list-style-type: none">• CLTS facilitators• Community agents	3 1	20 10
Input providers (interviews, observations) <ul style="list-style-type: none">• Producers/vendors of DSP• Local masons• VSLA• Microfinance	5 2 3 1	6 2 15 1
Authorities (interviews)	3	6
TOTAL	38	118 people

The average duration of an individual interview was 35 minutes and two hours for a focus group. Out of a total of 68 meetings, the team assessed 60 respondents (groups) as very cooperative and dynamic, while eight were reluctant or hasty to provide answers to the questions. For a complete overview of interviewed beneficiaries per region, refer to Annex 1.

Step 6. Analysis within the consultant team

The consultant team spent two days conducting their initial analysis of the data, classifying them per theme and per actor group. Where needed, additional data were collected from the projects, sometimes by phone, and some additional visits were paid to obtain data as accurately as possible within the time frame.

Step 7. Sharing of preliminary analysis with WASHplus staff

The consultants created and presented a PowerPoint photo presentation to summarize the successes of each approach in terms of observed and not observed practices, and, more importantly, to highlight the factors helping or hindering program success. The presentation was well received and validated by WASHplus staff, as well as by all other USAID WASH partners and USAID WASH representatives.

Methodological Constraints

Firstly, as mentioned before, this review is not an evaluation and should not be considered as such. Elements of OM were chosen to help define program success for each of the approaches. But like all research methods, there are constraints. The results that are generated may not always be representative of the entire population of WASH beneficiaries, projects, or implementers.

The classification of behaviors into “observed” or “not observed” is based on a limited number of cases and visits. The selection of sites was done by the projects in collaboration with USAID. Accessibility of the site was an important selection criteria, as was “information-richness,” sites where more than one WASH approach can be studied and that had several actor groups present. The ensemble of WASH partners and WASHplus staff considered the selected sites beforehand as typical. Nevertheless, the consultants had to validate the results afterward with WASH field staff to be able to give an adequate picture of WASH behaviors applied in Madagascar today.

Case Studies

The following chapter of this report presents the findings from the field review as four different case studies. For each of the four themes, a case study has been written that depicts the following elements:

- **General conclusions and learning points** with respect to the approach—what are the benefits, what works well, etc.
- **Why is it needed**—rationale behind the usage of the approach in the Madagascar context.
- **How does it work**—a brief explanation of the general methods or techniques applied within the WASH approach.
- **How it is working in Madagascar**—covers who is involved and who are the actors. This is mostly explained through the presentation of short case examples.
- **Factors helping or hindering program success**—overview of success factors and barriers, as stipulated in the scope of work of this consultancy.

Note that case studies differ in terms of length and content as a result of the availability of information collected during this review. Chapter 3 includes success stories that highlight the personal side of the four WASH approaches.

Chapter 2. Case Studies

Case Study 1. Sanitation without Subsidies

Can Rural Communities in Madagascar Be Convinced to Construct Latrines?

Summary of Conclusions and Key Learning Points

This review covers the CLTS approach to stop open defecation in two USAID-supported projects in Madagascar. They each use CLTS techniques slightly differently—with varying results. The main conclusions and learning points from the qualitative mini-review are shared below.

- Provided that the CLTS process is followed according to national/international guidelines and involves participation of the community at large, it can inspire behavior change to construct latrines and install simple hand washing stations.
- The communities use low-cost, locally available materials and hands-on expertise for latrine construction. This is efficient and likely to be sustainable.
- CLTS works in small-size communities with a designated defecation site where follow-up is feasible and support from leaders, local authorities, and community agents is available.
- Although CLTS villages may be ODF, this does not always mean that *all* people from the village are no longer defecating in the open.
- CLTS is not working in all circumstances. If a village does not build the first latrines within two to three months after the triggering session, it cannot be considered successful. Immediate, external monitoring appears to be essential for this process.

Why is Better Sanitation Needed?

The cycle of open defecation, water pollution, and poor hygiene practices often leads to diseases such as diarrhea that are preventable. The 2012 update of the Joint Monitoring Programme³ indicates that 45 percent of the rural population practices open defecation and 87 percent live without improved sanitation. Countrywide an estimated 7.7 million people are practicing open defecation, which ranks Madagascar among the 15 highest countries in the world. The practice has been going on for generations. In some areas it is even considered taboo to defecate anywhere else but in the open air. The need to convince people to start building and using latrines is evident in Madagascar, where general reluctance, deep-rooted traditions, and taboos are limiting hygienic latrine use.

What is CLTS?

CLTS, or community-led total sanitation, refers to the active participation of an entire community in the assessment, planning, implementation, monitoring, and decision making of a sanitation project. The goal of the process is to enable all households of the community and social institutions, such as churches, schools, and all public places like markets, to access and use appropriate sanitation facilities.

How Does CLTS Work?

The CLTS approach involves facilitation of a process to inspire and empower rural communities to stop open defecation and to build latrines without any subsidies. It is a psychological method designed to trigger disgust and shame about defecating in the open, transform community perceptions, and build on local practices. CLTS facilitators are trained in how to manage the pre-triggering, triggering, and post-

³ UNICEF/WHO Progress on Drinking Water and Sanitation, 2012 update

triggering steps of the process. They are also familiar with a range of tools and techniques to trigger people, for example:

- **Defecation area mapping**—participatory analysis to identify areas where people are defecating.
- **Calculation of shit**—discuss and calculate the average amount of feces one person produces per day, multiplied by number of household members, per day, per month, per year.
- **Calculation of costs**—households discuss and decide the average amount of money they spend on treatment of diarrhea and link that to the costs of constructing a latrine to help fight open defecation and diminish chances of contracting diarrhea.
- **Walk of shame**—transect walk to the defecation area to identify human feces and to map areas where people fetch water, where children are playing, etc.
- **Demonstration of contamination routes**—show how shit can contaminate water by dipping a contaminated piece of string in a glass of water and asking people if they would still drink it.

