



**USAID**  
FROM THE AMERICAN PEOPLE

**HIP** HYGIENE IMPROVEMENT  
PROJECT

## **Baseline Report for Madagascar**

### **2007 Measurement**

**USAID Hygiene Improvement Project**

**By Orlando Hernandez**

**USAID Contract #: GHS-I-00-04-00024-00, Order 1**

**December 2008**

**Prepared By:**

**Academy for Educational Development  
1825 Connecticut Avenue, NW  
Washington, DC 20009**



## Acronyms

CSB	Centre de Santé de Base (Basic Health Center)
DHS	Demographic Health Survey
FANTA	Food and Nutrition Technical Assistance Project
HIP	Hygiene Improvement Project
HW	Hand washing
LQAS	Lot Quality Assurance Sampling
OM	Outcome Monitoring
N/A	Not available
PDA	Personal Digital Assistant
PENSER	Population Environment Services
PMA	Program Management Area
POU	Point of Use
USAID	United States Agency for International Development
WASH	Water, Sanitation, and Hygiene

## Table of Contents

Executive Summary .....	1
Introduction.....	4
Methodology.....	5
LQAS .....	5
Application of LQAS for Outcome Monitoring in Madagascar .....	5
Samples.....	6
<i>Households</i> .....	6
<i>Institutions</i> .....	8
Indicators.....	8
Instruments .....	10
Data Collection and Analysis .....	10
Findings.....	11
Households .....	11
<i>Characteristics of Respondents</i> .....	11
<i>Water Treatment and Storage</i> .....	11
<i>Hand Washing</i> .....	14
<i>Sanitation</i> .....	17
<i>Exposure to Hygiene Promotion</i> .....	20
Institutional Performance .....	21
Schools.....	21
Implications.....	25
<i>Future Target Audiences: What Are the Choices?</i> .....	25
<i>Target Setting</i> .....	25
Annex 1 – Household Questionnaire .....	31
Annex 2 – School Questionnaire .....	62
Annex 3 – Basic Health Center Questionnaire .....	66

## Executive Summary

This research report presents the findings of baseline data collection that USAID's Hygiene Improvement Project (HIP) conducted in Madagascar in 2007. HIP's work in four regions of Madagascar focuses on improving hygiene practices at the household level, expanding access to hygiene infrastructure, and promoting hygiene improvement in schools and health facilities to reduce diarrheal disease. HIP conducted the baseline to measure hygiene practices in the three key areas that HIP addresses: point-of-use (POU) water treatment and storage, hand washing with soap at critical junctures by child caretakers, and hygienic disposal of human feces.

Data were collected in conjunction with the USAID-funded Food and Nutrition Technical Assistance Project (FANTA), which had been charged by USAID/Madagascar to implement an annual behavioral outcome monitoring activity using a sampling technique known as lot quality assurance sampling (LQAS). PENSER, a local research firm, carried out the baseline data collection at both households (21 households for each of five program management areas) and institutions (19 schools and 19 health centers). Households with children seven to 23 months of age with and without latrines were randomly selected to participate and administered a detailed household survey; this cohort is known as Group 1. Households with children in this age category were selected because DHS data indicates that this is the group with higher diarrheal prevalence in Madagascar among children under 5 years of age. Their responses were compared to households with a child aged zero to 59 months, which were given a more streamlined questionnaire. This is defined as Group 2 and it represents a study group for which many other health data are collected as child survival programs address health concerns in this cohort.

Among the water treatment and storage findings: the majority of households surveyed have access to unprotected water sources, most respondents spend less than 30 minutes fetching water from the source, and the most common source is surface water. The most frequently mentioned water treatment procedure is boiling; Sur'Eau (a hypochlorite solution) is very rarely used, and respondents were not acquainted with either filtration or solar disinfection methods.

Evaluating hand washing practices is a notoriously sensitive issue, so multiple measures were taken—self-reported hand washing based on a recall of the last 24 hours and observation of the most often used handwashing station to identify its location and the presence of needed supplies, particularly soap. According to findings, soap was observed in 43% of the handwashing stations most often used in households in Group 1. Water was observed in 61% of those handwashing stations. Knowledge questions about appropriate times for hand washing suggested that there is more awareness about the need to wash before eating—69 percent of study participants gave this response—and less awareness about the need to wash hands at other critical junctures. A review of the findings suggests that considerable work is needed in developing awareness about these critical junctures.

Access to sanitation was measured as was the availability of hand washing stations near latrines. The data indicate that 2/5 households do not have access to sanitary facilities. Among the 3/5 that do, shared latrines among families are a prevailing practice; most are pit latrines without slabs.

Only 3 percent of households in Group 1 were observed to have a hand washing station nearby and of those none had soap. In this group, 35 percent of the children practice open defecation.

In addition to measuring baseline values of POU, hand washing, and sanitation practices, the HIP survey classifies households based on the number of hygiene practices being implemented as a way to test the premise of its at-scale intervention—whether parallel adoption of multiple promoted practices is occurring. The majority of those surveyed in Group 1 (60 percent) engaged in two promoted behaviors. The survey also measured exposure to hygiene promotion messages, asking participants about the type and source of the information.

Data for schools and institutions are presented as a pass or fail grade based on the LQAS approach. Schools, for example, passed the test for latrine coverage for students but did not meet the standard with respect to the indicator on the provision of drinking water. Health centers passed the test of providing latrines with slabs for clients, but failed on the indicator measuring the presence of sex-specific or clean latrines or nearby hand washing stations.

An analysis of the survey findings concludes that even households identified as practitioners (doers) of HIP-promoted hygiene behaviors still heavily engage in “traditional” hygiene practices, such as boiling for water treatment and pit latrines for sanitation, rather than in “ideal” practices. The implications of these findings mean that HIP will need to determine where to focus its promotional messages (non-doers, traditional doers, or both) and how to adjust those messages for specific audiences. Realistic target setting should be the emphasis, taking into account funding resources and partnerships involved in implementing programs.

Specific program recommendations include the following:

- 1) Have a clearer program to target behavior change at the household level. The focus on institutions (health centers and schools) may be necessary but insufficient to change practices in households.
- 2) Funds permitting, work both on getting non adopters to adopt appropriate hygiene practices and getting 'traditional' practitioners to move up their respective 'improvement' ladders. For example, increase the number of water treaters, and promote the use of more modern treatment methods among boilers.
- 3) Define overall targets for the two years ahead and determine how much can be accomplished on an annual basis without attempting to be too ambitious.
- 4) Targets need to be set for behavioral determinants (e.g., knowledge of critical hand washing junctures to prevent disease, knowledge of different POU treatment methods) as well as for hygiene practices themselves.
- 5) In the POU arena, continue promoting all treatment options and the use of hard covers for wide and narrow neck drinking water storage containers.

- 6) In handwashing, continue promoting the availability of needed supplies (soap and water) at commonly used hand washing stations and promote the placement of handwashing stations with needed supplies near latrines.
- 7) Regarding sanitation, introduce Community Led Total Sanitation to achieve increased demand for sanitation infrastructure and larger health impact.
- 8) Track hygiene practices on a regular basis, incorporating them into the USAID/Madagascar Mission's annual behavior outcome monitoring system.

## Introduction

In July and August 2007 USAID's Hygiene Improvement Project (HIP), in collaboration with implementation partners including both public sector institutions and NGOs, collected baseline data from communes located in the regions where the project operates in Madagascar. This research report presents the findings. The thrust of HIP's activities occurs in four Malagasy regions: Amoron'i Mania, Analamanga, Atsinanana, and Haute Matsiatra.

HIP seeks to influence hygiene practices among families, especially with children under five years of age, where the highest incidence of morbidity and mortality resulting from diarrheal disease usually occurs. HIP focuses on three hygiene practices at the household level known to reduce diarrheal disease: point-of-use (POU) water treatment and storage, hand washing with soap at critical junctures by child caretakers, and hygienic disposal of human feces.

HIP also seeks to influence: a) access to hygiene infrastructure (e.g., sanitation and hand washing facilities, hand washing basins, protected water sources, solid waste management) and b) hygiene promotion programs implemented by schools and basic health facilities targeting their respective client base as well as communities at large. In this regard, HIP supports the Government of Madagascar's initiative to promote both WASH-(water, sanitation, and hygiene) friendly schools and basic health facilities. HIP was instrumental in defining criteria to classify schools and health facilities as WASH-friendly, and it provides support to enable schools and health facilities in its jurisdiction to become certified as WASH-friendly.

Data were collected in conjunction with the USAID-funded Food and Nutrition Technical Assistance (FANTA) Project, which implements an annual Behavioral Outcome Monitoring (OM) activity on behalf of USAID/Madagascar to track results of programs and projects implemented by USAID's partners in the health sector. This is the second OM that FANTA has conducted, and it has hired a local research firm, Population Environment Services (PENSER), to carry it out. FANTA's sampling is based on the Lot Quality Assurance Sampling (LQAS) approach described succinctly below. For baseline purposes, data were collected among both households and institutions.

This report presents findings for households first, for schools second, and for basic health facilities last. Findings are presented as frequency distributions for the indicators of interest. A correlation between measures of hand washing with soap at critical junctures at the household level is also included in the section pertaining to household data. The presentation of findings is followed by a section discussing the implications for setting program targets and future follow-up measures.



## Methodology

### LQAS

LQAS is a stratification sampling approach based on binary decision-making that originated in the manufacturing industry for quality control purposes: to determine if a particular lot of goods meets desired specifications. Instead of checking each item in the lot to determine which items do not meet standards, a sample of the items is chosen and the person in charge of quality control defines the level of risk taken for not inspecting every single item in the lot. Based on this approach, a given lot of goods is then accepted or rejected. The only decision that can be made with this type of sampling is “acceptable” or “not acceptable.” No measure of different levels of unacceptability is possible. The sample size is the number of units selected from each lot. “The decision value is the number of “defective” items that need to be found before the lot is deemed unacceptable” (Hoshaw-Woodard 2001).<sup>1</sup>

Information from lots can be combined to obtain the overall proportion of defects. This requires that the population be divided into a complete set of non-overlapping lots. Samples are selected from each lot, and the proportion of defective items is calculated. An overall proportion of defects in the population of items is estimated by taking the weighted average of defects from each lot. A confidence interval is calculated in addition. Hoshaw-Woodard (2001) has argued that LQAS is an example of stratified sampling because the overall proportion of defects is determined by combining the information from each lot, and the lots play the role of the strata.

Because the decision-making is binary, a small sample size per lot or per strata can be used. Typically, the sample size per lot varies between 19 and 21 cases.

Different sub-samples are required depending on the topic that needs to be investigated. The monitoring of exclusive breastfeeding practices, for example, would need to be conducted in a sample of households with children less than six months of age as the practice of exclusive breastfeeding is suggested for children from zero to five months. Tracking reproductive health indicators would require obtaining reproductive health information from a set of informants 14 to 49 years of age. By the same token, if the hygiene practices promoted are targeting households with children from newborn to 59 months of age, the LQAS approach requires that a sub-sample of households for each one of these cohorts be drawn. If the focus is on households with the highest diarrhea prevalence in children under five, which in the case of Madagascar is the seven to 23 month cohort, a specific sample for that cohort is required.

### Application of LQAS for Outcome Monitoring in Madagascar

A modified version of the LQAS approach has been applied to health interventions using the same logic. In the specific case of the OM conducted in Madagascar, FANTA has estimated that the sample size needed per lot is 21 cases. For a more detailed discussion on this decision, the reader is referred to FANTA’s 2007 Outcome Monitoring Survey Report.<sup>2</sup> This sample size is used for drawing household, school, and health facility samples.

---

<sup>1</sup> Hoshaw-Woodard, Stacy. 2001. *Description and comparison of the methods of cluster sampling and lot quality assurance sampling to assess immunization coverage*. Geneva: World Health Organization, Department of Vaccines and Biologicals.

<sup>2</sup> Food and Nutrition Technical Assistance (FANTA). 2007. Outcome Monitoring Survey: USAID/Madagascar Program. December 2007.

However, in the case of household sampling, the universe is divided into individual program management areas (PMAs). The PMAs OM exercise in Madagascar corresponds to the lots described earlier in association with LQAS. PMAs are geographic areas where different partnerships intervene to address health issues and where changes in healthy practices are expected at the household level. USAID/Madagascar’s Health, Population and Nutrition program is implemented by four discrete partner groups. Each partner group works on the same issues with roughly the same set of interventions in a subset of a total of 197 communes targeted by the USAID Mission’s health portfolio. For the purposes of the OM, each one of these partnerships is viewed as a PMA. A sample of 21 households is selected from each one of these PMAs.

HIP is expected to work with the USAID/Madagascar bilateral project Santénet and its partners to the extent possible to promote hygiene practices at the household level. However, HIP also has its own set of partners that may operate in geographic areas not covered by Santénet, either working alone or in partnership with other organizations. In fact, HIP works in an additional 46 communes. As a result, the USAID health portfolio, including HIP’s coverage area, is being implemented in a total of 243 communes. An additional sample of 21 households was selected from HIP’s area of influence, described further as the HIP PMA.

The following table, reproduced and adapted from the FANTA 2007 report mentioned above to reflect the HIP PMA, indicates the distribution of communes by PMA as well the members in the partnerships considered for establishing the household sample.

**Table 1 – Program Management Areas for OM Purposes Including HIP**

<b>PMA</b>	<b>Partnerships</b>	<b>Number of Communes Covered</b>
1	HIP and collaborators	46
2	Santénet alone	34
3	Santénet plus Child Survival Grantees	12
4	Santénet plus Title II Child Survival Grantees	50
5	Santénet plus Voahary Salama	101
	Total	243

No breakdown of the geographic area of coverage by PMA was used for the selection of the school and health facilities samples. Each one of those samples has 21 cases.

## **Samples**

### ***Households***

To arrive at the needed sample size of 21 households per PMA, a two-step cluster sampling was used. The first step required the random selection of seven clusters per PMA. A cluster was defined as a catchment area associated with a basic health center (e.g., *Centre de Santé de Base—CSB*). The selection of cluster per PMA was done using probability proportional to size. A catchment area would normally be a *fokontany* or village. Three households per village were then randomly selected. A “spin the bottle” approach was used to select the first household in the

village. The second and third cases were identified by selecting the closest households to the right of the first one, walking in a clockwise fashion.

Informants were child caretakers, and to be selected for interviewing they had to meet the following criteria:

- 1) Have a child seven to 23 months of age
- 2) Have a child seven to 23 months of age and have a latrine
- 3) Have a child zero to 59 months of age

As a result, three sub-samples were drawn in each PMA. The sample of households having both a child seven to 23 months of age and a latrine was established because of the need to ask a set of questions pertaining to access to and maintenance of sanitation facilities. It was assumed that the existence of sanitation facilities in rural Madagascar would be too low to obtain sufficient cases to explore sanitation facility maintenance in a sample meeting only the age cohort criterion.

The zero to 59 month sample is a group of households that is visited to obtain information about many health practices, and it serves in the context of this report as a comparison group that normally gets interviewed in child survival programs. Presenting information about this particular group in the context of this report is entirely illustrative and for comparison purposes. The samples of specific importance for HIP are those with children seven to 23 months of age who according to the 2004 Madagascar Demographic and Health Survey (DHS) have the higher prevalence of diarrheal disease.

The following table breaks down the sample size by PMA and household selection criteria used in this baseline study.

**Table 2 – Household Sample Breakdown by PMA and Selection Criteria**

PMA	Informant Selection Criteria		
	Having a 7-23-month-old child	Having a 7-23-month-old child plus a latrine	Having a 0-59-month-old child
HIP and collaborators	21	21	21
Santénet alone	21	21	21
Santénet + Child Survival Grantees	21	21	21
Santénet + Title II Grantees	21	21	21
Santénet + Voahary Salama	21	21	21
Total	105	105	105

The regions and communes where data were collected are listed in Table 3 below.

**Table 3 – List of Communes Where Baseline Data were Collected by Administrative Region**

<b>Regions</b>	<b>Communes</b>
Amoroni’Mania	Manandriana
Analamanga	Ambohidratrimo Ankazondandy Talatan’I Volonondry
Haute Matsiatra	Ambohimahamasina Ankafina Ihazoara Andraramila (EM)
Elsewhere	Ambatomena Ambohibary Ambohidronono Analampatsy Antanandava Beheloka Belazao Ifarantsa Mandoto Mangarano Maropaika Ranomafana

***Institutions***

A standard LQAS approach was used to collect information for schools and health centers. Nineteen schools and 19 basic health centers were selected at random from a sample frame that includes all schools and all basic health centers in the communes where the USAID/Madagascar health portfolio is implemented.

**Indicators**

Tables 4, 5, and 6 list respectively the indicators tracked by HIP’s baseline for households, schools, and basic health centers.