After a triggering session, there is often huge excitement and immediate motivation to stop open defecation. A community is never directly asked to build latrines or to stop open defecation. The decision must come from within the community; the CLTS facilitators only guide the process. An ODF action plan is made, indicating how many latrines will be built, by whom, and where. A natural leader from the village should emerge spontaneously to initiate and follow up on construction. During the post-triggering stages, CLTS facilitators conduct follow-up visits as well. When all households in a certain village are using latrines, the village can be declared open defecation free. When the village is ODF for six months, it can be certified.

Figure 1. General Stages of CLTS⁴



How CLTS is Working in Madagascar

In Madagascar, the CLTS technique has been used since 2010 by many WASH implementers, including USAID WASH partners Santénet (implemented by RTI International) and RANO-HP (a consortium of Care Catholic Relief Services [CRS] and local partners). UNICEF, the Global Sanitation Fund, and WaterAid also support the approach in cooperation with many local NGOs.

The CLTS process applied by USAID partners mostly follows the steps laid out in international CLTS guidelines. The focus is mainly on convincing people that they are eating each other’s feces to stimulate immediate behavior change. There is less focus on the other possible elements of “total” sanitation, such as hand washing, wiping, using slippers, nail clipping, or garbage disposal.

⁴ See also <http://www.communityledtotalsanitation.org>, which contains manuals written by CLTS pioneer Kamal Kar.

The impressions gathered from the seven CLTS villages visited in east, southeast, and central Madagascar indicate that the USAID WASH partner projects are applying the CLTS steps and techniques well, and facilitators have been trained according to international CLTS standards. The particulars of the CLTS process vary slightly from project to project. Differences observed during this review include:

- **Selection of CLTS facilitators:** In the RANO-HP areas visited in the east, village chiefs serve as the CLTS facilitators. In the RANO-HP target communities in the south and in the Santénet areas, motivated members of the community serve as facilitators. Both types of facilitators can be effective, as long as CLTS steps and approaches are followed.
- **Application of CLTS techniques:** Though all USAID WASH partners commonly use the essential techniques of mapping, taking a walk of shame, and conducting the string in water demonstration, other techniques (calculation of shit, calculation of costs) are not consistently applied.
- **Follow up (with visuals) and latrine use monitoring:** All CLTS activities are to be monitored for success. RANO-HP's implementing partner SAF employs 12 community agents in the east. They visit each household at least twice per month to monitor latrine use and other WASH behavior. When all household members are using the latrine, the agents award a yellow door sticker. If all members are applying the three key messages of hand washing, latrine use, and purifying water, the family receives a blue one. Santénet also has a follow-up system with 10 accompanying techniques to assist CLTS facilitators who have difficulty reporting and providing accurate figures on latrine construction and use.
- **Involvement of children in the approach:** While CLTS does not specify a role for children in implementation, they play an important role in the post-triggering stages as witnesses of incidents of open defecation. The RANO-HP project in southeast Madagascar, through its partner Caritas, has encouraged children to sing a song when they witness an open defecation "offender." The song goes like this: "A ha ha, mangeery anjooliikee!" (A ha ha, you still did poo-poo in nature!).



"Our village is clean, my children have no more belly cramps" –mother in Ambohimanarina, a Santénet area.

Declaration and certification can vary according to time and resources available for follow-up visits. Typically, in Santénet villages international NGOs and/or USAID representatives make the certification visits. RANO-HP has not yet officially certified villages; of the 36 villages that were CLTS-triggered in 2011, six have been declared ODF, the most recent in December 2011.

Observations from ODF Certified Villages

Among the benefits reported from successful CLTS communities are: fewer odors, better general health situation, less belly cramps, and more dignity for people, especially women when they are defecating in the village. Also, the consultants noted that though *villages* may be ODF, this does not necessarily mean that all *people* are no longer defecating in the open. Women reported a preference for defecating in or near the river so that they can wash themselves immediately after. The fact is that people do not spend their entire day in the village; women notably spend many hours per day in the field or near waterways.

Typically in Madagascar, men build latrines. In some CLTS villages local masons have been trained to make sanitation slabs and construct latrines using local materials while following national norms, such as a 2-meter depth for a hole. Feedback indicated that most men have not used the services of the local masons, though some have actually followed the norms. Home-made builders know and follow the basic dimensions. Interviewed masons indicated difficulty in selling the sanitation slabs in their commune.

In the villages that have female-headed households, single women are assisted by their fathers or brothers, or they share latrines with other relatives. Although sharing latrines is common practice, most households prefer to have their own. Sharing is typically only done among family members. The costs are borne by one household, which then becomes the owner of the latrine. In the visited areas, cleaning, if performed, is done by a woman from the household in charge.

Hand washing devices such as tippy taps (often made from plastic bottles) were observed frequently in visited CLTS villages, though quite a few bottles did not appear to be clean. Their *consistent* use could not be verified during this review. Moreover, soap is readily available in most small village shops inexpensively at 200 Ariary a piece (10 US cents), but most people interviewed still consider soap a luxury article. Soap is bought to wash clothes, but much less so for hand washing. In three cases the team observed the use of wood ash for hand washing. Ash has been promoted as an alternative to soap, as it has low PH, like bleach, and works as a simple disinfectant.



A child uses wood ashes instead of soap. Her mother explained that soap is a luxury good. Though the house has a tippy tap for rinsing hands.



“As a former Mada-Railway worker, I’ve always used a latrine. But now other people in my village are convinced, too.”

The ODF certification ceremony and follow-up visits by external people help boost morale and reinforce positive behaviors. Villagers are proud to show their latrines. The CLTS process provides the trigger that is needed for the entire village to be convinced, not just a few early adopters. One of the core strengths of CLTS is its communal approach, using social pressure as a means to change behavior, as illustrated by the quote of the retired railway worker, at left.

Observations from Noncertified Villages

The consultants also visited villages that were not open defecation certified. In some there were no latrines constructed at all, indicating that the triggering process simply did not have any effect. In other villages some latrines had actually been constructed but not all households had done so. Among the reasons why villages remain uncertified:

- **Absence of a substantial part of the community** during triggering, or even generally during the lean season when many villagers migrate temporarily. This affects the communal power of triggering. Though the interviewed CLTS facilitators are aware of this, they are sometimes faced with an inability to postpone until a critical mass is available.
- **Absence of a strong, motivated natural leader:** While in most cases a natural leader emerges, he or she is not always convincing and charismatic enough to carry out the entire process of latrine construction.
- **Dependence on international donor visits for certification:** Some villages have been declared ODF (six months or more where all villagers are using latrines) by the project, but they are waiting for the donor to visit to conduct the certification ceremony and place the official sign board.
- **Sudden external impacts** such as cyclone Giovanna, which damaged and destroyed homes and crops in eastern Madagascar in February 2012, drastically change people's priorities as they need to rebuild their houses first.
- **Ineffective CLTS facilitators:** Even though they have all been trained according to international guidelines, some CLTS facilitators are more effective than others. They may master the CLTS techniques in theory, but in practice some facilitators still use "top-down" and instructional approaches, instead of facilitation and bottom-up approaches.
- **Large-sized, spread out communities and absence of defecation site:** CLTS has also been tried in semi-urban and urban areas unsuccessfully because monitoring of open defecation and follow-up was ineffective at such a large site. It is also difficult to monitor open defecation when there are multiple defecation sites, such as in some coastal areas.

The Way Forward: CLTS Madagascar

- CLTS should continue as a proven approach that can lead to self-motivated behavior change and end open defecation in a sustainable, community-owned, and cost-effective way.
- The CLTS approaches could be better coordinated among USAID partners and other WASH implementers, e.g., harmonize CLTS timing and steps, monitor the use of CLTS techniques, improve the involvement of children in the triggering stages, mainstream gender issues, and encourage the use of visual aids in monitoring.
- The certification process can be simplified, involving the implementing NGOs, local authorities, already certified villages, and natural leaders.

* * *

Table 3: Summary of Success Factors and Barriers to CLTS in Madagascar

Factors Contributing to CLTS Success	Hindering Factors
CLTS facilitators following steps and approaches as per international CLTS guidelines.	Absence of large part of village population during triggering or post-triggering weakens the collective power.
Evolution and engagement of capable local leadership (natural leaders and role models).	Pre-triggering and triggering sessions are conducted when village is not ready (see above).
Follow-up immediately after triggering session (not to lose momentum).	Inadequate usage of methods and approaches by CLTS facilitators (e.g., top-down, educating instead of facilitating).
Encouragement and monitoring from external (non-CLTS) parties (community agents, project technicians...).	Sudden life changes (cyclone, crisis) that shake or distress communities.
Emphasis on use of local, low-cost materials and hands-on expertise for construction.	Absence of a designated defecation site. In coastal areas for example, often there is not “one” specific defecation site, people defecate on large stretches of beach or in the sea. Monitoring then becomes difficult.
Engagement/involvement of local authorities, village chiefs, notables—not as “latrine police” but to validate selection of CLTS facilitators and action plans.	Larger size of villages, large number of households, large space to cover makes monitoring difficult.
Involvement of children in post-triggering (as witnesses), with song/rhymes.	Loose or divided communities without a strong community sense.
Use of visual aids, such as stickers and posters to monitor behavior.	Dependence on visits from (international) donor for certification.
Visits from outsiders with “walk of praise,” to see latrines and openly appreciate the clean village.	

Case Study 2. Public Sanitation Services

Sustainable Management of Public WASH Blocks

Summary of Conclusions and Key Learning Points

Several WASH implementers in Madagascar have engaged in the construction and management of public WASH sanitation blocks. These blocks offer toilets, showers, water, and sometimes laundry facilities for a fee. They are managed in various ways, through community participation or by a private operator. The sustainability of the blocks is most essential. During a recently conducted review, seven blocks were visited to look for financial sustainability and other aspects of block management. Summarized conclusions and learning points include:

- Sanitation blocks provide essential water and sanitation services in clean and hygienic circumstances *to those that are willing and able to pay for services.*
- The toilets are mostly used by passers-by and travelers, less by residents, and most users pay the fees up front. The standardized fee structure provides clarity and facilitates payment.
- Revenue from fee payments covers the operating costs (salaries, taxes, toilet paper, cleaning products, etc.) in most of the seven cases; some are making profits if establishment costs or depreciation are not factored in.
- Blocks are kept clean and basic maintenance is ensured by the management structure.
- Public laundry facilities are welcomed by the residents; they alleviate a burden for women and provide income as most women are laundering for others.
- Most of the visited blocks lack *professional* financial management tools; records are kept but not accurately, monthly profit figures and break-evens are not analyzed.
- Sanitation blocks have the potential to provide an important source of income for the commune, in the form of a fund to expand WASH facilities (this has yet to be tried).
- They also generate employment, on average two posts per block, though employment contracts or minimum salaries are not guaranteed.

Why are WASH Blocks Needed?

The need for public sanitation facilities is high in Madagascar, where the lack of home-based water and latrines is of alarming concern; 54 percent of the population has no access to improved water sources and 85 percent lack adequate, hygienic sanitation. The establishment of public sanitation blocks in



strategic locations offers people access to hygienic toilets, clean water, and showers.

This can benefit residents of poor communities that do not have private latrines as well as passers-by in public places such as bus stations, markets, or other much frequented locations.

Antananarivo: many people are washing their clothes in the river. Laundry blocks offer a more comfortable alternative.

In addition, many people are laundering their clothes in the rivers that cross the capital. This causes pollution and increases the burden—

mostly on women—who have to carry heavy loads of clothes. Blocks that offer laundry facilities can alleviate this burden.