**Table 4 – HIP Household Indicators by Topic Area**

<b>Hygiene Practice</b>	<b>Indicator</b>
Hand Washing	% of households with soap
	% of households with dedicated hand washing (HW) station
	% of households with soap at commonly used hand washing station
	% of caretakers of children 7-23 months that reported using soap for HW at least one critical juncture
POU	% of caretakers aware of different water treatment options, including: Boiling Sur'Eau SODIS Ceramic Filters Biosand filters
	% of caretakers demonstrating correct mixing of Sur'Eau
	% of households that provided evidence for household water treatment method used
	% of households with narrow neck containers that have hard covers
	% households using only hard covers on wide mouth drinking water storage containers
Sanitation	% of households with sanitary facility
	% of households with sanitary facility that has a slab
	% of households with sanitary facility with protected door entry
	% of households with HW station near toilet facility
	% of households with HW station near toilet facility that also has soap
	% of households with sanitary facilities to dispose of child feces hygienically

**Table 5 – Indicators for WASH-Friendly Schools**

<b>Hygiene Practice</b>	<b>Indicator</b>
Water	Schools with access to safe drinking water
Sanitation and Hand Washing	Schools with latrines for students
	Schools with separate latrines for boys and girls
	Schools with separate latrines for boys and girls that have slabs
	Schools with separate latrines for boys and girls that are operational
	Schools with separate latrines for boys and girls that are clean
	Schools with latrines for students with nearby HW station
	Schools with HW stations near student latrines supplied with soap

**Table 6 – Indicators for WASH-Friendly Basic Health Centers**

<b>Hygiene Practice</b>	<b>Indicator</b>
Water	Centre de Santé de Base (CSBs) with access to safe drinking water
Sanitation and Hand Washing	CSBs with latrines for clientele
	CSBs with clientele latrines that have slabs
	CSBs with operational clientele latrines
	CSBs with clean clientele latrines
	CSBs with HW station near latrines
	CSBs with HW stations near latrines supplied with soap

### **Instruments**

Two instruments were developed for interviewing households: detailed and generic. The detailed household instrument was used to interview the households with children seven to 23 months old, regardless of whether they had a latrine or not. This instrument contains questions that reflect all the indicators listed above for households. The generic household questionnaire, on the other hand, was a streamlined version and it contained only some of the questions from the detailed questionnaire. It was used to interview households in Group 2 (those with children in the zero to 59 month category). It was constructed to fit the requirements of OM and relies on questions previously used in data collection efforts such as the DHS, the Multiple Indicator Cluster Survey, or the Knowledge, Practices and Coverage Survey’s hygiene questionnaire used by USAID Child Survival Grantees.

The instruments to collect information from institutions are very similar. The major difference between them resides in the breakdown of questions for latrines used by boys vs. girls that is peculiar to the instrument used in schools. The instruments for institutions were developed prior to the considerable evolution that has occurred in the latter part of 2007 to define the criteria to classify WASH-friendly schools. Future measures of institutional performance will be more sensitive to the newly developed criteria.

The instruments were developed in English and translated first into French and then into Malagasy. They were field pretested during the training of enumerators.

Examples of the baseline questionnaires used to interview households with children seven to 23 months old and to collect data from institutions may be found in Annexes 1, 2, and 3 of this document.

### **Data Collection and Analysis**

Personal Digital Assistants (PDAs) were used to collect the information from all study groups. Instruments were converted into Pocket Creations format, the software used by the PDAs. Data entered were exported to Excel and then into Statistical Package for the Social Sciences for analysis.

## Findings

### Households

The baseline findings for households will be presented as follows: first the socio-demographic characteristics of the respondents; followed by the knowledge of treatment options for drinking water and actual treatment and storage practices; hand washing practices will be discussed in third place; then sanitation coverage, sanitation facility characteristics, and disposal of child feces will be discussed; the findings conclude with the study participants' exposure to hygiene promotion broken down by topic and source of information.

### *Characteristics of Respondents*

Table 7 indicates that respondents in either study group are on average over 29 years old. The mean age of the reference child is 14.1 months in Group 1 compared with 24.5 months in Group 2. Given the nature of the cohort, this is an expected finding since children in Group 1 should be younger than those in Group 2. The findings also indicate that 51 percent and 54 percent of the reference children in Group 1 and Group 2, respectively, were boys.

**Table 7 – Socio-Demographic Characteristics of Respondents**

Variables	Baseline Value (% or total as appropriate)		
	Households with 7-23-month-old children (Group 1)	Households 0-59-month-old children (Group 2)	
Mean age of respondent	29.6 years	29.1	
Mean age of reference child	14.1 months	24.5	
Sex of reference child	Boy	51%	54%
	Girl	49%	46%

### *Water Treatment and Storage*

Table 8 indicates that the majority of the visited households in either study group have access to unprotected water sources. In fact, 61 percent of the households in Group 1 against 55 percent in Group 2 obtain their drinking water from unprotected sources; the most common source in either group is surface water. Study participants in Group 1 were then asked: 1) what their water source is for purposes other than drinking and 2) the typical distance to their water sources measured in terms of traveling to and from the sources plus wait time once there. In Group 1, 62 percent obtain water for uses other than drinking from an unprotected source; again surface water is the most common source. Ninety-five percent of the respondents in Group 1 indicated that on average they spend under 30 minutes fetching water from the source.

When unprompted, the most frequently mentioned method of drinking water treatment in both study groups was boiling. Sixty-three percent of the respondents in Group 1 and 70 percent of those in Group 2 mentioned this method spontaneously. A considerable difference exists, however, in regards to the use of Sur'Eau hypochlorite solution for water disinfection when an unprompted question is used to establish knowledge of treatment options. Only 6 percent of the

respondents in Group 1 mentioned Sur'Eau compared to 59 percent in Group 2. These differences disappear, however, when Group 1 participants are asked, "What products can be used to treat water to make it safe for drinking?" In response to this question, 66 percent mentioned Sur'Eau. So, the differences detected at first may be due to the type of question asked. It is noteworthy that neither study group mentioned filtration or solar disinfection as drinking water treatment options. Study participants were not acquainted with these methods.

There are considerable differences between study groups in the percentage of households declaring that they treat their drinking water. Whereas 57 percent of informants in Group 1 declared that they practice drinking water treatment, 73 percent of informants in Group 2 reported that they engage in this practice. Fifty-one percent of the informants in Group 1 declared that they treat their drinking water every day. This information is not available for Group 2. The most commonly used water treatment method in either group is boiling. Fifty-seven percent of the informants in Group 1 indicated that they boil their water compared to 67 percent in Group 2. Among Group 1 informants, Sur'Eau is very rarely used as a water treatment option. Only 2 percent of those interviewed in Group 1 declared that they use it. None of the respondents in Group 2 mentioned it.

The questionnaire used to obtain data from Group 1 was designed to explore in more detail the different options and to try to verify to the extent possible if the self-reported information is backed up by observations. In 51 percent of the households in Group 1, the study enumerator was able to observe a pot presumably containing boiled water. Fifty-seven percent of the informants in Group 1 indicated that the water was boiled the day of the interview. Group 1 informants that indicated they had used Sur'Eau were able to show the product, and the study enumerator was able to confirm in all cases that the solution was still valid. However, the chlorine residual test practiced to determine if there was chlorine in the chlorine-treated water proved to be negative in all cases.

Study participants in Group 1 keep on average 1.4 containers to store drinking water at the household. This information was not available for Group 2 given the limited number of questions asked of that group. However, both groups showed their water storage containers to study enumerators who observed them. Based on these observations, we can conclude that 40 percent of study participants in Group 1 vs. 73 percent in Group 2 use only wide mouth containers (defined as having an opening larger than 3 centimeters). The exclusive use of narrow mouth containers (with openings up to 3 centimeters wide) was prevalent among 7 percent of the households in Group 1 and 22 percent of the households in Group 2. Enumerators in study Group 1 observed that none of the households use hard covers exclusively on the water storage containers. More commonly, they use both soft and hard covers. In 55 percent of the households in Group 1, enumerators were able to see the tool used to retrieve water from the storage containers. The most commonly used tool was a glass or cup with a handle. At the time the questionnaire was designed, local advisors suggested that *zingas* (a long-handled dipper) were commonly used to retrieve stored water. However, this tool was only observed in 1 percent of the visited households in Group 1. Questions about how water containers are covered and how the water is retrieved from these containers were not part of the survey used to obtain data from Group 2.



**Table 8– Baseline Values for Point-of-Use Practices in Households**

Variables	Indicator		Baseline Level (% or Σ as appropriate)	
			Group 1	Group 2
Source of drinking water	unprotected	surface	26	23
		unprotected spring	23	16
		unprotected dug well	11	17
	protected	pipelined into dwelling/yard	2	
		public standpipe/tap	17	27
		protected dug well	15	13
		protected spring	5	5
Sources of water for other uses	surface		28	Not available (N/A)
	unprotected spring		23	
	unprotected dug well		11	
	pipelined into dwelling/yard		2	
	public standpipe/tap		17	
	protected spring		5	
	rainwater		1	
Distance to source	< 30 minutes		95	(N/A)
Knowledge of water treatment methods (unprompted, multiple responses possible)	boiling		63	70
	Sur'Eau/bleach		6	59
	filtration		0	0
	solar disinfection		0	0
	strain		0	2
	stand & settle		0	1
	cover water		1	1
	no method mentioned			6
Treats water to make it safer to drink			57	73
Frequency of water treatment practice	daily		51	
	occasionally		6	
Treatment method used by families (at time of interview for households with children 7-23 months and “usually done” in Group 2 households)	nothing		43	33
	boiling		57	67
	Sur'Eau		2	0
Management of boiled water	enumerator observed pot containing presumably boiled water		51	N/A
	water boiled the day of the interview		57	
Chlorination	allowed to conduct chlorine residual test		2	N/A
	positive results of chlorine residual		0	

	test		
	checked expiration date of Sur'Eau	2	
	Sur'Eau solution still valid	2	
Average number of containers used to store water among water treaters		1.4	N/A
Mouth of containers used to store treated water observed among water treaters	only wide mouth (larger than 3 cms)	40	73
	only narrow mouth (up to 3 cms)	7	22
	both wide and narrow mouth	4	0
	not observed	0	5
Type of container cover among water treaters	only hard covers	0	N/A
	both hard and soft covers used	74	
	no information		
Method of water retrieval from container among water treaters	glass/cup with handle	40	N/A
	pouring into glass/cup	10	
	zinga	1	

### ***Hand Washing***

Table 9 indicates that the presence of soap is more common in households in Group 1 than in Group 2; 69 percent of the households in Group 1 said they had soap compared to 49 percent in Group 2.

The most frequent location for the commonly used hand washing station was the yard of the house as reflected by 68 percent of the households in Group 1 and 42 percent of the households in Group 2. The information for Group 2 is based on only 56 percent of the cases as 44 percent of the study participants did not allow the enumerator to see the hand washing station. The most commonly used hand washing device in Group 1 was a basin/bucket; enumerators reported 72 percent of the devices observed were this type. No comparable information is available for Group 2 as this information was not captured in the survey. The presence of soap at the hand washing station was more prevalent among Group 1 households than among their Group 2 counterparts. The percentages reported are for the whole sub-sample in each case. The lower presence of soap in the Group 2 households may be partially due to the lack of authorization to see the hand washing device and check its supplies. Although 69 percent of Group 1 households declared to have soap on the premises, only a segment of those households keep soap at the hand washing station. Making soap available at the hand washing station may be a small doable action<sup>3</sup> to consider implementing to facilitate the adoption of the practice of hand washing with soap at critical junctures.

Sixty-one percent of the households in Group 1 kept water at the time of the interview at the hand washing station most commonly used. No such information is available for Group 2.

<sup>3</sup> A new practice or action to adopt to improve a water, sanitation, or hygiene behavior.

Fifteen percent of the Group 1 caretakers reported washing their hands with soap at least at one of the critical junctures. The line of questioning used to arrive at this figure is based on the assumption that indirect questions must be used. Instead of focusing on hand washing per se, the questions focused on the use of soap for any reason and are not necessarily associated with personal hygiene to reduce reporting bias on the part of informants. After being asked if informants used soap during a 24-hour recall period, they are asked what the soap was used for if they responded in the affirmative. Then several probes were used to find out under what circumstances soap was used. Unlike direct questions about hand washing, one may assume that the indirect approach leads to under-reporting.

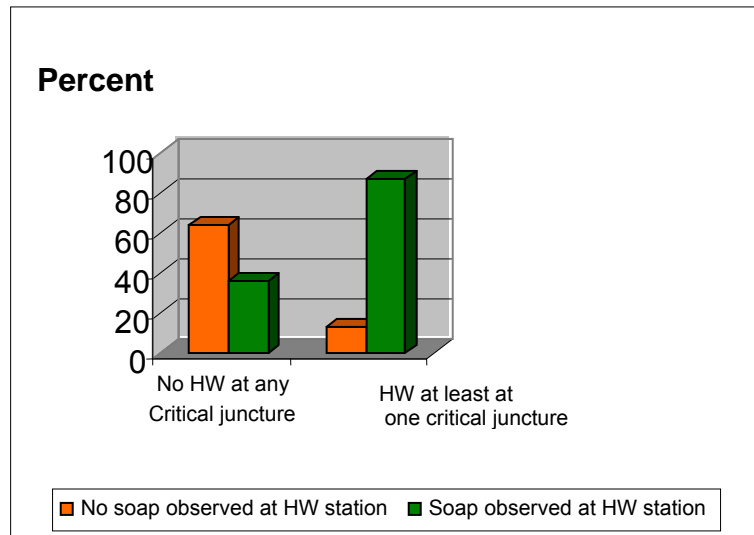
To explore this possibility, the relationship between two types of hand washing measures was studied: an objective one such as the presence of soap at the hand washing station, and a subjective one, the self-reported data. This analysis was done using the data from Group 1. The relationship between these two measures is presented in Chart 1. A statistically significant relationship between the two measures was detected. As may be observed in the chart, the proportion of self-reported hand washing with soap is lower when no soap was observed, yet higher when soap was observed. This result helps validate the self-reported data. The use of these two measures of hand washing is important. The international community promoting hand washing has agreed that multiple measures of hand washing are required, given the difficulty of evaluating these practices due to the sensitivity of the issue and the repetitive nature of the practice.

Knowledge questions about when hands should be washed suggest that in Group 1 there is more awareness about washing hands before eating—69 percent of study participants gave this response. Less common is the awareness about the need to wash hands with soap at other critical junctures, after defecation or before food handling. Only 1 percent of the study participants in Group 1 reported that it was important to wash hands after cleaning a latrine or after cleaning a potty. Fifteen percent indicated that it was necessary to wash hands after cleaning a child's bottom. That is about four and a half times less than those that mentioned hand washing before eating. Considerable work in developing awareness about the critical junctures seems a possible conclusion after reviewing these findings.

**Table 9 – Baseline Values for Hand Washing (HW) Practices**

Variables	Indicator	Baseline Level	
		Group 1	Group 2
Soap availability	“Do you have any type of soap in your house?”	69	49
Location of hand washing station generally used	inside/near toilet	10	4
	inside/near kitchen	16	10
	yard	68	42
	no specific place	6	
	not allowed to see HW station		44
Type of HW device observed	basin/bucket	72	N/A
	<i>gobelet</i> (plastic mug)	20	
	waterway	5	
	inside faucet	1	
	others (water fountain, barrel, etc.)	2	
Soap observed at HW station		43	27
Water observed at time of visit at HW station		61	
Self-reported soap use at critical junctures	soap used at least one critical juncture (“Did you use soap yesterday morning”? “What did you use it for? Anything else?”)	15	1
When do you usually wash your hands with soap? (unprompted)	after defecation	18	N/A
	after cleaning a child’s bottom	26	
	before preparing food	39	
	before feeding others	17	
	before eating	58	
When hands should be washed (unprompted)	after defecation	32	N/A
	after cleaning a child’s bottom	15	
	after cleaning a latrine	1	
	after cleaning a potty	1	
	before eating	69	
	before preparing food	37	
	before feeding a child	27	
	after eating	7	
	after getting up	3	
once your work is completed	7		

**Chart 1 - Relationship between Hand Washing Measured through Spot Checks and Measured through Self-Reported Practices**



***Sanitation***

Baseline findings are presented in Table 10. These data indicate that about 2/5 of the respondents do not have access to any sanitary facility. Among the 3/5 that do, a majority uses pit latrines without slabs (56 percent and 59 percent for Group 1 and Group 2, respectively). In addition, many of those with access to a sanitary facility share with other households. Sharing of latrines was reported among 44 percent of informants in Group 1 and 56 percent of informants in Group 2. Latrine sharing, then, appears to be a prevailing practice in the studied samples. The location of the latrine was recorded only in the case of Group 1, and two distinct groups emerge. Only 25 percent of those that have sanitary facilities indicated that the latrine is located on the premises compared to 36 percent who declared that it is off premises.

Enumerators did observe the sanitation facility among Group 1 respondents not only to determine its location, but also to determine its characteristics and use. In 42 percent of Group 1 households the sanitary facility had a protected entry allowing for privacy, and in 58 percent of the households there was evidence that the latrine was being used. Since 61 percent of households in this group did have latrines, lack of privacy does not seem to be an impediment to use.

The availability of a hand washing station near the latrine was extremely limited among Group 1 households. Only in 3 percent of Group 1 households was such a device observed by enumerators. Nowhere in Group 1 households was there soap at the hand washing station near the latrine.

Thirty-five percent of caretakers in Group 1 indicated that children in the household defecate in the open. Hypothetically, they would likely be doing what the rest of the family does. Fifty-eight percent of caretakers indicated that they disposed of the feces the last time the index child defecated by throwing it in the yard, in nearby bushes, or in a waterway.

**Table 10 – Household Sanitation**

Variables	Indicator	Baseline Level (% or $\Sigma$ as appropriate)	
		Group 1	Group 2
Coverage	no facility	39	38
	pit latrine without slab	56	59
	pit latrine with slab	3	2
	bucket latrine	1	0
	pour flush	1	0
Facility shared with other households		44	56
Average number of households sanitary facility is shared with among those that share		4.3	N/A
Location of facility	on premises	25	N/A
	off premises	36	N/A
Privacy	facility has observed door or curtain allowing privacy	42	N/A
Latrine has any observed child-friendly features (e.g., small hole, low seat, etc.)		12	N/A
Evidence that latrine is being used		58	N/A
Hand washing station near facility	available	3	N/A
	hand washing station has cleansing agent	0	
	hand washing station has (running) water	0	
Place of defecation for children	diapers/clothes	56	N/A
	potty	5	
	in sanitary facilities	3	
	open defecation (yard or bush)	35	
Disposal of child feces last time child defecated	dropped in sanitary facilities	26	N/A
	buried	4	
	with solid waste	3	
	disposed of in yard, nearby bushes, or waterway	58	

### ***Household Classification Based on Hygiene Practice Adopted***

HIP is a project that works at scale. For HIP, one of the premises of at-scale interventions is that multiple practices must be promoted through multiple channels by multiple complementary partners to facilitate their simultaneous adoption by multiple households. To enhance adoption, practices may be divided into small doable actions. The list of indicators and findings presented earlier includes some of the small doable actions promoted in Madagascar. For example, the proper handling of drinking water that has been treated will require families to use narrow neck containers that have hard covers permitting families to pour water into a glass or cup for drinking. If households have wide mouth containers, they should use hard lids on the containers and employ a dedicated tool for retrieving water from this container. The tool must be kept in a secure place so that family members avoid using it for other purposes.

HIP constructed a trichotomy to classify households based on the number of hygiene practices being implemented to help assess the premise of the parallel adoption of multiple promoted practices of HIP's at-scale approach. The construction of the trichotomy started with a list of all the small doable actions for which there is baseline data. Subsequently, HIP examined which of those actions were being implemented by households visited by survey enumerators. This trichotomy permitted the researchers to classify households into the following groups:

- 1) Households not practicing any of the practices promoted
- 2) Households engaged in only one practice promoted
- 3) Households engaged in two practices promoted
- 4) Households engaging in three or more practices promoted

The results of this analysis are presented in the following table. The table breaks down the major categories into the specific practices being implemented. In the case of those households performing only one practice, they were either treating their drinking water or they had access to sanitary facilities that met minimum standards. This typology was derived using data for Group 1 only. The table shows that 13 percent of households did not practice any of the recommended behaviors, 26 percent were engaged in performing one of the recommended behaviors, 60 percent performed two of the promoted behaviors, and none engaged in performing three behaviors.

**Table 11 – Distribution of Households by Performance of Different Hygiene Practices Promoted among Informants in HIP's Sample**

<b>Number of Practices</b>		<b>Baseline Value (%)</b>
None of the hygienic practices promoted		13
Only one practice	only POU treatment (boiling included)	12
	only toilets meeting minimum requirements	14
Two practices	POU treatment + soap at HW station	28
	POU treatment + toilet meeting minimum requirements	1
	soap at HW station and toilet meeting minimum requirements	13
	POU treatment + unimproved	16

	sanitation	
	soap at HW station + unimproved sanitation	2
Three practices	POU treatment + appropriate storage + soap at HW station + toilet meeting minimum requirements	0

### *Exposure to Hygiene Promotion*

The following table presents findings regarding exposure to hygiene promotion. These data are valid only for Group 1 informants. Less than one-fourth declared they had been recently exposed to messages pertaining to water treatment and storage, hand washing with soap, sanitation, or diarrheal diseases, for that matter. Although informants could mention more than one channel of exposure (whenever there was exposure), one single channel was generally cited. Radio was the most commonly mentioned source of information for POU, and village health educator or the health center for other topics investigated.

**Table 12 – Exposure to Hygiene Promotion**

Sources of Information by Topic		Baseline Value in Group I (%)
Exposure to information about POU		23
Sources of information about POU	health center	2
	village health educator	7
	radio	11
	TV	2
	NGO	1
Exposure to information about hand washing		13
Sources of information about hand washing	health center	3
	village health educator	4
	radio	4
	TV	1
	NGO	1
	neighbor	1
Exposure to information about sanitation		25
Sources of information about sanitation	health center	4
	village health educator	9
	radio	4
	TV	1
	NGO	1
	neighbor	1
	village chief	3



	village meeting/assembly	1
	festival	1
Exposure to	information about diarrheal disease	20
Sources of information about diarrheal disease	health center	5
	village health educator	5
	radio	4
	TV	1
	NGO	1
	neighbor	2
	festival	1
Number of hygiene topics informants have been exposed to	no topics	55
	one hygiene topic	26
	two hygiene topics	8
	three hygiene topics	9
	four hygiene topics	4

### **Institutional Performance**

Data pertaining to schools and health facilities are not presented in terms of percentages. A pass or fail grade is used for the different indicators listed. The LQAS approach requires the use of a binary classification when there is one single sample that represents the population, that is, when data were not collected by PMA or region, which is in fact the case for schools and basic health centers. Arbitrarily HIP set the standard at 51 percent to determine if schools would be classified as passing the test on any given criterion. This was based on the assumption that the probability of meeting the criteria was just as high as the probability of failing it.

### **Schools**

Data in Table 13 for schools indicated that access to latrines is more prevalent than access to drinking water and to treated drinking water. Schools passed the test for latrine coverage for students but not for the availability of treated drinking water. Schools also met the criteria of having sex-specific latrines and having latrines with slabs and a protected entry allowing for privacy. Schools, however, failed the test concerning latrine cleanliness and having nearby hand washing stations and hand washing stations with access to soap.

**Table 13 – Baseline Values for Drinking Water Availability and Treatment Methods in Schools**

Variables	Indicator	Baseline Level
Availability	drinking water on premises	Fail
Treatment	no treatment, fountain water	Fail
	non-fountain water treated with Sur'Eau	Fail

**Table 14 – Baseline Values for Sanitation Infrastructure and Practices in Schools**

Variables	Indicator	Baseline Level	
Coverage	schools with latrines for students	Pass	
	schools with sex-specific latrines	Pass	
Characteristics of latrines students may use	with slabs	unisex	Pass
		sex-specific latrines	Pass
	operational	unisex	Pass
		sex-specific latrines	Pass
	allowing privacy	unisex	Pass
		sex-specific latrines	Pass
	kept clean	unisex	Fail
		sex-specific latrines	Fail
	with hand washing station nearby	unisex	Fail
		sex-specific latrines	Fail
	with soap at nearby hand washing station	unisex	Fail
		sex-specific latrines	Fail

**Table 15 – Hygiene Promotion Activities by Schools**

Hygiene promotion	schools with hygiene promotion activities targeting students	Pass
	schools with hygiene promotion activities targeting communities	Pass

### **Basic Health Centers**

Tables 16 and 17 present similar information for basic health centers (CSB). The data in the table indicate that these health centers pass the test concerning the availability of drinking water on the premises, but fail when it comes to having treated water. In addition, the data also indicate that basic health centers passed the test regarding availability of latrines for clients as well as the existence of latrines with slabs, but failed when it came to the presence of sex-specific latrines, the

cleanliness of unisex latrines, which are the most common, the presence of hand washing stations near the latrines, and hand washing stations that are supplied with soap.

**Table 16 – Baseline Values for Drinking Water Availability and Treatment Methods in Basic Health Centers**

<b>Variables</b>	<b>Indicator</b>	<b>Baseline Level</b>
Availability	drinking water on premises	Pass
Treatment	no treatment, public tap/standpipe	Fail
	non-fountain water treated with Sur'Eau	Fail

**Table 17 – Baseline Values for Sanitation Infrastructure and Practices in Basic Health Centers**

Variables	Indicator		Baseline Level
Coverage	health facilities with latrines for clients		Pass
	health facilities with sex-specific latrines		Pass
Characteristics of CSB latrines	with slabs	unisex	Pass
		sex-specific latrines	Pass
	operational	unisex	Pass
		sex-specific latrines	Pass
	allowing privacy	unisex	Pass
		sex-specific latrines	Pass
	kept clean	unisex	Fail
		sex-specific latrines	Pass
	with hand washing station nearby	unisex	Fail
		sex-specific latrines	Fail
	with soap at nearby hand washing station	unisex	Fail
		sex-specific latrines	Fail

**Table 18 – Hygiene Promotion by Basic Health Centers**

Hygiene promotion	CSBs with hygiene promotion activities targeting clients visiting facility	Pass
	CSBs with hygiene promotion activities targeting communities	Pass

## Implications

This section focuses on three issues:

- 1) What audiences to focus on for upcoming activities
- 2) Whether there is a need to adjust messages about some traditional practices
- 3) What should targets be for the next year

### *Future Target Audiences: What Are the Choices?*

The Group 1 baseline data from Madagascar show a divide between the “practitioners” or doers, and the “non-practitioners” or non-doers of HIP-promoted hygiene behaviors. So, for example, regardless of the technology used, 60 percent treat their drinking water, 61 percent have access to sanitary facilities, and 43 percent keep soap at a hand washing station thus enabling hand washing with soap at one critical juncture. On the flip side, 40 percent do NOT treat their water, 39 percent have NO access to sanitary facilities, and 57 percent do NOT keep soap at a hand washing station. Reiterating the same point but using different information obtained after the analysis of the findings, the classification of households based on the number of hygiene practices they perform indicated 13 percent of the households did not engage in any of the hygiene practices promoted and 26 percent engaged in only one of those practices. None of the households visited in Group 1 engaged in the three behavioral areas HIP focuses on.

Furthermore, the data also show that among the doers there is a prevalence of what practitioners call “traditional” hygiene practices—57 percent boil their water and 57 percent have a simple pit latrine.

That means that the “ideal” practices are rare: only 15 percent of the households demonstrated correct mixing of Sur’Eau, and yet the chlorine residual test was negative in all of the few households reporting that they treat water with this method. By the same token, only 4 percent use hard covers for all wide mouth containers used to store drinking water, only 3 percent had sanitary facilities with slabs, and only 5 percent had a hand washing station near a sanitary facility.

The data suggest that HIP can and should reflect on where to focus its promotional efforts in order to be able to set targets for future monitoring measures. HIP is thus confronted with three issues:

- ◆ Should HIP try to get the non-doers to do something?
- ◆ Should HIP try to get the traditional doers to move up the respective “improvement ladders?”
- ◆ Or should HIP try to do both?

Program managers should answer these questions and make programmatic decisions accordingly.

### *Target Setting*

Being a binary decision tool, the LQAS approach to monitoring behavioral performance requires HIP to set targets in order to determine follow-up measures if those targets are met. Behavior change is a long process requiring time. Although big increases in behavior change may be

desirable, they may not be necessarily reachable in one year. HIP has the opportunity to move gradually and to set incremental targets from year to year. For example, if reaching a 30 percent increase in behavior change in the life of the project were desirable, seeing an increment of this magnitude in one single year of promotional efforts may be hard to achieve. HIP can decide, however, to break up such a target into two years and set a 15 percent annual increase for both 2008 and for 2009.

Target setting must take into account the limitations of LQAS. Future measurements would be in a position to capture gains of at least 5 percent, but preferably 10 percent or more, in practices that are performed already by 30 percent of the target population.

Using an example, following that requirement would mean attempting to get household water treatment of drinking water to increase from 60 percent to 70 percent. Or by the same token, attempting to increase access to sanitary facilities from 61 percent to 71 percent, or attempting to increase the availability of soap at a hand washing station from 43 percent to 53 percent. In all of those examples, the baseline level is higher than 30 percent and a 10 point increase over that level is set as a target.

Because of the limitations of LQAS and given the low levels of ideal practices, any pass/fail decisions about these practices in the immediate future would be technically inappropriate. The jumps in ideal practices would have to be big and reach at least 30 percent to say that a given target is being achieved or failing. If the detected change is below 30 percent, it can only be said that things are moving in the right direction.

Target setting should be realistic, taking into account program activities, including both funding resources and partnerships involved in implementing programs.

Table 19 lists the recommended indicators to track next year and the targets that may be used to establish progress by September 2008.

**Table 19 – Suggested Targets for 2007-2008 Implementation Year**

Hygiene Practice	Indicator	Baseline	O8 Target
Hand washing (HW)	soap in the household	70%	80%
	soap at hand washing station	43%	53%
	soap used for HW at least at one critical juncture	19%	Not possible, given limitations of LQAS as practices need to have a baseline level of 30% to establish targets. Yet, increases will still be monitored in upcoming study waves even in the absence of targets.
POU	knows about different water treatment options: boiling	63%	83%

	Sur'Eau SODIS filters	66% 0% 0%	86% Not possible given limitations of LQAS as baseline level of 30% is needed to establish targets. Yet, increases will be monitored in upcoming study waves even in the absence of targets.
	demonstrates correct mixing of Sur'Eau	15%	Not possible due to limitations of LQAS for reasons expressed above. Yet, increases will be monitored in subsequent study waves even in the absence of targets.
	% of households that used any household water treatment technology	59%	69%
	% households using only hard covers on wide mouth drinking water storage containers	4%	Not possible yet increases followed up
Sanitation	% of households with sanitary facility	61%	66%
	% of households with sanitary facility that has slab	3%	Not possible due to limitations of LQAS for reasons expressed above. Yet, increases followed up and monitored in subsequent study waves even in the absence of targets.
	% of households with sanitary facility with protected door entry	71%	76%
	% of households with HW station near toilet facility	5%	Not possible due to limitations of LQAS for reasons expressed above. Yet, increases followed up and monitored in subsequent study waves even in the absence of targets.
	% of households with HW station near toilet facility that also has soap	1%	Not possible due to limitations of LQAS for reasons expressed above. Yet, increases followed up and monitored in

			subsequent study waves even in the absence of targets.
	% of households with sanitary facilities and with Group 1 disposing of child feces hygienically	69%	74%

Specific comments and caveats about some of the targets suggested are in order below.

### ***POU***

The POU indicators for which targets are set are related to both knowledge and practices. In setting the proposed targets, it is assumed that the increases in knowledge will be larger than the increases in practices. We have opted for proposing a 20 percent increase in knowledge where an already considerable proportion of the respondents expressed knowledge on a given topic.

Large gains may be possible where there is no previous knowledge. So, one could opt to recommend large increases such as 50 percent in knowledge about water treatment technologies such as solar disinfection and filtration. However, no such recommendation is presented here because of the limitations of the LQAS requirement of a minimum level of knowledge at the baseline in order to set the targets.

In the upcoming months, HIP will probably need to work on three fronts regarding household water treatment.

- ◆ First, HIP should ensure that more families treat their drinking water in the household, even for individuals that drink water collected from protected sources. Given the amount of open defecation that is practiced throughout Madagascar, surface water is likely to be contaminated. In addition, transportation of water from the source to the house may contribute to contamination as well.
- ◆ Second, HIP will need to consider bringing new “doers” onto the water treatment “ladder” regardless at which point they enter it—even getting people to boil if nothing else is practiced, and if possible, getting them to adopt other treatment technologies. Clasen et al. (2008)<sup>4</sup> has indicated that boiled water in households in Vietnam met international standards of quality. However, this research also indicated that the quality of water gets worse as time elapsed, suggesting that the handling of treated water recontaminated it. As a result, boiling by itself will not be sufficient. Any promotion of boiling needs to be accompanied by messages about appropriate storage and handling of boiled water.
- ◆ Third, HIP will have to continue to promote all treatment options expecting that some households may graduate from and opt for other treatment techniques. If chlorination is selected, HIP will need to ensure that Sur’Eau is used correctly. As a result, the expectation is that a higher proportion of Sur’Eau users would have positive results when

---

<sup>4</sup> Clasen, T., D. H. Taho, S. Boisson and O. Shiprin. (2008) Microbiological effectiveness and cost of boiling to disinfect drinking water in rural Vietnam. *Environmental Science and Technology*. Vol. 42, No. 12: 4255-4260.



using the chlorine residual test. Being conservative in this regard, nevertheless, we propose a small change, generally not more than 5 percent.