Different Block Management Approaches in Madagascar

The WSUP⁵ project is applying management models used in other African cities based on **community participation**. In Antananarivo, the project facilitated the construction of two new blocks, offering water, laundry facilities, and toilets. They are located in densely populated communes of the capital, which previously did not have any public sanitation facilities. Water Users Associations manage both blocks that have been created for this purpose. The blocks' supervision is ensured by the WASH committee, which, as part of the commune, is comprised of local authorities and community residents.

The second approach to managing sanitation blocks is a **public-private-partnership** model. WASHplus's predecessor project HIP introduced this method. Since 2008, the HIP project constructed and financed several new WASH blocks and renovated dilapidated ones. In some cases, autonomous associations such as Scouting Clubs or Water Users Associations manage the blocks. They function as private management committees, yet are monitored by the commune. In a second scenario, elected members from the commune are actually on the management committee, which makes it a semi-private model. And lastly, private managers manage some blocks, following a tendering procedure. This private person manages the block and keeps the income from the fees in exchange for a concession fee payable to the commune.

Observations on Community-Based Management Model (WSUP)

Aina Vao, a local water association, manages the WSUP block in Andranonahoatra, inaugurated in October 2011. This Water Users Association consists of 15 members (13 women and two men). The block has toilets, a water point, and laundry facilities; all clean and in good condition. The fees match those in other blocks in the country: 50 Ariary for the urinal (2 US cents), 100 Ariary for the toilet, and water for laundry costs 20 Ariary for 15 liters. There are no rental or concession fees; the block is located on land near the commune's office.

While residents do not frequently use the toilets, the laundry facilities are very popular and appreciated by users, who previously had to launder in the nearby river. The women who frequent the facilities have expressed several advantages: the water is cleaner, it takes less time to wash clothes, and the block is close to home. "In short," claims one interviewed woman, "our wash load is less heavy and we are earning between \$3 and \$5 US per day washing for clients."

So far, the block has been profitable, if donor-funded construction and depreciation costs are not factored in. The monthly income from user fees covers its fixed and variable running costs (water bill, salaries, cleaning products, paper). When asked how much profit the block has made exactly in the past few months, the question remained unanswered. The association's block managers are not calculating monthly profits or break-even points. A quick estimation showed us a small surplus of around \$20 per month.

Though it may be a little early to judge the block's long-term sustainability, WSUP has put some measures and mechanisms in place. Aina Vao has a maintenance plan. An accumulated total of US

⁵ WSUP, or Water and Sanitation for the Urban Poor, is a nonprofit partnership among the private sector, NGOs (including CARE, WaterAid, and World Wildlife Fund), and research institutions focused on solving the global problem of inadequate water and sanitation in low-income urban communities.

\$3,000 is currently deposited in the association’s microfinance institution bank account, most of it generated by twelve water kiosks. The WASH committee will use this sum to maintain current infrastructure and to expand to new WASH initiatives in the commune. This is foreseen for the second half of 2012 and 2013.

The president of the commune is pleased, “We have given the WASH sector priority in our annual development plan. The kiosks and the block are part of it. Other plans still to be done are: hand washing stations at bus and taxi stands and a WASH campaign on TV. A few major issues remain crucial: controlling WASH violations and regularly supervising existing infrastructures. We have limited capacity and means to do that.”



The local Water Users Association Aina Vao, “New Life,” manages this WSUP block in Andranonahoatra.



The block’s laundry facilities are mostly used by women, but sometimes by men.



Members of the association keep notes and check the record-keeping.

Public Partnership Model (HIP)

Two blocks under private sector management were visited for this case study. The first is located in Ambanitsena—20 km from the capital. It was established in November 2010 under the HIP project. USAID financed the US \$2,000 construction costs.

The block is functional and in good shape. An autonomous association with members of the commune on the board oversees the management (semi-private). The toilets are used by 40 to 50 paying users per day, mostly passers-by and market stall holders, not by residents of the nearby village. This generates around \$2.50 per day, or \$80 per month. The showers and water points are not used often; water per bucket at the block is more expensive than from other water points in the same village. The block’s monthly operation costs are recovered. It makes modest profits, if original construction fees are not taken into account, despite a comparatively low number of users. This is because the block has low fixed costs, due to the fact that there is no rent or concession fee.

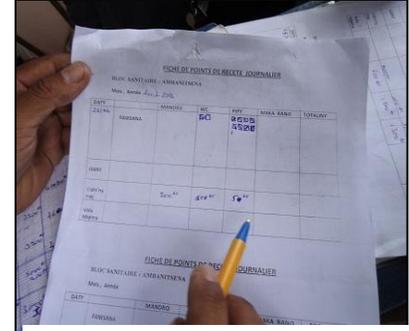
People from the community are moderately happy with it. “The area has become a little bit cleaner,” says one villager, “but there are still people using the drain to urinate in the evening. The block is only open during the day. The commune is supervising the block, but not the violations, our drains are still dirty.”



This public WASH block in Ambanitsena is located 20 km from the capital.



Toilets and showers are in good condition, though showers are not used regularly.



Record-keeping shows 41 urinal users and 9 toilet users totaling 3,000 Ariary income on one day.

The second block visited for this review is located in Mahitsy, some 40 km from the capital on the national road near a busy market and bus station. It was established under a HIP initiative in 2010. Initially it belonged to the commune, which had set up a management committee to operate the block. In July 2011, the management was handed over to a private individual, Mr. Johannes, following a bidding procedure.

The block's toilets are frequently used by between 160 and 200 people per day. Showers attract on average three people per day. The block is not used much as water point; the water pressure is low.

In 2010, HIP facilitated a feasibility study, predicting monthly income based on the actual number of users over several months. Based on these figures, the private entrepreneur is paying a fixed concession fee of 420,000 Ariary (US \$200). This seems a relatively high price considering the context and the rental price of land in that area.

In 2011, the block's monthly costs were still being recovered. It appears that since 2012, after three years of downward economic and political crisis, its profitability is in jeopardy. During Madagascar's lean months, e.g., from November to March when rice has not yet been harvested, Mr. Johannes claims there are hardly enough users to cover the costs. Though precise figures are not available—the manager does not analyze his monthly figures—it appears that the block has suffered losses in some months. The figures from 2012 fluctuate between a US \$15 loss and a \$35 dollar profit per month. In the medium term, this block's turnover rises and falls in an economy that is highly agriculture-based.

The WASH committee from the commune has nearly 4 million Ariary (US \$1,925) in its bank account since July 2011, the cumulative concession fees paid by the private operator. It plans to open a second WASH block in 2013. After 10 months of private operation, the block's original construction costs have actually been recovered. But it remains to be seen if the 420,000 Ariary monthly concession fees can be sustained for a longer period. It is now up to Mr. Johannes to negotiate; his one year contract will end in November of this year. That will be decision day; he will only continue if he still can make a profit.



A janitor cleans toilets.



..... a
Looking at the figures with
Mr. Johannes.



The Mahitsy WASH block's strategic location attracts many customers.



Receptionist and two members of the commune supervising committee.

The Way Forward for WASH Blocks

The public WASH blocks provide crucial sanitation services in Madagascar, especially in peri-urban and urban areas. Each block has its own strengths and weaknesses, yet in general they generate revenue for the commune while the operating costs are recovered by fee-paying clients—a win-win situation. To sustain these benefits the following recommendations may be considered:

- Improve/establish a supervising mechanism to ensure proper record-keeping and maintenance, as well as mechanisms to control WASH violations.
- Organize regular training and coaching of managers to ensure proper financial management tools are in place, e.g., to calculate profitability per month, or break-even figures.
- Keep supervising bodies small and effective and clarify/communicate the role and status of the WASH committee or supervising bodies.
- Set concession fees according to market rates.
- Consider longer opening hours (e.g. up to 8 p.m.), and/or install external urinals attached to the blocks to be used after hours.
- Investigate strategies to attract more residents and (return) costumers such as reward cards that give free passes after x number of times.

* * *

Table 4: Summary of Success Factors and Barriers to Sustainable Management of Public WASH Blocks in Madagascar

Factors Contributing to Success	Hindering Factors
Blocks are placed in a strategic location with many passers-by (bus stop, travel routes, near market, etc.).	Opening hours are limited to the daytime, e.g., people still use drains to urinate in during the evening/night.
Caretakers are hired to clean and maintain facilities and a receptionist to take cash and record number of users.	A large supervising association (too many members) can render decision making ineffective.
Facilities are kept clean and adhere to standards and norms.	When the role/status of the WASH committee or supervising association is not clear, not visible, and unknown in the community.
Water and soap, toilet paper, nail clippers, incense, etc., are readily available.	High fixed costs—high concession fees that are above market rates for rental of buildings or land.
Laundry facilities at the sanitation block attract customers (and generate income for laundry women).	Absence of supervising mechanism to ensure proper record-keeping in the first place.
	Managers do not calculate profitability per month, nor whether they break even because they lack proper management systems.
	When cost of water at the block is higher than cost of water points in village.
	Credit—pee now, pay later (read: never)

Case Study 3. Boosting Markets for Sanitation

Marketing Improved Latrines in Urban and Rural Areas

Summary of Conclusions and Key Learning Points

USAID has been supporting the innovative sanitation marketing approach since 2010. In Madagascar multiple WASH partner projects are combining social and commercial principles to market sanitation products. A review focusing on the marketing of hygienic sanitation slabs (Dalle SanPlat or DSP) in urban as well as rural areas yields the following insights:

- Producers and users agree that the new DSP is a good product; it is easier to produce, lighter, easier to clean and install, and more affordable than previously available slabs.
- Although most producers and resellers are making modest profit margins on the DSP, they consider it more a humanitarian activity than a commercial one.
- The urban “early adopters” are typically homeowners with slightly higher education levels and better (though still low) income levels.
- In urban target areas the DSP sells reasonably well. Intense marketing with door-to-door sales pitches by community agents are increasing the sales.
- The arrangement to pay in three installments is well used even though the sales prices end up being higher.
- The price of a DSP in rural areas can be 2.5 times higher as raw materials are less easily available and transport is costly.
- Men in rural areas who construct latrines do not often pay for the services of local masons, or for DSP.
- The free advice given by local masons on the national norms for latrine construction (e.g., 2 meters depth of the hole, 1.5 meters space on each side of the hole) is being adopted.

Urban Versus Rural Needs

Since 2009, the sanitation situation in Madagascar’s capital is, according to a major study⁶ “in a serious state of emergency.” The report points out that most toilets are in very bad hygienic condition; it even categorizes them as “really disgusting.” With 2.3 million inhabitants in greater Antananarivo the “health risks are increasing yearly,” the study forewarns. The Madagascar Demographic and Health Survey⁷ confirms the problem: less than one in 10 urban households has access to private, improved toilets or latrines with a slab.

What has caused this dire situation in the capital city? The fact is that expenses for sanitation are not included in the household budget, and affordable latrine facilities are simply not available to most. To turn this situation around, both studies recommend raising urgent awareness to improve households’ sanitation systems, and lobbying with authorities to invest in sewage infrastructure.

In rural areas the main problem is open defecation, practiced by 45 percent of the population. Encouraging people to construct their own latrines made with locally available materials and hands-on expertise is a strategy that has already borne fruit in Madagascar.

⁶ SOMEAH (Société Malgache d’Etude et d’Application Hydrauliques). 2010. “Study on the impact of the socio-economic crisis on the water and sanitation situation.”

⁷ Madagascar Demographic and Health Survey (DHS) 2009, Table 2.2: Type of toilets used by households, improved toilets: 12 percent of urban households, 2 percent in rural areas.