As far as storage is concerned, getting families to use hard covers on all wide mouth pots may prove easier to accomplish than moving up the water treatment ladder. This conclusion is based on the assumption that such a practice would expand on what some households are already doing with some of their storage vessels. If it is already being done, that would mean hard covers for wide mouth pots are available in the marketplace. Since it would be an extension of an existing practice, the suggested jump is from 4 percent to 14 percent.

### ***Hand Washing***

Two issues are important regarding hand washing: 1) whether to try to increase the percentage of households that have soap, and 2) how to ensure that households that already have soap make it available at the hand washing station to facilitate the practice of hand washing with soap at critical junctures.

Deciding to work on soap in households may imply coordinating the manufacturing and/or distribution of soap in the rural context where HIP operates. HIP management in Madagascar should decide if this is indeed possible. There may have already been some discussions with the soap company Savonnerie Tropicale as well as with local soap manufacturers to influence the availability of soap at shops in HIP's intervention areas. Setting up targets regarding the presence of soap at the household level will depend partially on the results of those discussions.

Forty percent of households in Group 1 and 49 percent of households in Group 2 actually kept soap at the typically used HW station in the household. Sixty percent of the households in the first group and 39 percent in the second group keep their HW stations in the yard. If a precondition for HW with soap is the presence of soap at a hand washing station typically used by household members, HIP should be interested in seeing an increase in the percentage of soap-owning households that keep some soap at this station. This would indicate progress. HIP and its partners would have to target 30 percent of households in Group 1 and 10 percent of households in Group 2 that have no soap at the station, although they may have it some place else in the household. The behavior HIP is looking for is where to place soap, or at least some of it, to facilitate HW with soap at critical junctures.

If HIP focuses on placing soap (or any cleansing agents) at HW stations, this should apply to HW stations that may be installed near latrines.

### ***Sanitation***

Some practitioners argue that higher coverage is more appropriate to achieve health impact. Defenders of this position argue that higher drops in diarrheal prevalence are observed with higher sanitation coverage. A study cited by Knowledge Links<sup>5</sup> in India indicates that 38 percent diarrheal disease prevalence has been found with 29 percent sanitation coverage. Yet, 26 percent diarrheal disease prevalence has been found in a situation where there had been 95 percent sanitation coverage, and 7 percent diarrheal prevalence has been found with 100 percent sanitation coverage. So, the larger gains in diarrheal disease prevalence are obtained when the vast majority of a given population has sanitary facilities. Achieving high coverage levels may be possible if a

---

<sup>5</sup> Knowledge Gains (2005), Formative Research for Sanitation IEC Manual.

community-led total sanitation approach is implemented where community pressure is exerted to reach higher levels of sanitation adoption. The current monitoring system, based on LQAS, would not be able to pick up progress on a village by village basis, and a different tracking approach would have to be adopted. A champion community approach or a sanitation-friendly community approach would make more sense.

Here again the assumption is that people should climb onto the sanitation ladder,<sup>6</sup> regardless of what entry level. And second, for those already on the ladder, the goal is to have them at least to the point where they have a slab in the latrine that they already own.

---

<sup>6</sup> A progression to higher levels of sanitation technology options:  
[http://www.schoolsanitation.org/Resources/Readings/lao\\_consumer.pdf](http://www.schoolsanitation.org/Resources/Readings/lao_consumer.pdf)

## Annex 1 – Household Questionnaire

### DRINKING WATER ACCESS – ACCES A L'EAU A BOIRE - FAHAZOANA RANO SOTROINA

N°	QUESTIONS AND FILTER				CODING CATEGORIES		SKIPs
701	What is the main source of drinking water for members of your household?		Quelle est la source principale d'eau à boire pour les membres de ménage ?	Avy aiza ny fiavian'ny rano fisotro ampiasain'ny mpianakavy?	<ol style="list-style-type: none"> <li>1. Conduite d'eau/Robinet dans la maison</li> <li>2. Conduite d'eau/Robinet dans la cours</li> <li>3. Robinet public /borne- fontaine</li> <li>4. Puit à forage industriel (très profond)</li> <li>5. Puits couvert/ protégé</li> <li>6. Puits ouvert/ non protégé</li> <li>7. Eau d'une source protégée</li> <li>8. Eau d'une source non protégée</li> <li>9. Eau de pluie</li> <li>10. Camion citerne</li> <li>11. Charrette/ brouette avec petit réservoir</li> <li>12. Eau de surface (rivière/barrage/lac/étang/ruisseau/canal/canal d'irrigation)</li> <li>13. Eau en bouteille</li> <li>14. Autre (spécifier)</li> <li>—</li> </ol>	<ol style="list-style-type: none"> <li>1. Fitarihin-drano/ Paompy ao an-trano</li> <li>2. Fitarihin-drano/ Paompy eo an-tokontany</li> <li>3. Paompy/ Fatsakambahoaka</li> <li>4. Lava-drano lalina moderina</li> <li>5. Lava-drano (vovo) voaharo</li> <li>6. Lava-drano (vovo) tsy voaharo</li> <li>7. Rano avy amin'ny Loharano voaharo</li> <li>8. Rano avy amin'ny Loharano tsy voaharo</li> <li>9. Ranon'orana</li> <li>10. Fiara mpamatsy Rano (misy sinibe)</li> <li>11. Sarety/ kalesy misy fiterihizan-drano (barika..)</li> <li>12. Rano an-tanety (renirano, dobo, farihy, tanim-bary, lakan-drano, toha-drano)</li> <li>13. Rano amin'ny tavoahangy</li> <li>14. Hafa (Soraty)</li> </ol>	

702	How long does it take to go there, get water, and come back? WRITE IN NUMBER OF MINUTES		Combien de temps cela prend-il pour se rendre à l'endroit, prendre l'eau et revenir? NOTER LE NOMBRE DE MINUTES	Hafiriana (raha mandeha an-tongotra mandroso/miverina) no andehananao matsaka any amin'io toerana io.	Minutes: <input type="text"/> <input type="text"/> Sur place..... 1	Minitra: <input type="text"/> <input type="text"/> Eo an-toerana.... 1	
703	What is the main source of water used by your household for other purposes such as cooking and hand washing?		Quelle est la source principale de l'eau employée par votre ménage pour d'autres buts tels que faire la cuisine et se laver les mains ?	Avy aiza ny fiavian'ny rano ampiasain'ny mpianakavy amin'ny fikarakarana sakafo sy ny fanasan-tanana ?	<ol style="list-style-type: none"> <li>1. Conduite d'eau/Robinet dans la maison</li> <li>2. Conduite d'eau/Robinet dans la cours</li> <li>3. Robinet public /borne- fontaine</li> <li>4. Puit à forage industriel (très profond)</li> <li>5. Puits couvert/ protégé</li> <li>6. Puits ouvert/ non protégé</li> <li>7. Eau d'une source protégée</li> <li>8. Eau d'une source non protégée</li> <li>9. Eau de pluie</li> <li>10. Camion citerne</li> <li>11. Charrette/ brouette avec petit réservoir</li> <li>12. Eau de surface (rivière/barrage/lac/étang/ruisseau/canal/canal d'irrigation)</li> <li>13. Eau en bouteille</li> <li>14. Autre (spécifier)</li> <li>—</li> </ol>	<ol style="list-style-type: none"> <li>1. Fitarihin-drano/ Paompy ao an-trano</li> <li>2. Fitarihin-drano/ Paompy eo an-tokontany</li> <li>3. Paompy/ Fatsakambahoaka</li> <li>4. Lava-drano lalina moderina</li> <li>5. Lava-drano (vovo) voaharo</li> <li>6. Lava-drano (vovo) tsy voaharo</li> <li>7. Rano avy amin'ny Loharano voaharo</li> <li>8. Rano avy amin'ny Loharano tsy voaharo</li> <li>9. Ranon'orana</li> <li>10. Fiara mpamatsy Rano (misy sinibe)</li> <li>11. Sarety/ kalesy misy fiterihizan-drano (barika..)</li> <li>12. Rano an-tanety (renirano, dobo, farihy, tanim-bary, lakan-drano, tohadrano)</li> <li>13. Rano amin'ny tavoahangy</li> <li>14. Hafa (Soraty)</li> </ol>	

704	What other source do you use when the main source does not have sufficient water? (Seasonal or intermittent)		Quelle autre source utilisez-vous quand la source principale n'a pas suffisamment d'eau ? (De façon saisonnière ou occasionnelle)	Rano avy aiza koa ny ampiasain'ny mpianakavy raha tojo tsy fahampiana ny rano fampiasa mahazatra	<ol style="list-style-type: none"> <li>1. Conduite d'eau/Robinet dans la maison</li> <li>2. Conduite d'eau/Robinet dans la cours</li> <li>3. Robinet public /borne- fontaine</li> <li>4. Puit à forage industriel (très profond)</li> <li>5. Puits couvert/ protégé</li> <li>6. Puits ouvert/ non protégé</li> <li>7. Eau d'une source protégée</li> <li>8. Eau d'une source non protégée</li> <li>9. Eau de pluie</li> <li>10. Camion citerne</li> <li>11. Charrette/ brouette avec petit réservoir</li> <li>12. Eau de surface (rivière/barrage/lac/étang/ruisseau/canal/canal d'irrigation)</li> <li>13. Eau en bouteille</li> <li>14. Autre (spécifier)</li> </ol>	<ol style="list-style-type: none"> <li>1. Fitarihin-drano/ Paompy ao an-trano</li> <li>2. Fitarihin-drano/ Paompy eo an-tokontany</li> <li>3. Paompy/ Fatsakambahoaka</li> <li>4. Lava-drano lalina moderina</li> <li>5. Lava-drano (vovo) voaharo</li> <li>6. Lava-drano (vovo) tsy voaharo</li> <li>7. Rano avy amin'ny Loharano voaharo</li> <li>8. Rano avy amin'ny Loharano tsy voaharo</li> <li>9. Ranon'orana</li> <li>10. Fiarra mpamatsy Rano (misy sinibe)</li> <li>11. Sarety/ kalesy misy fiterihizan-drano (barika..)</li> <li>12. Rano an-tanety (renirano, dobo, farihy, tanim-bary, lakan-drano, tohadrano)</li> <li>13. Rano amin'ny tavoahangy</li> <li>14. Hafa (Soraty)</li> </ol>	
-----	--	--	---	--	--	--	--

KNOWLEDGE ABOUT WATER TREATMENT – CONNAISSANCES SUR LE TRAITEMENT DE L'EAU

N°	QUESTIONS AND FILTER				CODING CATEGORIES		SKIPs
705	What can families do to make water better for drinking?  RECORD ALL MENTIONED		Qu'est-ce que les familles peuvent faire pour améliorer la qualité de l'eau à boire?  NOTER TOUTES LES REPONSES	Inona ny fomba ampiasainareo mba handiovana ny rano fisotro?  MARIHO IREO VALINTENY REHETRA	<ol style="list-style-type: none"> <li>1. Bouillir l'eau</li> <li>2. Ajouter de l'eau de Javel</li> <li>3. Ajouter une solution chlorée (Sur'Eau)</li> <li>4. Ajouter des comprimés de chlore (Aquatabs)</li> <li>5. La passer à travers un Tissu</li> <li>6. La laisser reposer</li> <li>7. Utiliser un filtre en Céramique</li> <li>8. Utiliser un filtre bio-Sable</li> <li>9. Désinfection solaire</li> <li>10. Garder l'eau dans un récipient couvert</li> <li>11. Autre (spécifier)</li> <li>12. Rien</li> <li>99. Ne sait pas</li> </ol>	<ol style="list-style-type: none"> <li>1. Mampandevy, manpangotraka rano</li> <li>2. Asiana Eau de Javel</li> <li>3. Asiana Ranona kilaoro (Sur'Eau)</li> <li>4. Asiana Vaingana kilaoro (Aquatabs)</li> <li>5. Tatavanina amin'ny lamba</li> <li>6. Tsika (tsi-drano)</li> <li>7. Mampiasa filtra bakoly</li> <li>8. Mampiasa fasika ho fanatantavanana</li> <li>9. Mampiasa tana-masoandro</li> <li>10. Tehirizana amin'ny fitaovana misarona</li> <li>11. Hafa (Soraty eo ambany)</li> <li>12. Tsy misy</li> <li>99. Tsy fantatro</li> </ol>	
706	What products can be added to drinking water to make it safer to drink?  RECORD ALL MENTIONED		Quels produits peuvent être ajoutés à l'eau de boisson pour la rendre plus sûre à boire?  NOTER TOUTES LES REPONSES	Araka ny fahalalanao, inona avy ireo fanafody simika azo ampiasaina mba ahazoana rano fisotro madio?	<ol style="list-style-type: none"> <li>1. Liquide de chlore (Sur'Eau)</li> <li>2. Pastilles de chlore (Aquatabs)</li> <li>3. Floculant au chlore (PuR, Watermaker)</li> <li>4. Autres présentation de chlore (granulés HTH, chlore, eau de Javel, autres)</li> <li>5. Iode (gouttes ou comprimés)</li> <li>6. Permanganate</li> <li>7. Autre (Décrire:</li> </ol>	<ol style="list-style-type: none"> <li>1. Ranona kilaoro (Sur'Eau)</li> <li>2. Pilina kilaoro (Aquatabs)</li> <li>3. Vovoka (PuR, Watermaker)</li> <li>4. Chlore amin'ny endrika hafa , Ohatra : (Potika HTH, Kilaoro, eau de javel, hafa)</li> <li>5. Ioda (Ranony na pilina)</li> <li>6. Permanganaty</li> </ol>	

					8. _____) 8. Aucun 9. Ne sait pas	7. Hafa (Soraty eo ambany): _____ 8. Tsy misy 9. Tsy Hay	
--	--	--	--	--	---	--	--

707	Do you know a product called Sur'Eau?		Connaissez-vous un produit nommé Sur'Eau ?	Mahafantatra Sur'Eau ve ianao?	NON.....0 0 OUI.....1 1	TSIA.....0 ENY.....1	→ 710
708	Can you show how to use Sur'Eau?		Pouvez-vous me montrer comment utiliser le Sur'Eau ?	Azonao aseho ahy ve ny fomba fampiasana Sur'Eau ?	Incorrect.....0 Correct.....1	Diso.....0 Marina.....1	
709	Where could you get a Sur'Eau close by (less than 5 km) if you wanted some?  RECORD ALL MENTIONED		Où pouvez-vous vous procurer du Sur'Eau (à moins de 5 km) si vous en voulez ?  NOTER TOUTES LES REPONSES	Aiza no ahafahako mividy SurEau akaiky indrindra izao (Tsy mihoatra ny 5Km manodidina	1. CSB 2. AVBC 3. Epicerie/Boutique 4. Dépôt de médicaments 5. Ailleurs 6. Nulle part 7. NE SAIT PAS	1. Any amin'ny tobi-pahasalamana 2. Any amin'ny mpaninjara sy mpanentana arapahasalamana 3. Any amin'ny "épicerie", na botika 4. Tobi-pivarotampanafody 5. Toerana hafa ankoatry ny voalaza etsy ambony 6. Any amin'ny toeran-kafa ivelan'ny 5 Km 7. Tsy fantatra	
710	Do you treat your water in any way to make it safer to drink?		Traitez-vous à domicile l'eau à boire pour la rendre potable?	Manadio rano ho sotroina mba ho lasa rano fisotro madio ao antrano ve ianao?	NON.....0 OUI.....1	TSIA.....0 ENY.....1	→ 757
711	What do you currently do to make water safer to drink? Anything else? (CHECK ALL MENTIONED AND PROCEED WITH THE DIFFERENT		Quelle(s) méthode(s) ou produit(s) utilisez-vous d'habitude pour traiter l'eau à boire ?  (Vérifier toutes	Inona no fomba mahazatra ampiasanao ahazoana rano fisotro madio sy azo antoka?	1. Bouillir l'eau 2. Ajouter de l'eau de javel 3. Ajouter une solution de chlore (Sur'Eau) 4. Ajoutes des pastilles de chlore (Aquatabs)	1. Mampangotraka 2. Asiana rano Eau de Javel 3. Ranona kilaoro (Sur'Eau) 4. Pilina/vaingana kilaoro (Aquatabs) 5. PuR 6. Mampiasa sivana	→ 717 → 717 → 717 → 717

SECTIONS PER METHOD. WHEN ALL METHODS ARE COVERED, GO TO QUESTION 754)		les réponses mentionnées et procéder aux différentes sections par méthode. Une fois que toutes les méthodes ont été couvertes, aller à la Question 754)		5. PuR	bakoly	→	725
				6. Utiliser un filtre céramique	7. Mampiasa fasika ho fanatantavanana	→	732
				7. Utiliser un filtre biosable	8. Mampiasa tana masoandro	→	738
				8. Désinfection solaire	9. Hafa (Soraty eo ambany)	→	757
				9. Autre (spécifier)	10. Tsy misy	→	757
				10. Rien	99. Tsy fantatro	→	757
				99- Ne sait pas			

### BOILING PRACTICES – BOUILLIR – MAMPANGOTRAKA

712	When did you boil that water?		Quand avez-vous fait bouillir cette eau ?	Oviana no nampangotrahamanao io rano io?	1..... our de l'entretien tout en cuisinant 2..... our de l'entretien une fois la cuisine faite 3..... autre (Spécifier: _____)	1. Andro hanaovana ny fanadihadiana ary eo am-pikarakarana ny sakafo 2. Andro hanaovana ny fanadihadiana raha vao vita ny fikarakarana ny sakafo 3. Hafa (Soraty): _____)	
713	Can I see the container where you keep the boiled water?		Est-ce que je peux voir le récipient où vous gardez votre eau bouillie ?	Azoko jerena ve ny sinibe hiterizanao ny rano nampangotrahana ?	NON .....0 OUI.....1	TSIA.....0 ENY.....1	→ 716
714	OBSERVE: Does vessel have a hard cover?		OBSERVER: Est-ce que le récipient comporte un couvercle rigide?	Misarona mafy ve ny sinibe ?	NON .....0 OUI.....1	TSIA.....0 ENY.....1	
715	How do you get water out of this container?		Comment prenez-vous l'eau de ce récipient ?	Ahoana no handraisanao ny rano avy ao anatin'io sinibe io ?	1..... erre/tasse avec hanse 2..... ouche 3.....	1..... era/Kaopy misy tahony 2..... otrobe 3.....	



					erser dans verre/tasse 4..... autre mécanisme Spécifier: _____ )	araraka amin'ny vera/Kaopy 4..... afa(Soraty):__	
716	CHECK 711 AND VERIFY IF THERE ARE ANY OTHER METHODS FOR WHICH SPECIFIC DATA NEED TO BE COLLECTED.		Verifier 711 et verifier s'il existe d'autres méthodes pour lesquelles des données spécifiques doivent être collectées	Hamarino 711 ary hamarino raha misy fomba hafa mba ahazohana antontam-baovao manokana.	Si 2 OU 3 OU 4 OU 5 .....aller 717 Si 6 aller à ..... 725 Si 7 aller à ..... 732 Si 8 aller à ..... 738 Si 9, 10, 99 ou aucun aller à ..... 757	Raha 2 na 3 na 4 na 5, mandehana..... → 717 Raha 6, mandehana .... → 725 Raha 7, mandehana.... → 732 Raha 8, mandehana ... → 738 Raha 9, 10, 99 na tsy misy, mandehana ... → 757	

**CHLORINATION—UTILISATION DE LA SOLUTION DE CHLORE, DE L'EAU DE JAVEL, DES PASTILLES DE CHLORE TELLES QU'AQUATABS OU BIEN PUR**

717	May I take a sample of your drinking water to test for chlorine?		Est-ce que je peux prendre un échantillon de votre eau à boire pour tester le chlore?	Afaka manandra ny rano sotroina ve mba ahafaha kilo mizaha ny tahan'ny kilaoro	Non autorisé .....0 Autorisé..... .1 Non applicable, méthode non utilisée.....2	Tsy nahazo alalana...0 → 724 Nahazo alalana .....1 Tsy azo hampiarina, fomba tsy azo hampiasaina...2 → 724	
718	CHECK RESULTS OF RESIDUAL CHLORINE TEST. ACCEPTABLE LEVEL IS .05.		Vérifier les résultats du test de chlore résiduel . Niveau acceptable: 0,5.	Hamarino ny vokatra ny fizahana ny tahan'ny kilaoro. Hahavo azo ekena: 0,5	Négatif (n'est pas devenu rose).....0 Positif (est devenu rose).....1 Non applicable méthode non utilisée.....2	Tsy mety (tsy nanome mavo kely).....0 Mety (nanome mavo kely) ...1 Fomba fiasa tsy azo ampiasaina.....2	

719	How long ago did you treat this water with the product you mentioned? (ESTIMATE THE NUMBER OF HOURS ELAPSED SINCE TREATMENT AND WRITE DOWN THAT NUMBER IN ROUNDED FIGURES)		Combien de temps s'est écoulé depuis que vous avez traité l'eau avec le produit mentionné ? <input type="text"/> <input type="text"/> (estimer le nombre d'heures écoulés depuis que le traitement a et effectué. Inscrive ce chiffre en arrondissant) Hafiriana izay ny fotoana lasa raha oharina tamin'ny fotoana nanadiovanao ny rano tamin'io kilaoro io ? <input type="text"/> <input type="text"/> (Soraty ny ora lasa nandritry ny fanadiovana natao – Boriborio ny tarehi-marika)		
720	CHECK 711			VERIFIER 711 Si 6 aller à.....725 Si 7 aller à ..... 732 Si 8 aller à..... 738 Si 9, 10, 99 ou aucun aller à ..... 757	HAMARINO 711 Raha 6 , mandehana... → 725 Raha 7, mandehana ... → 732 Raha 8, mandehana ... → 738 Raha 9, 10,99, mandehana ..... → 757
721	Do you still have the bottle/packaging that contains that product?	Avez-vous encore la bouteille/emballage qui contient le produit?	Mbola votahirinao ve ny tavoahangy /fonosana nisy azy ?	NON.....0 OUI.....1 Non Applicable à utiliser de solution chlorée (l'eau de Javel ou autres).....2	TSIA.....0 → 724 ENY.....1 → 724 Tsy afaka mampiasa ranona kilaoro (eau de Javel na endrika kilaoro hafa).....2
722	May I see it?	Pouvez vous me la montrer ?	Azonao aseho ahy ve ?	Non autorisé.....0 Autorisé.....1	Tsy nahazo alalana .....0 → 724 Nahazo alalana .....1
723	Check the expiration of the chlorine solution	Vérifier la date de péremption de la solution de chlore (Sur'Eau ou autres)	Hamarino ny daty farany tsy ahafahana mampiasa ny ranona kilaoro (sur'eau na hafa)	Péricimée.....0 Non périmée..... 1	Lany daty.....0 Tsy lany daty..... 1
724	Check 711 and verify if there are any other methods for which specific data need to be	VERIFIER 711 ET VERIFIER S'IL EXISTE D'AUTRES METHODES	HAMARINO 711 ARY HAMARINO RAHA MISY FOMBA Hafa MBA AHAZOHANA	Si 6 aller à .....725 Si 7 aller à .....732 Si 8 aller à.....738	Raha 6, mandehana.... → 725 Raha 7, mandehana.... → 732 Raha 8, mandehana.... → 738

	collected		POUR LESQUELLES DES DONNEES SPECIFIQUES DOIVENT ETRE COLLECTEES	ANTONTAM- BAOVAO MANOKANA.	Si 9, 10, 99 ou aucun aller à.....757	Raha 9, 10, 99 mandehana .....	757
--	-----------	--	--	----------------------------------	--	-----------------------------------	-----

#### FILTRATION (CERAMIC FILTER) – UTILISATION DE FILTRES EN CERAMIQUE

725	When did you last clean this filter?		Quand avez-vous nettoyé ce filtre la dernière fois?	Oviana no nanasanao, nandiovanao farany ny sivana?	Ne satisfait pas aux recommandations du fabricant.....0  Satisfait aux recommandations du fabricant.....1  Ne l'a jamais nettoyé..2	Tsy nahafapo, tsy nanaraka ny toro-hevitry ny mpanamboatra..... 0  Nanaraka ny ny toro-hevitry ny mpanamboatra..1  Tsy nanasa mihitsy.....2	727
726	How did you clean it?		Comment l'avez-vous nettoyé ?	Ahoana no fomba nanasanao, nandiovanao ny sivana ?	Ne satisfait pas aux recommandations du fabricant.....0 Satisfait aux recommandations du fabricant .....1	Tsy nahafapo, tsy nanaraka ny toro-hevitry ny mpanamboatra.....0  Nanaraka ny ny toro-hevitry ny ..... 1	
727	Can I see your drinking water filter?		Est-ce que je peux voir votre filtre d'eau potable ?	Azoko jerena ve ilay sivana fandiovanao ny rano fisotro madio?	Non autorisé.....0 Autorisé.....1	Tsy nahazo alalana....0 Nahazo alalana.....1	731
728	Observe: is this filter covered with a lid?		OBSERVER : le filtre dispose-t-il d'un couvercle?	JEREO : Ilay sivana ve misy sarony?	NON.....0 OUI.....1	TSIA.....1 ENY.....2	
729	Observe: does the filter have water in the bottom unit?		Observer : l'unité inférieure du filtre contient-elle de l'eau filtré ?	JEREO : Ny fanambanin'ilay sivana (ao anatiny) ve misy rano voadio ?	NON.....0 OUI.....1	TSIA .....1 ENY.....2	
730	Observe: does the filter have a		Observer: le filtre compte-t-il	JEREO : Ny fanambanin'ilay	NON.....0 OUI.....1	TSIA.....1 ENY.....2	

	ceramic filter installed in the unit?		un filtre en céramique installé dans l'unité ?	sivana ve vita amin'ny bakoly?			
731	Check 711 and verify if there are any other methods for which specific data need to be collected		VERIFIER 711 ET VERIFIER S'IL EXISTE D'AUTRES METHODES POUR LESQUELLES DES DONNEES SPECIFIQUES DOIVENT ETRE COLLECTEES	HAMARINO 711 ARY HAMARINO RAHA MISY FOMBA HAFA MBA AHAZOHANA ANONTAM-BAOVAO MANOKANA.	Si 7 aller à.....732 Si 8 aller à.....738 Si 9, 10, 99 ou aucun aller à.....757	Raha 7, mandehana.... → Raha 8, mandehana.... → Raha 9, 10, 99 mandehana →	732 738 757

#### BIOSAND FILTRATION – UTILISATION DES FILTRES BIOSABLE

732	When did you last clean this filter?		Quand avez-vous nettoyé ce filtre la dernière fois?	Oviana no nanasanao, nandiovanao farany ny sivana?	Ne satisfait pas aux recommandations du fabricant (il y a plus de 6 mois).....0 Satisfait aux recommandations du fabricant.....1 (6 mois ou moins) Ne l'a jamais nettoyé...2	Tsy nahafapo, tsy nanaraka ny toro-hevitry ny mpanamboatra (mihoatra ny enim-bolana ).....0 Nanaraka ny ny toro-hevitry ny mpanamboatra (enimbolana na latsaka)..... 1 Tsy nanasa mihitsy .....2 →	734
733	How did you clean it?		Comment l'avez-vous nettoyé ?	Ahoana no fomba nanasanao, nandiovanao ny sivana ?	Ne satisfait pas aux recommandations du fabricant (N'a pas changé les cailloux, le carbone ou le sable)..0 Satisfait aux recommandations du fabricant (a changé les cailloux, le carbone ou le sable).....1	Tsy nahafapo, tsy nanaraka ny toro-hevitry ny mpanamboatra (tsy nanolo ny vatokely, karbonina na fasika) .....0 Nanaraka ny toro-hevitry ny mpanamboatra (nanolo ny vatokely, karbonina na fasika).....1	

734	Can I see your drinking water (bio sand) filter?		Est-ce que je peux voir votre filtre d'eau potable bio sable?	Azoko jerena ve ilay sivana vita amin'ny fasika fandiovanao ny rano fisotro madio?	NON.....0 OUI.....1	TSIA.....0 ENY.....1	→ 737
735	Observe: is the filter covered with a lid?		Observer : le filtre dispose-t-il d'un couvercle?	Jereo : Ilay sivana ve misy sarony?	NON.....0 OUI.....1	TSIA.....0 ENY.....1	
736	Observe: does the inside of the top part of the filter have algae or visible slime?		OBSERVER : est-ce que la partie supérieure de l'intérieur du filtre a des algues ou une pellicule de saleté ?	Jereo : Ny faritra ambonin'ilay sivana ve misy lomotra na riatra manify maloto ?	NON.....0 OUI.....1	TSIA.....0 ENY.....1	
737	Go back to question 711 and verify if there are any other methods for which specific data need to be collected		Revenir a la question 711 ET VERIFIER S'IL EXISTE D'AUTRES METHODES POUR LESQUELLES DES DONNEES SPECIFIQUES DOIVENT ETRE COLLECTEES	MIVERENA AMIN'NY FANONTANIANA 711 ARY HAMARINO RAHA MISY FOMBA HAFAMA AHAZOHANA ANONTAM-BAOVAO MANOKANA.	Si 8 aller à.....738 Si 9, 10, 99 ou aucun aller à .....757	Raha 8, mandehana Raha 9, 10, 99 mandehana	→ 738 → 757

### SOLAR DISINFECTION – DESINFECTION SOLAIRE

738	Can I see your SODIS bottles in the sunlight?		Est-ce que je peux voir vos bouteilles SODIS exposées au soleil	Azoko jerena ve ny tavoahangy SODIS miseho amin'ny masoandro ?	NON.....0 OUI.....1	TSIA .....0 ENY. ....1	→ 740
739	Observe: If allowed to see SODIS bottles, indicate number of bottles.		Observer: Si l'on vous permet de voir les bouteilles SODIS, indiquer	JEREO : Raha afaka mijery ireo tavoahangy SODIS, ataovy ny fanisana ny tavoahangy	Nombre de bouteilles <input type="text"/> <input type="text"/>	Isan'ny tavoahangy <input type="text"/> <input type="text"/>	

	(BOTTLES FILLED WITH WATER)		le nombre de bouteilles.		Ⓢ UNE ATTENTION PARTICULIERE EST DEMANDEE AVANT DE REMPLIR, CAR LA PROGRAMMATION DANS LE PADs N'ACCEPTE PAS LE RETOUR.		
740	If not allowed, ask: How many bottles are currently exposed to the sun?		Si Non autorisé, DEMANDER : Combien de bouteilles sont actuellement exposées au soleil?	RAHA TSY NAHAZO ALALANA, ANONTANIO : Firy ny isan'ny tavoahangy miseho amin'ny masoandro amin'izao fotoana izao?	Nombre de bouteilles <input type="text"/> <input type="text"/> SI 0 PASSER A.....743	Isan'ny tavoahangy <input type="text"/> <input type="text"/> RAHA TSY MISY, MANDEHANA	→ 743
741	Did you put all these bottles in the sun on the same day?		Avez vous mis au soleil toutes ces bouteilles le même jour?	Nataonao azon'ny masoandro niaraka indray andro ve ireo tavoahangy ireo ?	NON.....0 OUI.....1	TSIA .....0 ENY.....1	→ 743

742 IF NOT ALL BOTTLES EXPOSED ON THE SAME DAY, FILL IN THE TABLE BELOW THEN SKIP TO 745  
SI TOUTES LES BOUTEILLES N'ONT PAS ETE EXPOSEES AU SOLEIL LE MEME JOUR, REMPLIR LE TABLEAU CI-DESSOUS, AUTREMENT ALLER A 745  
RAHA TSY NIARAKA NASEHO MASOANDRO IREO TAVOAHANGY IREO DIA FENOY NY TABILAO ETO AMBANY, RAHA TSY IZANY DIA MANDEHANA ANY AMIN'NY 745 :

Number of days exposed	Number of bottles	How many more days do you plan to expose these bottles?
Nombre de jours d'exposition au soleil	Nombre de bouteilles	Combien de jours comptez- vous les exposer encore au soleil?
Isan'ny andro nampisehoana masoandro	Isan'ny tavoahangy	Firy andro no eritreretinao mbola hampisehoana masoandro?
Un jour		
Deux jours		

NOUS UTILISERONS LES DONNEES SI LA DUREE D'EXPOSITION AU INCORRECTE. SI L'ENQUETE EST PLUIES OU PERIODE PENDANT DU SOLEIL A MADAGASCAR, LA POUR LES BOUTELLES EST DE

Plus de deux jours	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>

DE CE TABLEAU POUR DETERMINER SOLEIL EST CORRECTE OU FAITE LORS DE LA SAISON DES LAQUELLE IL Y A MOINS DE LUMIERE DUREE CORRECTE D'EXPOSITION DEUX JOURS.