The marketing of improved latrine slabs can be part of a sustainable solution in urban and rural areas. People who invest in their latrine are more likely to use it properly and maintain it. The slabs facilitate latrine cleaning and are comfortable and safe to use.

How Sanitation Marketing of Improved Latrines Works

Like any market intervention, sanitation marketing works on two levels: triggering demand on the one hand, and improving the affordable supply of products on the other. Ideally, all four “Ps” of marketing are worked on simultaneously:

- Product: design and develop a high quality, easy to clean latrine slab
- Price: make the slabs affordable and offer payment mechanisms
- Place: ensure a proper distribution network
- Promotion: create marketing messages and materials to persuade clients to purchase it

How Sanitation Marketing of DSP is Working in Madagascar

USAID has supported two urban sanitation marketing interventions. The HIP/C-Change project worked on the design, manufacturing, and marketing of a DSP prototype made of cement. The WSUP project is currently applying innovative strategies in two peri-urban zones. The aim is to market DSPs and prompt the urban poor to invest in their sanitation facilities.

In rural areas of Madagascar the RANO-HP project has trained masons from the community in simple latrine construction, following national norms but with locally available, low-cost materials. Local masons have also received training on how to produce a DSP.

WASH partners have developed the following marketing strategy for the DSP:

Place + Product: to ensure a diverse distribution network in the urban areas, WASH partners have worked actively with existing small- and medium-sized cement producing businesses and with community-based associations. They have trained technicians from both types of providers and created simple instruction booklets. Several technicians have received a start-up kit, containing a bag of cement, some steel cable, and a fiberglass mold.

Promotion: to promote the DSP the projects have developed a publicity stand, posters and flyers, and a radio campaign citing the benefits of the hygienic slab.



Price: DSPs are sold at various prices by the producers/vendors, ranging from 12,000 and 30,000 Ariary in urban areas (US \$6 to \$14). To ease the burden on low income urban families, WSUP has created a payment mechanism in conjunction with an association, which enables people to pay in three installments. In remote areas with difficult access, the DSP can cost up to 50,000 Ariary (US \$24).

This mother purchased the DSP immediately; she wanted a safe and sturdy latrine for her children.

Observations from Urban Areas

One of the urban-based organizations involved in sanitation marketing is the Valisoa Association. Created in September 2011 under the WSUP project, it is located in a densely populated suburb of Antananarivo. Its key task is to promote the sale of DSP available from local producers and hardware stores.

“Convincing people to invest in more hygienic toilets is not easy,” admits a field agent from Valisoa. She and her colleagues visit households, schools, and markets to promote the three key messages of latrine use, hand washing, and water treatment. Many people are interested, yet they are reluctant to spend money to upgrade their sanitation. All kinds of reasons are given: they refuse because they live in a rented house, they claim that their septic tank is not yet full, or that the DSP lid is too heavy for their children to lift.

Those who have bought DSP so far are conscious about the need for hygienic and safe latrines for themselves and their children. “Our latrine is used by 10 people, so it has to be solid,” explained a mother of five children.

Valisoa also manages a payment mechanism: customers can pay for a DSP in three installments of 5,000 Ariary each, hence 15,000 Ariary per slab. Alternatively, clients can buy them for 12,000 Ariary directly from the hardware shops, which typically do not offer any incremental payment plan. For each DSP sold through Valisoa, the field agents receive a bonus of 2,000 Ariary. Between October 2011 and April 2012, Valisoa sold 360 slabs; 108 through the payment plan and 252 directly to shops and clients.

Private entrepreneur Serge owns a small cement workshop where he manufactures bricks, balustrades, and cement ornaments. He has two employees. WSUP approached him to participate in the three-hour training on how to produce sanitation slabs. He has so far produced and sold 110 DSP, manufacturing a maximum of 10 per week. His clients are hardware shops, WSUP associations promoting DSP, and private customers. He does not really know the costs of producing one slab; he sells them for 12,000 Ariary with what he believes to be a small profit margin. He considers the production of the slabs an add-on to his business, but more a social activity than a real commercial one. He keeps a record of sales to the WSUP project. His own latrine is not yet outfitted with a sanitation slab because he is not the owner of his house.



Serge can produce a maximum of 10 DSP per week with one mold.

In the more central part of the capital is Jemsh Enterprise, a medium-sized cement factory that produces DSP through the assistance of the former HIP/C-Change project. Mr. Jemsh’s story is similar to Serge’s. He too feels that the DSPs are selling reasonably well in his five sales outlets. “We know they have been bought by schools, hospitals, and churches in other parts of the country. It gives us pleasure to be involved in the sanitation development process. We are keeping a special record for the sales of SanPlats. Last month we have sold 58.”



This local mason constructed his own latrine with a DSP, but finds it hard to sell his products and services to others.

Observations from Rural Areas

In the south and southeastern parts of Madagascar, the situation is different. “Here we need to first convince people to construct a latrine, and when they can afford it they can buy and install a SanPlat,” explains the technician from partner NGO SAF. SAF has trained several local masons under the RANO-HP project. The masons give advice on how deep to dig the hole, for example, and which local materials to use. They know how to produce a DSP as well. The price of DSPs in the rural areas in the southeast can be up to 2.5 times higher than in urban areas. A mason explains: “It is costly to transport cement bags, and steel cable has to come from the capital hundreds of kilometers away. We don’t sell many.” A mason in the east states:

“People ask us for advice but they don’t pay for our services. Every man in this village constructed his own house; they are not going to ask someone else to construct their latrine. It is a matter of pride, too.”

The Way Forward in Sanitation Marketing

The sanitation marketing approach is working in Madagascar as DSP are being produced and purchased without any major subsidies. The approach could be expanded to market other sanitation products: soap, innovative types of toilets (e.g., Ecosan), hand washing devices—taking into account that all four Ps (price, product, place, promotion) of the marketing strategy should be context-specific (rural/urban).