743	<p>How many days have these bottles/has this bottle been exposed to the sun?</p> <p>Write answers in number of days. If more than 7 days, write 8. If don't know write 9</p>		<p>Combien de jours ces bouteilles ont-elles été exposées au soleil ?</p> <p>NOTER LES réponses EN NOMBRE DE JOURS. SI PLUS DE 7 JOURS, INSCRIRE 8.</p> <p>Si Ne sait pas, INSCRIRE 9</p>	<p>Firy andro no nampisehoana masoandro ireo tavoahangy ireo ?</p> <p>MARIHO NY VALINY AMIN'NY ALALAN'NY ANDRO.</p> <p>RAHA MIHOATRA NY FITO (7) ANDRO, SORATY VALO (8).</p> <p>RAHA TSY FANTATRA, SORATY SIVY (9)</p>	<p>Nombre de jours <input data-bbox="1357 245 1422 312" type="text"/></p>	<p>Isan'ny andro <input data-bbox="1666 245 1731 312" type="text"/></p>	
744	<p>How many more days do you plan to expose them/it?</p> <p>Write answer in number of days . Write answers in number of days. If more than 7 days, write 8. If don't know write 9.</p>		<p>Combien de jours en plus avez-vous l'intention de les exposer ?</p> <p>NOTER LES réponses EN NOMBRE DE JOURS. SI PLUS DE 7 JOURS, INSCRIRE 8. Si Ne sait pas, INSCRIRE 9</p>	<p>Firy andro amboniny no eritreretinao hampisehoana masoandro ireo tavoahanagy ireo ?</p> <p>MARIHO NY VALINY AMIN'NY ALALAN'NY ANDRO.</p> <p>RAHA MIHOATRA NY FITO (7) ANDRO, SORATY VALO (8).</p> <p>RAHA TSY FANTATRA, SORATY SIVY (9)</p>	<p>Nombre de jours <input data-bbox="1285 751 1350 818" type="text"/></p>	<p>Isan'ny andro <input data-bbox="1565 751 1630 818" type="text"/></p>	



**WATER STORAGE, RETRIEVAL AND USE OF TREATED WATER – STOCKAGE, PUISAGE ET UTILISATION DE L'EAU TRAITEE**

745	How often do you treat water this way?		Combien de fois traitez-vous l'eau de cette façon ?	Impiry ianao no mikarakara ny rano fisotro madio amin'io fomba io?	Chaque jour.....1 De temps en temps, mais pas tous les jours.....2 Quand quelqu'un est malade dans le ménage..3 Pendant la saison des pluies.....4 Occasions spéciales.....5	Isan'andro.....1 Matetika fa tsy isan'andro.....2 Rehefa misy marary ato an-tokatrano.....3 Mandritra ny fotoam-pahavaratara.....4 Fotoana manokana.....5	
746	Who in the household drinks the treated water?		Qui sont les personnes du ménage qui boivent l'eau traitée ?	Iza avy ireo olona ato an-tokatrano misotro ny rano fisotro madio nokarakarina?	Tous les membres du ménage.....1 Uniquement les enfants.....2 Uniquement les malades.....3 Uniquement les personnes âgées.....4 Autres (Spécifier:.....)5	Ny fianakaviana rehetra ato an-tokantrano.....1 Ny zaza ihany.....2 Ireo izay marary ihany.....3 Ireo olona efa antitra ihany.....4 Hafa (Soraty):.....5	
747	How do you store drinking water ?		Comment est-ce que vous stockez l'eau à boire?	Ahoana no fomba hitahirizanao ny rano ho sotroina?	Ne stocke pas l'eau.....0 Dans des récipients (seau, tonneaux, bidons, etc.)...1 Réservoir sur le toit ou citerne.....2	Tsy mitahiry rano.....0 → 754 Ao anaty fitahirizana (sinibe, barika, bidao, ...)...1 Fitahirizana rano ao ambony tafo na barika....2 → 754	
748	IF IN CONTAINERS, may I see the containers, please?		SI ELLE UTILISE DES RECIPIENTS, DEMANDEZ : Est-ce que vous pouvez voir ces récipients SVP ?	RAHA MAMPIASA FITAHIRIZANA RANO IZY, DIA HANONTANIO: Azoko jerena ve ireo fitahirizana rano ireo ?	NON..... 0 OUI.....1	TSIA.....0 → 754 ENY.....1	
	COUNT HOW MANY CONTAINERS ARE USED AND WRITE DOWN		COMPTER LE NOMBRE DE RECIPIENTS UTILISES ET INSCRIRE LE	ISAO NY ISAN'NY FITAHIRIZANA RANO ARY SORATY NY ISANY	Nombre de récipients <input type="text"/>	Isan'ny fitahirizana rano <input type="text"/>	

	THE NUMBER		NOMBRE				
749	WHAT TYPES OF CONTAINERS ARE THESE? OBSERVE AND CHECK ALL THAT APPLY. Narrow mouth opening is 3 cms or less.		Quels sont les types de recipients utilises ?  observez et utilisez toutes les reponses valables. une ouverture etroite serait egale ou inferieure a 3 Cm.	INONA AVY IREO KARAZANA FITAHIRIZANA RANO HAMPIASAINY?  JEREO ARY ARY HAMPIASAO NY VALINY REHETRA MARINA. VAVANY TERY: 3 cm na latsaka	SEULEMENT OUVERTURE ETROITE.....1 SEULEMENT OUVERTURE LARGE.....2 DEUX TYPES, ETROITE ET LARGE.....3	VAVANY TERY IHANY ....1 VAVANY MIVELATRA IHANY.....2 IREO KARAZANY ROA: TERY SY MIVELATRA.....3	
750	ARE CONTAINERS COVERED? (OBSERVE AND CHECK)		Observer : est-ce que les recipientS SONT couverts ?	JEREO ILAY FITAHIRAZANA RANO RAHA MISARONA	0. AUCUN 1. TOUS AVEC DES COUVERCLES RIGIDES 2. CERTAINS EN SONT AVEC DES COUVERCLES RIGIDES 3. TOUS AVEC DES COUVERCLES SOUPLES (comme PIECES DE TISSU	0. TSY MISY DAHOLO 1. MANANA SARONA ENJANA DAHOLO 2. MANANA SARONA ENJANA NY AMPAHANY 3. MANANA SARONA MALEMY DAHOLO (TOY NY ROVITRA LAMBA)	
751	Observe: DO CONTAINERS HAVE A TAP?		Observer : Est-ce que les recipientS disposeNT d'un robinet ?	JEREO: IREO FITAHIRIZANA RANO VE MISY ROBINET?	AUCUN .....0 OUI, TOUS.....1 CERTAINS EN ONT ET D'AUTRES N'EN ONT PAS .....2	TSY MISY.....0 MISY DAHOLO.....1 SASANY MISY ARY NY SASANY TSY MISY...2	
752	How long ago did you clean these containers? (Write down the number of days. If day of the		Combien de jours se sont écoulés depuis que vous avez nettoyé ce recipient la	Hafiriana izay ny fotoana lasa raha oharina tamin'ny fotoana nanadiovanao ny fitahirizana rano farany ?	Jamais.....0  Nombre de jours <input type="text"/>	Tsy nisy.....0  Isan'ny andro <input type="text"/>	754

	interview, write 1, if yesterday, write 2)		dernière fois ?  (NOTER LE NOMBRE DE JOURS. SI LE NETTOYAGE A EU LIEU LE JOUR DE L'ENTRETIEN METTRE 1.; SI C'ETAIT HIER, METTRE 2)	(MARIHO NY ISAN'NY ANDRO). RAHA AMIN'NY FOTOANA HANAOVANA NY FANADIHADIANA NO MANAO NY FANADIOVANA NY FITAHIRIZANA RANO DIA SORATY IRAY (1); RAHA OMALY DIA SORATY ROA (2).			
753	How often do you clean these containers?		Tous les combien de jours nettoyez-vous ces récipients ?	Isaky ny firy andro ianao no manao ny fanadiovana ny fitahirizana rano?	Tous les jours .....1 Tous les deux jours.....2 Toutes les semaines.....3 Autre (Spécifier____).....4 Jamais.....5	Isan'andro.....1 Isaky ny roa andro.....2 Isaky ny herinanandro.....3 Hafa (Soraty).....4 Tsy nisy.....5	
754	Did you prepare any food yesterday morning?		Avez-vous préparé de la nourriture hier matin ?	Nikarakara sakafo ve ianao omaly maraina?	NON.....0 OUI.....1	TSIA .....0 ENY.....1	
755	Did you feed any children yesterday morning?		Avez-vous donné à manger à un enfant hier matin ?	Nanome sakafo ny zanakao ve ianao omaly maraina?	NON .....0 OUI.....1	TSIA .....0 ENY.....1	
756	Did you clean a child yesterday morning after (s)he defecated?		Avez-vous nettoyé un enfant hier matin après qu'il/elle ait déféqué ?	Nanasa ny zanakao ve ianao omaly rehefa avy nangery izy ?	NON .....0 OUI.....1	TSIA.....0 ENY.....1	

#### HANDWASHING – LAVAGE DE MAINS

801	Do you have any type of soap in your house?		Avez-vous du savon dans votre ménage?	Misy savony ve ao an-trano?	NON.....0 OUI.....1	TSIA .....0 ENY.....1	→ 812
-----	---	--	---------------------------------------	-----------------------------	------------------------	--------------------------	-------

802	Did you use soap at anytime yesterday morning?		Avez-vous utilisé du savon à un moment quelconque hier matin?	Nampiasa savony ve ianao omaly maraina?	NON.....0 OUI..... 1	TSIA.....0 ENY.....1	→ 812
803	The first time you used soap yesterday, what did you use it for? IF FOR WASHING MY OR MY CHILDREN'S HANDS IS MENTIONED, PROBE WHAT WAS THE OCCASION, BUT DO NOT READ THE ANSWERS		La première fois que vous avez utilisé du savon hier, pourquoi en avez-vous utilisé ?  SI ON MENTIONNE POUR ME LAVER LES MAINS OU LAVER CELLES DE MON ENFANT, DEMANDEZ A QUELLE OCCASION, MAIS NE LISEZ PAS LES REPONSES.	Taminao nampiasa savony voalohany omaly, inona no antony nampiasainao azy ?  RAHA HANASANA TANANA NA NY ZAZA DIA HANONTANIO HOE AMIN'NY FOTOANA INONA. AZA VAKIANA NA TANISANA IREO VALINY.	1. pour laver le linge 2. pour laver mon corps 3. pour laver mes enfants 4. pour laver les fesses de mes enfants 5. pour laver les mains de mes enfants 6. pour me laver les mains après avoir défèque 7. pour me laver les mains après avoir lave les fesses d'un enfant 8. pour me laver les mains avant de donner a manger aux enfants 9. me laver les mains avant de préparer a manger 10. me laver les mains avant de manger 11. autres raisons. indiquez lesquelles	1. nanasa lamba 2. nandro (nanadio tena, misaika) 3. nampandro/nampisai ka zaza 4. nanasa vodin-jaza 5. nanasa ny tananan'ny zaza 6. nanasa tanana avy nandeha nangery 7. nanasa tanana rehefa avy nanasa vodinjaza 8. nanasa tanana alohan'ny nanome sakafon-jaza 9. nanasa tanana alohan'ny nikarakara sakafo 10. nanasa tanana alohan'ny nisakafo 11. antony hafa. (SORATY)	
804	Did you use soap at any other occasion yesterday morning?		Avez-vous utilisé du savon à une autre occasion ?	Nisy fotoana hafa manokana nampiasanao savony ve?	NON.....0 OUI..... 1	TSIA .....0 ENY.....1	→ 812

805	What did you use soap for? IF FOR WASHING MY OR MY CHILDREN'S HANDS IS MENTIONED, PROBE WHAT WAS THE OCCASION, BUT DO NOT READ THE ANSWERS		Pourquoi avez-vous utilisé du savon ? SI ON MENTIONNE POUR ME LAVES LES MAINS OU LAVES CELLES DE MON ENFANT, DEMANDEZ A QUELLE OCCASION, MAIS NE LISEZ PAS LES REPONSES.	Inona no antony hampiasainao savony? RAHA HANASANA TANANA NA NY ZAZA DIA HANONTANIO HOE AMIN'NY FOTOANA INONA. AZA VAKIANA NA TANISANA IREO VALINY.	1. pour laver le linge 2. pour laver mon corps 3. pour laver mes enfants 4. pour laver les fesses de mes enfants 5. pour laver les mains de mes enfants 6. pour me laver les mains après avoir défèque 7. pour me laver les mains après avoir lave les fesses d'un enfant 8. pour me laver les mains avant de donner a manger aux enfants 9. me laver les mains avant de préparer a manger 10. me laver les mains avant de manger 11. autres raisons. indiquez lesquelles	1. nanasa lamba 2. nandro (nanadio tena, misaika) 3. nampandro/nampisai ka zaza 4. nanasa vodin-jaza 5. nanasa ny tñanan'ny zaza 6. nanasa tñana avy nandeha nangery 7. nanasa tñana rehefa avy nanasa vodinjaza 8. nanasa tñana alohan'ny nanome sakafon-jaza 9. nanasa tñana alohan'ny nikarakara sakafo 10. nanasa tñana alohan'ny nisakafo 11. antony hafa. (SORATY)	
806	Any other time?		A un autre moment?	Amin'ny fotoana hafa ?	NON.....0 OUI..... 1	TSIA.....0 ENY.....1	→ 812
807	What for? IF FOR WASHING MY OR MY CHILDREN'S HANDS IS MENTIONED, PROBE WHAT WAS THE OCCASION, BUT DO NOT READ		A quel usage? SI ON MENTIONNE POUR ME LAVES LES MAINS OU LAVES CELLES DE MON	Hampiasaina amin'inona? RAHA HANASANA TANANA NA NY ZAZA DIA HANONTANIO HOE AMIN'NY FOTOANA INONA. AZA VAKIANA NA TANISANA IREO	1. pour laver le linge 2. pour laver mon corps 3. pour laver mes enfants 4. pour laver les fesses de mes enfants 5. pour laver les mains de mes	1. nanasa lamba 2. nandro (nanadio tena, misaika) 3. nampandro/nampisai ka zaza 4. nanasa vodin-jaza 5. nanasa ny tñanan'ny zaza 6. nanasa tñana avy nandeha nangery	

	THE ANSWERS		ENFANT, DEMANDEZ A QUELLE OCCASION, MAIS NE LISEZ PAS LES REPONSES.	VALINY.	6. enfants pour me laver les mains après avoir défèque 7. pour me laver les mains après avoir lave les fesses d'un enfant 8. pour me laver les mains avant de donner a manger aux enfants 9. me laver les mains avant de préparer a manger 10. me laver les mains avant de manger 11. autres raisons. indiquez lesquelles	7. nanasa tânana rehefa avy nanasa vodinjaza 8. nanasa tânana alohan'ny nanome sakafon-jaza 9. nanasa tânana alohan'ny nikarakara sakafo 10. nanasa tânana alohan'ny nisakafo 11. antony hafa. (SORATY)	
808	Any other time?		A un autre moment?	Amin'ny fotoana hafa ?	NON.....0 OUI..... 1	TSIA.....0 ENY.....1	→ 812
809	What for? IF FOR WASHING MY OR MY CHILDREN'S HANDS IS MENTIONED, PROBE WHAT WAS THE OCCASION, BUT DO NOT READ THE ANSWERS		A quel usage ?  SI ON MENTIONNE POUR ME LAYER LES MAINS OU LAYER CELLES DE MON ENFANT, DEMANDEZ A QUELLE OCCASION, MAIS NE LISEZ PAS LES REPONSES.	Hampiasaina amin'inona?  RAHA HANASANA TANANA NA NY ZAZA DIA HANONTANIO HOE AMIN'NY FOTOANA INONA. AZA VAKIANA NA TANISANA IREO VALINY.	1. pour laver le linge 2. pour laver mon corps 3. pour laver mes enfants 4. pour laver les fesses de mes enfants 5. pour laver les mains de mes enfants 6. pour me laver les mains après avoir défèque 7. pour me laver les mains après avoir lave les fesses d'un enfant 8. pour me laver les mains avant de	1. nanasa lamba 2. nandro (nanadio tena, misaika) 3. nampandro/nampisai ka zaza 4. nanasa vodinjaza 5. nanasa ny tânanan'ny zaza 6. nanasa tânana avy nandeha nangery 7. nanasa tânana rehefa avy nanasa vodinjaza 8. nanasa tânana alohan'ny nanome sakafon-jaza 9. nanasa tânana alohan'ny nikarakara sakafo 10. nanasa tânana	

					<p>donner a manger aux enfants</p> <p>9. me laver les mains avant de préparer a manger</p> <p>10. me laver les mains avant de manger</p> <p>11. autres raisons. indiquez lesquelles</p>	<p>alohan'ny nisakafo</p> <p>11. antony hafa. (SORATY)</p>	
810	Any other time?		A un autre moment?	Amin'ny fotoana hafa ?	<p>NON.....0</p> <p>OUI..... 1</p>	<p>TSIA .....0</p> <p>ENY.....1</p>	→ 812
811	What for? IF FOR WASHING MY OR MY CHILDREN'S HANDS IS MENTIONED, PROBE WHAT WAS THE OCCASION, BUT DO NOT READ THE ANSWERS		A quel usage ?	<p>Hampiasaina amin'inona?</p> <p>RAHA HANASANA TANANA NA NY ZAZA DIA HANONTANIO HOE AMIN'NY FOTOANA INONA. AZA VAKIANA NA TANISANA IREO VALINY.</p>	<p>1. Pour laver le linge</p> <p>2. Pour laver mon corps</p> <p>3. pour laver mes enfants</p> <p>4. Pour laver les fesses de mes enfants</p> <p>5. Pour laver les mains de mes enfants</p> <p>6. pour me laver les mains après avoir défèque</p> <p>7. Pour me laver les mains après avoir lave les fesses d'un enfant</p> <p>8. Pour me laver les mains avant de donner a manger aux enfants</p> <p>9. Me laver les mains avant de préparer a manger</p> <p>10. Me laver les mains avant de manger</p>	<p>1. Nanasa lamba</p> <p>2. nandro (nanadio tena, misaika)</p> <p>3. nampandro/nampis aika zaza</p> <p>4. nanasa vodin-jaza</p> <p>5. Nanasa ny tãnanan'ny zaza</p> <p>6. Nanasa tãnana avy nandeha nangery</p> <p>7. Nanasa tãnana rehefa avy nanasa vodin-jaza</p> <p>8. Nanasa tãnana alohan'ny nanome sakafon-jaza</p> <p>9. Nanasa tãnana alohan'ny nikarakara sakafo</p> <p>10. Nanasa tãnana alohan'ny nisakafo</p> <p>11. Antony hafa. (SORATY)</p>	

					11. Autres raisons. indiquez lesquelles		
812	Can you show me where you usually wash your hands and what you use to wash hands?  ASK TO SEE AND OBSERVE		Pouvez vous me montrer l'endroit où vous lavez vos mains et ce que vous utilisez pour vous laver les mains ?  DEMANDER ET OBSERVER	Azonao aseho ahy ve ny toerana hanasanao t̄anana sy ny zavatra hampiasainao?  ANONTANIO SY JEREO	1. A l'intérieur/près de la salles de bains/latrines 2. A l'intérieur/ près de la cuisine/endroit pour préparer a manger 3. Quelque part d'autre au jardin 4. En dehors du jardin 5. Pas d'endroit spécifique 6. Pas de permis pour observer	1. Anati-trano/ akaikin'ny efitra fandroana/ fivoahana 2. Anati-trano/ akaikin'ny lakoza/ efitra fisakafoanana 3. Eny an-tokontany 4. Any ivelan'ny tokontany 5. Tsy mifidy toerana 6. Tsy nahazo alalana hijery	817
813	Observe: What is the hand washing device?		Observer : Quel est le dispositif de lavage des mains?	JEREO: Inona ny fitaovana ampiasain'ny tokantrano ho fanasana t̄anana ?	Robinet.....1 Robinet à basculer.....2 Cuvette/seau.....3 Autre (spécifier).....4	Paompy.....1 Tavoahangy mihohaka (miantona, misy lavadavaka ny sarony).....2 Daba na Seau.....3 Hafa (Soraty).....4	
814	Observe: Was water available at time of interview?		Observer : L'eau était-elle disponible au moment de l'interview ?	JEREO : Eo ampanaovana ny fanadihahana dia jereo raha misy ny rano	NON.....0 OUI..... 1	TSIA .....0 ENY.....1	
815	Ask: Did you have water here yesterday?		DEMANDER : Aviez-vous eu de l'eau dedans hier ?	ANONTANIO raha nisy rano tao anatin'ilay fitaovana omaly	NON.....0 OUI..... 1	TSIA.....0 ENY;.....1	
816	OBSERVATION ONLY: IS THERE SOAP OR DETERGENT OR LOCALLY USED CLEANSING AGENT?		OBSERVER : Y-A-T-IL DU SAVON, DETERGENT, OU AUTRES PRODUITS LOCAUX DE NETTOYAGE	JEREO FOTSINY: MISY SAVONY VAINGANY, RANONY, VOVONY NA FITAOVANA FIDIOVANA Hafa MISY EO AN-TOERANA?	Aucun.....0 Savon.....1 Détergeant.....2 Cendres.....3 Boue.....4 Sable.....5 Autre (spécifier).....6	0. TSY MISY 1. SAVONY VAINGANY 2. RANO/VOVON-TSAVONY 3. LAVENONA 4. FOTAKA 5. FASIKA 6. Hafa (SORATY)	



	THIS ITEM SHOULD BE EITHER IN PLACE OR BROUGHT BY THE INTERVIEWEE WITHIN REASONABLE TIME. IF THE ITEM IS NOT PRESENT WITHIN THAT TIME CHECK NONE, EVEN IF PROVIDED LATER.		CES OBJETS DEVRAIENT ETRE A LEUR PLACE HABITUELLE OU A PORTE EN UN TEMPS RAISONNABLE  AUTREMENT, ENREGISTRE R "AUCUN".	MARIHO ENY RAHA HITA EO AMIN'NY TEORANA TOKONY HISY AZY NA NALAINA AVY AMIN'NY TOERAN-KAFA AKAIKY .  RAHA TSY MAHAFENO IREO FEPETRA VOALAZA ETSY AMBONY DIA MARIHO TSY MISY.			
817	What do you think are the most important times to wash your hands?  RECORD ALL MENTIONED		D'après vous, quel est le moment le plus important pour se laver les mains ? NOTEZ TOUTES LES REPONSES FOURNIES	Aminao, inona no fotoana tena tsara hanasana ny tãnana?  SORATY NY VALIMPANONTANIANA REHETRA	Après défécation.....1 Avant de manger.....2 Après avoir lavé les enfants/et les couches-culottes.....3 Après le nettoyage des latrines.....4 Après le nettoyage de pot.....5 Avant la préparation du repas.....6 Avant le repas de l'enfant.....7 Après le repas.....8 Autre (spécifier).....9	Rehefa avy nangery.....1 Alohan'ny hisakafo.....2 Rehefa avy nampandro/nampisaika zaza/nanolo tatin-jaza...3 Rehefa avy nanadio lavapringy.....4 Rehefa avy nanasa tavy (an-jaza).....5 Alohan'ny hikarakara sakafo.....6 Alohan'ny hanomezana sakafo ny zaza.....7 Avy nisakafo.....8 Hafa (Soraty).....9	
818	What are the reasons for washing hands with soap?		Pour quelles raisons doit-on se laver les mains avec du savon?	Inona avy ireo antony hanasana ny tãnana amin'ny savony?	Prévenir la diarrhée.....1 Prévenir d'autres maladies.....2 Retirer les germes.....3 Empêcher la saleté de se mettre dans la bouche...4 Empêcher la saleté de se mettre dans la nourriture.....5	Misoroka ny aretim-pivalanana.....1 Misoroka ny aretina hafa..2 Manala ny loto/otrik'aretina.....3 Hisakanana ny loto tsy hiditra ao am-bava.....4 Hisakanana ny loto tsy hiditra ao amin'ny sakafo	

					Sent bon.....6 Autres (Spécifier).....7	.....5 Manamanitra ny tànana.....6 Hafa (Soraty).....7	
819	Usually at what time in the day do you wash your hands?  RECORD ALL MENTIONED		Généralement, à quel moment de la journée vous lavez-vous les mains ?  NOTER TOUT CE QUI EST MENTIONNE	Amin'ny akapobeny, fotoana inona ao anatin'ny andro iray no anasanao ny tànana?	Après avoir été aux toilettes.....1 Après avoir changé les couches du bébés ou laver les fesses du bébé..2 Avant de préparer la nourriture.....3 Avant de manger.....4 Avant de donner la nourriture aux autres (y compris le bébé).....5 Jamais ou ne sait pas...6	Rehefa avy ao amin'ny lava-pririny.....1 Rehefa avy nanolo tatin-jaza na nanasa vodinjaza..2 Alohan'ny fikarakarana ny sakafo.....3 Alohan'ny hisakafo.....4 Alohan'ny hanomezana sakafo ny olona hafa (anisan'izany ny zaza).....5 Tsy nanasa mihitsy na tsy fantatra.....6	
820	Do you wash your hands using water treated with bleach/Sur'Eau?		Est-ce que vous vous lavez les mains avec de l'eau traitée avec du chlore/Sur'Eau ?	Nanasa tànana tamin'ny rano voadio amin'ny kilaoro/ Sur'Eau ve ianao?	NON.....1 OUI.....2	TSIA.....1 ENY.....2	

#### SANITATION - ASSAINISSEMENT

901	The last time the youngest child under your care passed a stool, where did he/she defecate?		La dernière fois où votre enfant le plus jeune a déféqué, où a-t-il fait ?	Tamin'ny zanakao kely indrindra nangery farany, taiza izy no nanao izany?	1. A utilisé les latrines 2. A utilisé un pot 3. A utilisé une couche-culotte lavable 4. A utilisé une couche-culotte jetable 5. Est venu dans la maison/cour 6. Est allé hors des lieux 7. A fait dans ses vêtements 8. Autre (spécifier)	1. Nampiasa lavapiringy 2. Nampiasa tavy 3. Nampiasa taty azo sasana 4. Nampiasa taty azo ariana 5. Tonga nangery tao an-trano/antokontany 6. Nandeha tany ivelan'ny tokontany 7. Nangery an-kilaoty	
-----	---	--	--	---	---	--	--

					0. Ne sait pas	8. Hafa (Soraty) 0. Tsy hay	
902	The last time your youngest child under your care passed stools, where were the feces disposed of?		La dernière fois où votre enfant le plus jeune a déféqué, où a-t-on jeté ses excréments?	Tamin'ny zanakao kely indrindra nangery farany, taiza no nanarianao ny malotony ?	1. Dans les latrines 2. Enterrés 3. Fosse ou bac à ordures 4. Dans la cour 5. Hors des lieux 6. Latrines publiques 7. Dans l'évier ou le baquet 8. Dans la conduite d'eau 9. Ailleurs (Spécifier)	1. Tao amin'ny lavapingy 2. Nalevina 3. Lava-pako 4. Tao an-tokontany 5. Ivelan'ny tokontany 6. Lavapingim-bahoaka 7. Tao anaty daba, barika 8. Tao amin'ny fantson-drano 9. Hafa (Soraty)	

903	What kind of toilet facility do members of your household usually use?		Quel sorte de toilettes ce ménage utilise-t-il généralement ?	Inona no karazana lavapiringy hampiasain'ny tokenrano amin'ny akapobeny?	0. aucune, champ, brousse, sac en plastique 1. l'égout avec conduite 2. fosse septique 3. latrine améliorée avec chasse d'eau 4. quelque part /ailleurs 5. latrine améliorée avec trou et ventilée 6. fosse avec dalle dure 7. fosse sans dalle 8. toilette avec composte (double fosse) 9. latrine sceau 10. toilette suspendue 11. Autre (spécifier)	0. tsy misy, any an-tsaha, eny antampon-tanety, ao anaty harona/ tsy lena <sachet plastique> 1. fantsona manary maloto mivantana 2. fosse septique 3. lavapiringy nohatsarainam misy fantson-drano 4. lavaka eny rehetra eny 5. lavaka nohatsaraina, misy fivoahan-drivotra 6. lavaka misy fanitsahana mafy (simenitra...) 7. lavaka tsy misy fanitsahana mafy 8. lavapiringy azo akana zezika (lavaka roa) 9. lavapiringy misy fitatazana (barika, daba,...) 10. lavapiringy mihantona ambony rano 11. Hafa (Soraty)	1001
904	Do you share this facility with other households?		Est-ce que vous partagez ces toilettes avec d'autres ménages ?	Hitambaranareo amin'ny olona na token-trano hafa ve ity lavapiringy ity?	NON.....0 OUI.....1	TSIA.....0 ENY.....1	906
905	How many households share this facility?		Combien de ménages partagent ces toilettes ?	Firy ny trano na tokenrano mitambatra/mampiasa ity lava-piringy ity?	Nombre de ménages <input type="text"/> <input type="text"/>	Isan'ny token-trano <input type="text"/> <input type="text"/>	

	Write number of households		NOTER LE NOMBRE DE MENAGES				
906	Where is this toilet facility?		Où se trouvent ces toilettes ?	Aiza no misy an'ireo lava-piringy ireo?	<ol style="list-style-type: none"> <li>1. A l'intérieur/attendant au logement</li> <li>2. N'importe où sur les lieux</li> <li>3. Hors des lieux</li> <li>4. Latrines publiques</li> </ol>	<ol style="list-style-type: none"> <li>1. Ao an-trano</li> <li>2. Ao antin'ny faritry ny tãnana na tokontany</li> <li>3. Ivelan'ny tokontany</li> <li>4. Lava-pringim-bahoaka</li> </ol>	
907	Can I see the facility?		Est-ce que je peux voir ces toilettes ?	Azoko jerena ve ireo lava-piringy ireo?	Non autorisé.....0 Autorisé à voir.....1	Tsy nahazo alalana.....0 Nahazo alalana hijery...1	→ 1001

908	Does it have walls?		Est-ce que les toilettes ont des murs ?	Misy rindrina ve ireo lava-piringy ireo?	NON.....0 OUI.....1	TSIA.....0 ENY.....1	
909	Does it have a roof?		Est-ce que les toilettes ont un toit ?	Misy tafo ve ireo lava-piringy ireo?	NON.....0 OUI.....1	TSIA .....0 ENY.....1	
910	Does it allow privacy? (It has a curtain or door)		Est-ce qu'elles procurent l'intimité ? (rideau ou porte)	Misy varavarana na ridao ve ireo lava-piringy ireo?	NON.....0 OUI.....1	TSIA.....0 ENY.....1	
911	Is it locked?		Sont-elles fermées à clé ?	Mihidy amin'ny lakile ve ireo lava-piringy ireo?	NON.....0 OUI.....1	TSIA .....0 ENY.....1	→ 914
912	Does it have any of these child friendly features:		Y a t il des caractéristiques qui rendent plus facile son emploi aux enfants, telles que :	Misy toetra mampivavaka azy ve mba azahoan'ny zaza mampiasa azy mora toy ny :	Latrines avec trou plus petit.....1 Siège plus bas.....2 Ne peut pas déterminer...3 Aucun des éléments susmentionnés.....0	Lavapiringy misy lavaka kely.....1 Seza ambany.....2 Tsy voafaritra.....3 Tsy misy an'ireo voalaza eo ambony ireo.....0	
913	Is it being used? (OBSERVE IF THERE ARE FECES IN THE PIT, THROW A ROCK AND LISTEN IF IT SEEMS WET, IF THERE IS EVIDENCE OF ANAL CLEANSING, AND/OR IF THE PATH TO THE LATRINE SEEMS TO HAVE BEEN WALKED ON)		Est-ce que les latrines semblent avoir été utilisées ? (Observer s'il y a des excréments dans le trou, lancer une pierre pour déterminer s'il y a de l'eau à l'intérieur, s'il y a du papier toilette et/ou si le chemin pour accéder aux latrines semble avoir été utilisé)	Ny lava-piringy ve nampiasaina?  (Jereo : raha misy maloto/Tay ao anaty lavaka, tsipazo vato raha toa ka misy rano ao anatin'ny, raha misy taratasy, raha hampiasaina ny lalana mankany amin'ny lava-piringy)	NON.....0 OUI.....1	TSIA.....0 ENY.....1	
914	Is there a broom nearby?		Y a-t-il un balai tout près ?	Misy kofafa ve akaikin'ny lavapiringy ?	NON.....0 OUI.....1	TSIA.....0 ENY.....1	
915	Is there hand washing station near the latrine?		Y a-t-il un endroit pour le lavage des	Misy toerana hanasana tãnana ve akaikin'ny lava-	NON.....0 OUI.....1	TSIA.....0 ENY.....1	→ 917

			mains près des latrines ?	piringy?			
916	Is there water at the hand washing station near the latrine?		Y a-t-il de l'eau à cet endroit près des latrines ?	Misy rano ve eo amin'io toerana akaikin'ny lava-piringy io?	NON.....0 OUI.....1	TSIA.....0 ENY.....1	→ 1001
917	What container is used for water at the HW station?		Quel récipient est utilisé pour l'eau près des latrines ?	Inona no fitaovana hampiasaina hitahirizana rano eo akaikin'io lava-piringy io?	Robinet.....1 Robinet à basculer....2 Seau.....3 Autre (spécifier).....4	Paompy.....1 Tavoahangy mihohaka (miantona, misy lavadavaka ny sarony).....2 Daba na Seau.....3 Hafa (Soraty).....4	
918	Is there a cleansing agent at this hand washing station near the latrine? RECORD ALL PRESENT		Y a-t-il un produit de nettoyage à cet endroit près des latrines ? NOTER TOUS LES PRODUITS DISPONIBLES	Misy fitaovana fanadiovana ve eo amin'io toerana akaikin'ny lava-piringy io? SORATY DAHOLO IREO FITAOVANA FANADIOVANA	Aucun.....0 Savon.....1 Détergeant.....2 Cendre.....3 Autre (spécifier).....4	Tsy misy.....0 Savony vaingany.....1 Savony ranony, Vovony.....2 Lavenina.....3 Hafa (Soraty).....4	