For the marketing of DSP in particular, the following recommendations may be useful:

- To increase the “snowball effect” of DSP in and around the capital, WASH projects can train more small producers from the private sector, or have existing producers train others.
- Regular publicity campaigns and home visits appear essential to boost sales to larger numbers of households in urban zones.
- Having community agents market DSP in combination with other WASH messages (like hand washing and garbage disposal) is effective and needs to be continued.
- In many rural areas, DSP end up being above affordable levels; substitute materials to construct some sort of hygienic slab could be sourced (wood, locally available stone, etc.).
- Alternatively, DSP could be made available in rural areas through a (slightly subsidized) voucher system.
- Assistance to local masons to purchase and transport raw materials could be considered to keep input costs of DSP down.
- Local masons can be mobilized to train village men on latrine construction.

* * *

Table 5: Summary of Success Factors and Barriers to Sanitation Marketing in Madagascar

Factors Contributing to Success	Hindering Factors
Good quality products, easy to produce, and light weight.	Absence of payment facility in some cases.
Affordable price setting (low-cost raw materials).	High price in some rural areas (DSP: costs up to 2–5 times the urban price).
Support by a communication campaign and publicity materials.	Cost of sanitation usually not taken into account in household budgets (the current socio-economic context with low purchase power).
Intense support through door-to-door marketing of DSP and other WASH messages.	Scale: DSP mostly only available in project areas.
Making use of existing producer and distributor network.	Rural men traditionally construct their own latrines and are reluctant to pay for the services of a local mason.

Chapter 3. Success Stories

Ending Open Defecation; Convincing Communities to Build Latrines

“It is revolutionary,” exclaims Harison, technical field agent of AIM (Association Inter-Cooperation of Madagascar), implementing partner of Santénet2, a USAID-funded health project implemented by RTI International⁸. “Some men start digging latrine holes immediately after a triggering session. In villages where people have been relieving themselves out in the open for generations.” Harison is referring to CLTS, the approach that can help end Madagascar’s deeply rooted and widely spread practice of open defecation (OD).

Piece of String

CLTS, or community-led total sanitation, stimulates behavior change by triggering disgust and shame about defecating in the open. CLTS master trainers from USAID’s partner in Madagascar, Santénet2, have trained technicians from local partner associations who, in turn, train community-based CLTS facilitators. During a triggering session they use various techniques. The most commonly used are “defecation area mapping,” a jointly made village map that indicates where people defecate and where water sources are, and “the walk of shame,” where the villagers walk together to the defecation site and point out each other’s piles of poop. All CLTS facilitators agree: the technique that has the greatest impact is the piece of string. Harison describes it: “A villager drinks a glass of water offered by the facilitator. When it’s empty it is refilled. The facilitator then takes a piece of string, dips it in a pile of poop collected during the walk of shame, and puts it in the glass. No one *ever* drinks again from the glass.” Santénet2 has initiated CLTS in 480 out of 800 communes with the help of independent trainers, members of social development committees, and implementing partners.

Embarrassing

CLTS works because it is about people, not about buildings, explains Dr. Rivosoa from AIM, Santénet’s key CLTS partner. “I have seen donors come and construct expensive latrines in villages and schools; they are not used. I find it embarrassing that donors have to build WCs for us. The decision to stop open defecation has to come from the communities. After a triggering session most villages develop an action plan for the self-construction of latrines. Even with little means people manage to build a simple outhouse. We follow up, and when all people of a certain commune have stopped OD, we celebrate and certify the village. This boosts people’s morale and stresses positive behavior.”

Natural Leader

AIM, with Santénet2 technical and financial assistance, started promoting CLTS in 2010, in 50 communes, 40 of which participated in a triggering session. From the 35 communes that developed action plans and received follow-up, 10 are now completely open defecation free. All together they constructed 1,338 latrines. When visitors come to a certified village, people proudly show their latrines. They’re simple huts made of leaves but have stone slabs that are clean and odorless. Plastic bottles with little holes in their tops serve as tippy taps where people wash their hands. The former defecation site has now been planted with manioc (its leaves are commonly used for cooking). “This village has a very



Dr. Rivosoa: “It’s embarrassing when donors have to come to build our WCs.”



Ambonimamarina Village certified “open defecation free” by Santénet2.

⁸ RTI provides grants to 16 NGOs to implement the WASH approach, a community-centered effort to improve overall health, to activities in 800 communes.

strong natural leader,” Harison explains. “The people were easily convinced, but the church pastor encouraged people to start building latrines. The mayor was also engaged in the process.” These are key CLTS success factors—highly motivated CLTS facilitators, a charismatic natural leader, and follow-up by authorities or other external people. Santénet2 aims to help 1,000 villages reach open defecation free status by the end of the project. AIM’s success reflects community momentum in 480 communes.

Leading a Community to Healthier Habits

Claudine is an active woman in her community, a true pillar. She's 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 important municipal projects. She was recently elected to also chair the WASH committee, a sub-committee of the broader development committee. Claudine justifies her involvement in the WASH group, which was established under the WSUP project⁹, a USAID-funded water and sanitation project. "My neighborhood is poor," she states, "our living environment is dirty; we do not have enough water. The garbage is not collected regularly and roaches are everywhere."

Winning Offer

The WASH committee serves a mainly supervisory role. It oversees three associations that together are responsible for four main activities: encouraging people in the area to adopt the three key messages of hand washing, toilet use, and treating water; 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, created in 2011 after WSUP launched a call for proposals. Claudine, in addition to being the president of the WASH committee, is also involved in Valisoa Association.

Public WASH Block

Valisoa Association currently employs 11 field agents. They constantly promote 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. Valisoa works tightly together with the Water Users Association that manages the public WASH block that offers for-fee toilets, clean water, and laundry facilities. The block was established under the WSUP project in March 2012.



It is busy every day in this laundry area at a WASH block in Antananarivo.

Triple Role

These are just Claudine's community involvements. She is also a mother of two, married to a military officer, and the owner of a taxi business. Like many women in developing countries she fulfills a triple role: reproductive, productive, and social. 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.

Early Adopters

Claudine shares her achievements so far while visiting the WASH block. "The laundry facility is very well used," she says. "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. At

Valisoa people can pay in three installments of 5,000 Ariary (less than US \$3) each. It is more expensive than 12,000 Ariary at the hardware shop but it helps to make them more affordable." What is her marketing secret? "We first target people with higher living standards and better education levels. They are easier to convince. Then others are following slowly," she says. "I don't know much about marketing," she admits, "but I do know what works in our community."

⁹ WSUP (Water and Sanitation for the Urban Poor) is a nonprofit partnership among the private sector, NGOs (including CARE, WaterAid, and the World Wildlife Fund), and research institutions focused on solving the global problem of inadequate water and sanitation in low-income urban communities.

Will Rural Communities Pay for Clean Water? The Answer is a Resounding “Yes.”

Long before the USAID-funded RANO-HP¹⁰ project set foot in Anivorano-Est, a rural community of 5,500 people in eastern Madagascar, the community’s water supply system had broken down to the point that one water tap served the entire town. Most people lugged heavy water jugs from rivers and nearby creeks. It was not a given that residents of this poor rural community would be willing and able to pay for water services. But the RANO-HP experience proves the contrary. “We are happy with this project,” explains Marcel, who opted for a shared water connection. “In the past the water was dirty, there were frequent break downs, and the pressure was low.”

Collaborate with Stakeholders

In 2011 the RANO Ham Pivoatra, or Water for Progress project, hoped to provide potable water to 90 percent of the population of Anivorano-Est. To do so, the project financed a US \$95,000 water capture and distribution facility, as well as the rehabilitation of two WASH blocks. RANO-HP trained the community’s bid committee in transparent public tendering processes. Several bidders submitted proposals, and the committee chose Velo Enterprise to run the new water distribution service.



Manager Patrick is passionate about the water facility.

Magic

Patrick is the facility manager for Velo Enterprise. Since September 2011 he and his team have sold 138 water supply connections, providing clean water to over 400 households, some of which are sharing the tap with others. Patrick said he was, “passionate about this facility. Four times a day I take a walk to the sources to see if everything works. Seeing how the water from the stream river is transformed into clean water taps at people’s homes is like magic.” Patrick admits that the management side appeals less to him. Sending water bills and receiving monthly payments is part of his job. “Late payments are not uncommon,” he sighs, “but so far we have only had two bad payers.”

A Dollar Each Month

Velo Enterprise markets three types of water connections: public, private and social. Private connections are placed at individual households or businesses, while social connections are shared among multiple households. For private and social set ups the consumer pays for the connection and the water counter. The leaders of each social



Claudine installed a flush toilet in her restaurant.

connection keep track of each member’s water consumption. A social connection user, Marcel, explains: “We share this tap with 10 families. Twenty-five people use it daily for cooking, drinking, washing dishes, laundry, and bathing. When a family fills up a jerry can, they pay me on the spot. This ends up being one or two dollars per family per month, enough to pay the monthly bill.”

Good Business

Irene, among the first customers of Velo Enterprise, has a private connection. “I own a small restaurant and can now offer a flush toilet and water to my clients. It is good for business.” Marie, however, is from one of

the families not connected to the system. “I can’t afford my own connection,” she admits, “so I still bathe in the river... But for cooking and drinking we buy water from the WASH block.” Her neighbor Landy is quick to explain how pleased she is with the new laundry facility. “Every Saturday morning I am here,” she says with a smile. “It is a gift that I don’t have to carry my heavy laundry baskets to the river anymore.”



Marcel shares his tap with 10 other homes.

¹⁰ RANO-HP = Rural Access to New Opportunities and for Health and Prosperity, is managed by a consortium of CRS, CARE, Caritas, Vahary Salama, Sandandrano, and Bush Proof.

Designing and Marketing an Innovative Latrine Slab

Encouraging people to use a latrine is one thing, encouraging them to use a *hygienic* latrine is another, admits Dr. Nary in Antananarivo, Madagascar’s capital. “Our city is full of dirty and smelly latrines. They attract rats, leave bad odors, and the wood is infested with microbes.” You don’t need to be a doctor to understand that these toilets are hotbeds of infectious diseases.

Dalle SanPlat

One of the objectives of the USAID HIP/C-Change¹¹ water and sanitation project was to improve the availability of hygienic latrine slabs in the capital. The slabs are called Dalle SanPlats (abbreviation for sanitation slabs), or DSP. Naina, the engineer from the former HIP/C-Change project explains: “We wanted to persuade businesses to start producing these DSP. They had to be available without any public funding. We did a rapid assessment and learned that there are three prefab cement enterprises in Antananarivo. When we approached them, two were willing to work with us. We then trained their technical staff and developed materials to assist with marketing the slabs. This is purely a private sector activity.”



A stock of SanPlats in Fianarantsoa, ready to be sold.

Innovative Product



Roland is holding the new DSP—the previous model is under his knee.

“It is a good product,” declares Roland, head of the cement department of Jemsh Enterprise. The company has five sales outlets in the capital. “The new design is simple to produce and an improvement compared to the slabs we were making before. The old one weighed twice as much,” Roland says. He confirms that the two-hour training was sufficient and shows the instruction sheets that explain how much cement should be used and how many meters of steel cable. “It costs us about US \$4 to produce one slab,” he says, “and we sell them for \$6 each.”

Social Activity

This is backed up by Mr. Jemsh, the enterprise owner. “We marketed 58 DSPs last month, not like hotcakes, but they sell. They are bought by individuals, small hardware shops, schools, and churches. I consider it a social activity. It gives us pleasure to be involved in the development process. It is important because it helps people stay healthy. If that is the case then I am more than happy to continue the production.”

¹¹ HIP is the predecessor project to WASHplus, and C-Change provided follow-on funding to bridge the gap between the two projects.

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