#### EXPOSURE TO INFORMATION – VULGARISATION DE MESSAGES

1001	In the past month, have you received information on hand washing?		Au cours du mois dernier, avez-vous reçu des informations sur le lavage des mains ?	Tamin'ny volana lasa teo, efa naharay antotam-baovao mikasika ny fanasana tânana ve ianao?	NON .....0 OUI.....1	TSIA .....0 ENY.....1	→ 1003
1002	What was the source of that information?  Anywhere else?  RECORD ALL MENTIONED		Quelle était la source de cette information ?  Où encore?  NOTER TOUS LES CANAUX D'INFORMATION FOURNIS	Taiza no naharenesanao/naha zahoanao io antotam-baovao io?  Taiza ihany koa?  SORATY DAHOLO IREO KARAZANA LOHARANOM-BAOVAO	Par le centre de santé...1 Par l'animateur communautaire.....2 Par les enfants qui vont à l'école.....3 Par la radio.....4 Par d'autres canaux (spécifier).....5	Tao amin'ny Tobim-pahasalamana.....1 Tany amin'ny Mpanentana.....2 Tamin'ny alalan'ireo ankizy mandeha mianatra.....3 Tao amin'ny radio.....4 Tamin'ny alalan'ny loharanom-baovao hafa...5	
1003	In the past month, have you received		Au cours du mois dernier,	Tamin'ny volana lasa teo, efa naharay	NON.....0 OUI.....1	TSIA .....0 ENY.....1	→ 1005

	any information about treating the water you drink?		avez-vous reçu des informations sur le traitement de l'eau à boire ?	antotam-baovao mikasika ny fandiovanany rano fisotro ve ianao?			
1004	Where did you see it or hear it?  Anywhere else?  RECORD ALL MENTIONED		Quelle était la source de cette information ?  Où encore?  NOTER TOUS LES CANAUX D'INFORMATION FOURNIS	Taiza no naharenesanao/naha zahoanao io antotam-baovao io?  Taiza ihany koa?  SORATY DAHOLO IREO KARAZANA LOHARANOM-BAOVAO	Par le centre de santé...1 Par l'animateur communautaire.....2 Par les enfants qui vont à l'école.....3 Par la radio..... 4 Par d'autres canaux (spécifier).....5	Tao amin'ny Tobim-pahasalamana.....1 Tany amin'ny Mpanentana.....2 Tamin'ny alalan'ireo ankizy mandeha mianatra.....3 Tao amin'ny radio.....4 Tamin'ny alalan'ny loharanom-baovao hafa....5	
1005	In the past month have you heard or seen anything about sanitation?		Au cours du mois dernier, avez-vous entendu ou vu quoi que ce soit au sujet de l'assainissement ?	Tamin'ny volana lasa teo, efa nahare na nahita zavatra mikasika ny fahadiovana fisotro ve ianao?	NON.....0 OUI..... 1	TSIA.....0 ENY.....1	→ 1007
1006	What was the source of the information?  Anywhere else?  RECORD ALL MENTIONED		Quelle était la source de cette information ?  Où encore?  NOTER TOUS LES CANAUX D'INFORMATION FOURNIS	Taiza no naharenesanao/naha zahoanao io antotam-baovao io?  Taiza ihany koa?  SORATY DAHOLO IREO KARAZANA LOHARANOM-BAOVAO	Par le centre de santé...1 Par l'animateur communautaire.....2 Par les enfants qui vont à l'école.....3 Par la radio..... 4 Par d'autres canaux (spécifier).....5	Tao amin'ny Tobim-pahasalamana.....1 Tany amin'ny Mpanentana.....2 Tamin'ny alalan'ireo ankizy mandeha mianatra.....3 Tao amin'ny radio.....4 Tamin'ny alalan'ny loharanom-baovao hafa....5	
1007	In the past month, have you received information about diarrhea?		Au cours du mois dernier, avez-vous reçu des informations au sujet de la diarrhée ?	Tamin'ny volana lasa teo, efa naharay antontam-baovao mikasika ny fivalanana ve ianao?	NON .....0 OUI..... 1	TSIA.....0 ENY.....1	→ FIN
1008	What was the source of that		Quelle était la source de cette	Taiza no naharenesanao/naha	Par le centre de santé...1 Par l'animateur	Tao amin'ny Tobim-pahasalamana.....1	



information? Anywhere else? RECORD ALL MENTIONED	information ? Où encore? NOTER TOUS LES CANAUX D'INFORMATIO N FOURNIS	zahoanao io antotam-baovao io? Taiza ihany koa? SORATY DAHOLO IREO KARAZANA LOHARANOM- BAOVAO	communautaire.....2 Par les enfants qui vont à l'école.....3 Par la radio..... 4 Par d'autres canaux (spécifier).....5	Tany amin'ny Mpanentana.....2 Tamin'ny alalan'ireo ankizy mandeha mianatra.....3 Tao amin'ny radio.....4 Tamin'ny alalan'ny loharanom-baovao hafa....5
---	--	---	---	---

## Annex 2 – School Questionnaire

### Guide d'Observation pour les Ecoles Hygiène, Eau et Assainissement Ligne de Base, Madagascar

Identification du Lieu d'Observation			
Nom de l'Ecole			
Village			
District			
Commune			
Région	1. Amoron'imania 2. Analamanga 3. Fianarantsoa 4. Tomasina		
Enquêteur	1. 2. 3. 4.		
Chef d'Equipe	1. 2. 3.		
Date de l'Observation			
Assainissement			
1.	Cette école, a-t-elle une/des latrine(s) accessible(s) aux enfants ?	NON .....0 → OUI .....1	24
2.	Y a-t-il une latrine exclusivement pour les filles ?	NON .....0 → OUI .....1	13
3.	Est-ce que je peux la voir ?	NON .....1 → OUI .....2	13
4.	OBSERVEZ : Cette latrine a-t-elle : une dalle ?	NON .....0 OUI .....1	
5.	des murs ?	NON .....0 OUI .....1	
6.	une porte/un rideau ?	NON .....0 OUI .....1	
7.	un toit ?	NON .....0 OUI .....1	
8.	est-elle opérationnelle?	NON .....0 OUI .....1	
9.	est-elle ferme à clé ?	NON .....0 OUI .....1	

10.	est-elle propre ?	NON .....0 OUI .....1	
11.	Y a –t-il un dispositif de lavage de main a proximité de cette latrine?	NON .....0 OUI .....1	
12.	Dispose ce dispositif de savon ?	NON .....0 OUI .....1	
13.	DEMANDEZ : Y a-t-il une latrine exclusivement pour les garçons ?	NON .....0 → OUI .....1	24
14.	DEMANDEZ : Est-ce que je peux la voir ?	NON .....0 → OUI .....1	24
15.	OBSERVEZ : Cette latrine a-t-elle : une dalle ?	NON .....0 OUI .....1	
16.	des murs ?	NON .....0 OUI .....1	
17.	une porte/un rideau ?	NON .....0 OUI .....1	
18.	Un toit ?	NON .....0 OUI .....1	
19.	est-elle opérationnelle?	NON .....0 OUI .....1	
20.	est-elle fermée À clé?	NON .....0 OUI .....1	
21.	est-elle propre ?	NON .....0 OUI .....1	
22.	Y a –t-il un dispositif de lavage de main a proximité de cette latrine?	NON .....0 OUI .....1	
23.	Dispose ce dispositif de savon ?	NON .....0 OUI .....1	
24.	DEMANDEZ : Dispose l'école de l'eau à boire pour les élèves?	NON .....0 → OUI .....1	32
25.	Est-ce que cette eau a été purifiée pour être consommée par les élèves?	NON .....0 → OUI .....1	28
26.	Comment a-t-elle été purifiée ?	Approvisionnée par borne-fontaine. . . 1 SUR' eau . . . . . 2 Autres méthodes, spécifiez . . . . . 3	
27.	Comment école s'approvisionne-t-elle des produits pour traiter l'eau à boire, y compris le SUR' eau ?  RETENEZ TOUTES LES REPONSES FOURNIES	Budget de fonctionnement. 1 Contributions de la Communauté. 2 Projet spécifique . . . 3 Autre sources, spécifiez . . . . . 4	
28.	Quel système de stockage d'eau à boire est utilisé par école?  RETENEZ TOUTES LES REPONSES FOURNIES	Fut . . . . . 1 Jerrycan . . . . . 2 Pot en terre cuite. . . 3 Autre récipient, spécifiez . . . . . 4	
29.	Veillez me le(s) montrer SVP ?	Accès pas accorde .0→ Accès accorde.....1	31
30.	Le(s) récipient(s) pour stocker l'eau à boire disposent-ils d'un couvercle dur ?	Aucun n'a de couvercle dur1 Quelqu'uns disposent d'un couvercle dur . . 2 Seulement couvercle souple comme tissu . 3 Jerrycan ou semblable . . .4	

31.	Comment est-ce qu'on se sert à boire ?	Récipient dispose d'un robinet . . . . 1 Outil dédié exclusivement pour obtenir de l'eau . . . 2 Autre méthode, spécifiez 3	
32.	L'école, réalise-t-elle des activités de sensibilisation sur l'hygiène adressées aux enfants ?	NON . . . . . 0 → OUI . . . . . 1	33
33.	Lesquelles?  (Réponses multiples, RETENEZ TOUTES LES REPONSES FOURNIES)	Intégrées au curriculum . . . . .1 Extra curriculum . .2 (Clubs d'hygiène) Autres, spécifiez 3	
34.	Quels sujets sont adressés par ces activités ?  (Réponses multiples, RETENEZ TOUTES LES REPONSES FOURNIES ).	Lavage des mains avec du savon.....1 Traitement a domicile de l'eau a boire .....2 stockage a domicile de l'eau a boire.....3 latrination.....4 autres sujets, specifiez 5	
35.	L'école, organise-t-elle des activités de sensibilisation sur l'hygiène adressées aux parents d'élèves ?	NON . . . . . 0 OUI . . . . . 1	
36.	Si oui, lesquelles ?  (Réponses multiple RETENEZ TOUTES LES REPONSES FOURNIES s. .)	Foires/kermesse.....1 Séances d'information.2 Défiles communautaires 3 Autres actions, spécifiez 4	
37.	Quels sujets sont adressés par ces activités ?  (Réponses multiples. RETENEZ TOUTES LES REPONSES FOURNIES).	Lavage des mains avec du savon.....1 Traitement a domicile de l'eau a boire .....2 stockage À domicile de l'eau a boire.....3 latrination.....4 autres sujets, specifiez 5	
38.	L'école, organise-t-elle des activités de sensibilisation sur l'hygiène adressées à la communauté en général ?	NON . . . . . 1 OUI . . . . . 2	
	Si oui, lesquelles ?  (Réponses multiples. RETENEZ TOUTES LES REPONSES FOURNIES)	Foires/kermesse..... 1 Séances d'information.2 Défiles communautaires 3 Autres actions, spécifiez 4	
39.	Quels sujet sont adressés par ces activités>	Lavage des mains avec du savon.....1 Traitement a domicile de l'eau a boire .....2 stockage À domicile de l'eau a boire.....3 latrination.....4 autres sujets, specifiez 5	
40.	L'école dispose-t-elle des enseignants formes en promotion de l'hygiène ?	NON . . . . . 1 OUI . . . . . 2	

41.	Ont-ils été formes par le Projet d'Amelioration de l'Hygiène ou ces partenaires ?	NON ..... 1 OUI ..... 2	
-----	---	----------------------------	--

### Annex 3 – Basic Health Center Questionnaire

**Instrument d'Observation et d'Enquête pour les Centres de Santé de Base**  
**Hygiène, Eau et Assainissement**  
**Ligne de Base, Madagascar**  
 Avril 07

Identification du Lieu d'Observation			
Nom du Centre de Sante de Base			
Village			
District			
Commune			
Région	1. Amoron'i mania 2. Analamanga 3. Fianarantsoa 4. Tomasina		
Enquêteur	1. 2. 3. 4.		
Chef d'Equipe	1. 2. 3.		
Date de l'Observation			
Assainissement			
1.	Ce CSB, a-t-il une/des latrine(s) accessible(s) a la clientèle ?	NON .....0 → OUI .....1	13
2.	Y a-t-il une/des latrine(s) exclusivement pour les femmes ?	NON .....0 → OUI .....1	
3.	Est-ce que je peux la/les voir ?	NON .....0 → OUI .....1	
4.	OBSERVEZ : Cette latrine a-t-elle : une dalle ?	NON .....0 OUI .....1	
5.	des murs ?	NON .....0 OUI .....1	
6.	une porte/un rideau ?	NON .....0 OUI .....1	
7.	un toit ?	NON .....0 OUI .....1	
8.	est-elle opérationnelle?	NON .....0 OUI .....1	
9.	est-elle fermee À clé ?	NON .....0 OUI .....1	

10.	est-elle propre ?	NON .....0 OUI ..... 1	
11.	Y a –t-il un dispositif de lavage de main a proximite de cette latrine?	NON .....0 OUI .....1	
12.	Dispose ce dispositif du savon ?	NON .....0 OUI ..... 1	
13.	Y a-t-il une/des latrines exclusivement pour les hommes ?	NON .....0 OUI ..... 1	
14.	Est-ce que je peux la voir ?	NON .....0 OUI ..... 1	
15.	OBSERVEZ : Cette latrine a-t-elle : une dalle ?	NON .....0 OUI ..... 1	
16.	Des murs ?	NON .....0 OUI ..... 1	
17.	une porte/un rideau?	NON .....0 OUI ..... 1	
18.	un toit ?	NON .....0 OUI ..... 1	
19.	est-elle operationnelle ?	NON .....0 OUI ..... 1	
20.	Est-elle fermee A cle ?	NON .....0 OUI ..... 1	
	est-elle propre ?	NON .....0 OUI ..... 1	
21.	Y a-t-il un dispositif de lavage de main a proximite de cette latrine ?	NON .....0 OUI ..... 1	
22.	dispose ce dispositif du savon ?	NON .....0 OUI ..... 1	
13.	DEMANDEZ : Dispose le CSB de l'eau à boire pour la clientèle?	NON .....0 → OUI ..... 1	20
14.	Est-ce que cette eau a été purifiée pour être consommée par la clientèle?	NON .....0 → OUI ..... 1	17
15.	Comment a-t-elle été purifiée ?	Approvisionnée par borne-fontaine... 1 SUR' eau ..... 2 Autres méthodes, spécifiez .....3	
16.	Comment le CSB s'approvisionne-t-il de SUR' eau ?  RETENEZ TOUTES LES REPONSES FOURNIES	Budget de fonctionnement . 1 Contributions de la communauté . .2 Projet spécifique . . . 3 Autre sources, spécifiez 4	
17.	Quel système de stockage d'eau à boire est utilise par le CSB?  RETENEZ TOUTES LES REPONSES FOURNIES	Fut .....1 Jerrycan ..... 2 Pot en terre cuite . . 3 Autre récipient, spécifiez 4	
18.	Veillez me les montrer SVP	Accès pas cordé 0→ Accès accordé 1	20
19.	Le(s) récipient(s) pour stocker l'eau à boire disposent-ils d'un couvercle dur ?	Aucun n'a de couvercle dur .1 Quelqu'uns disposent d'un couvercle dur 2 Seulement couvercle souple comme tissu . 3 Jerrycan ou semblable . . . .4	
20.	Comment est-ce qu'on se sert à boire ?	Récipient dispose d'un	

		robinet ... 1 Outil dédié exclusivement pour obtenir de l'eau ... 2 Autre méthode, spécifiez _____ 3	
21.	Le CSB, réalise-t-il des activités de sensibilisation sur l'hygiène adressées à la clientèle sur place ?	NON ..... 0 → OUI ..... 1	23
22.	Lesquelles ?  RETENEZ TOUTES LES REPONSES FOURNIES.	Causeries.....1 Conseils intégrés aux soins santé maternelle/santé enfants.....2 Affichage.....3 Autres formes. Spécifiez _____ 4	
23.	Le CSB, organise-t-il des activités de sensibilisation sur l'hygiène adressées à la communauté en général ?	NON ..... 1→ OUI ..... 2	ARRET EZ L'ENQU ETE
24.	Lesquelles ?	Visites à domicile ...1 Journées de l'hygiène...2 Autres activités. Spécifiez _____ 3	