WASH Service Provision in Rural Madagascar: Sustainability Check 2

A Report for the Ministry of Water, Sanitation and Hygiene, Government of Madagascar

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Acronyms and abbreviations

CLTS	Community Led Total Sanitation.
GoM	Government of Madagascar.
HWWS	Hand washing with soap.
INSTAT	Institut National de la Statistique.
Min EAH	Ministry of Water, Sanitation and Hygiene.
ODF	Open defecation free.
SC	Sustainability Check.
SC1	The first SC, conducted in 2013/4.
SC2	This SC, conducted from November 2015 to February 2016.
SWAp	Sector Wide Approach.
UNICEF	United Nations Children's Fund.
WASH	Water supply, sanitation and hygiene.

Acknowledgments

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1 Introduction

1.1 Background

In September 2015 the report "Sustainable WASH Services and an Effective WASH Sector in Madagascar" was published by the Ministry of Water, Sanitation and Hygiene. In that report, the authors set out a broad strategy for achieving sustainable rural water and sanitation services in Madagascar, through creating a more effective, harmonised and coordinated WASH sector (a so-called SWAp or sector-wide approach).

The report contained numerous short-term, medium-term and long-term recommendations. Further work was then commissioned regarding four of the short-term recommendations, namely:

- A preliminary cost analysis of the rural water sector;
- A review of rural water service management models and their fit to the range of contexts found in Madagascar;
- Development of a user-friendly financial planning tool for the rural water sector in Madagascar;
- Updating of the Sustainability Check for rural water and sanitation, last carried out in 2013.

This report concerns the Sustainability Check; a separate report contains details of the other three elements. The joint terms of reference for the four pieces of work is presented in Annex A.

1.2 Objectives

The objective of the SC2 was to establish the sustainability status of rural water services, of the usage of sanitation and of hygiene behaviours across rural Madagascar. The objective of this report is to provide a single reference point for that exercise.

1.3 The main issues

1.3.1 Introduction

The principal issues regarding sustainability remain unchanged from the report of the first Sustainability Check ("SC1"), published in early 2014[1]. It would appear that the global WASH sector has grown in its recognition of these issues over recent years, moving on from the commonplace but distressing images of non-functioning infrastructure, which could be seen as a symptom, to a wider understanding of the main causes (or at least their identification). As a consequence, a need to address WASH in terms of s*ervice provision* has gained recognition – and while this still requires consideration of

[1] References are tabulated in Appendix B.

functionality and durability of equipment, it also generates the need to consider finance, back-stopping, service chains, maintenance regimes and other such contextual parameters.

The central tenet is that people should expect to receive a continuous safe water service, that adequate sanitation is available to them and that they use these facilities, and that they continue to exhibit sufficient hygiene behaviours, as against e.g. is there a working pump, or a clean toilet, or a *tippy-tappy* close to the toilet?

This means that a lengthy set of parameters and potential interactions needs to be addressed when setting up surveys of *sustainability*, when it is considered as continuous service delivery in the way described above. The main ones now identified for each service element in turn.

1.3.2 Monitoring sustainability of rural water services

The key indicator of functionality has been, and remains, whether or not the infrastructure (waterpoint/s) is/are working, at all, and as they should be in terms of quality and quantity; and of accessibility to community members (distance and time, the latter in terms of walking time and waiting time). Figures between two thirds and three quarters of waterpoints being in use – on the day of the survey – are commonplace in Sub Saharan Africa and Madagascar.

As important are efforts to identify some of the factors felt or known to have an impact on service availability. Current thought would indicate that these include the ownership that a community has of its facilities (where ownership is in a wider sense than legal; it takes on a philosophical hue but also includes practical considerations like contribution to the construction effort and to operating costs). Whether or not this is simply a backhand way of conferring responsibility to communities in the absence of external support to them post waterpoint construction is moot, and worthy of discussion. The variables thought to cover this *ownership* include the presence and functioning of a WASH Committee and the contribution of communities to the construction of the hardware

However, development in terms of parameters to be addressed in surveys of this nature is not limited to the inclusion of the causatory. Some further clarification of the nuances of service availability and/or use are also helpful, in addition to the *is it working / well today* type of basic question. So, in SC1, the issue of period of service (during the preceding year) was address, and is again in SC2. A further issue discovered in SC1 was that a high proportion of people for whom a working waterpoint appears to be available do not always (or on some cases ever) use it. An attempt to establish why this is the case has been made in SC2.

1.3.3 Monitoring sustainability in sanitation services

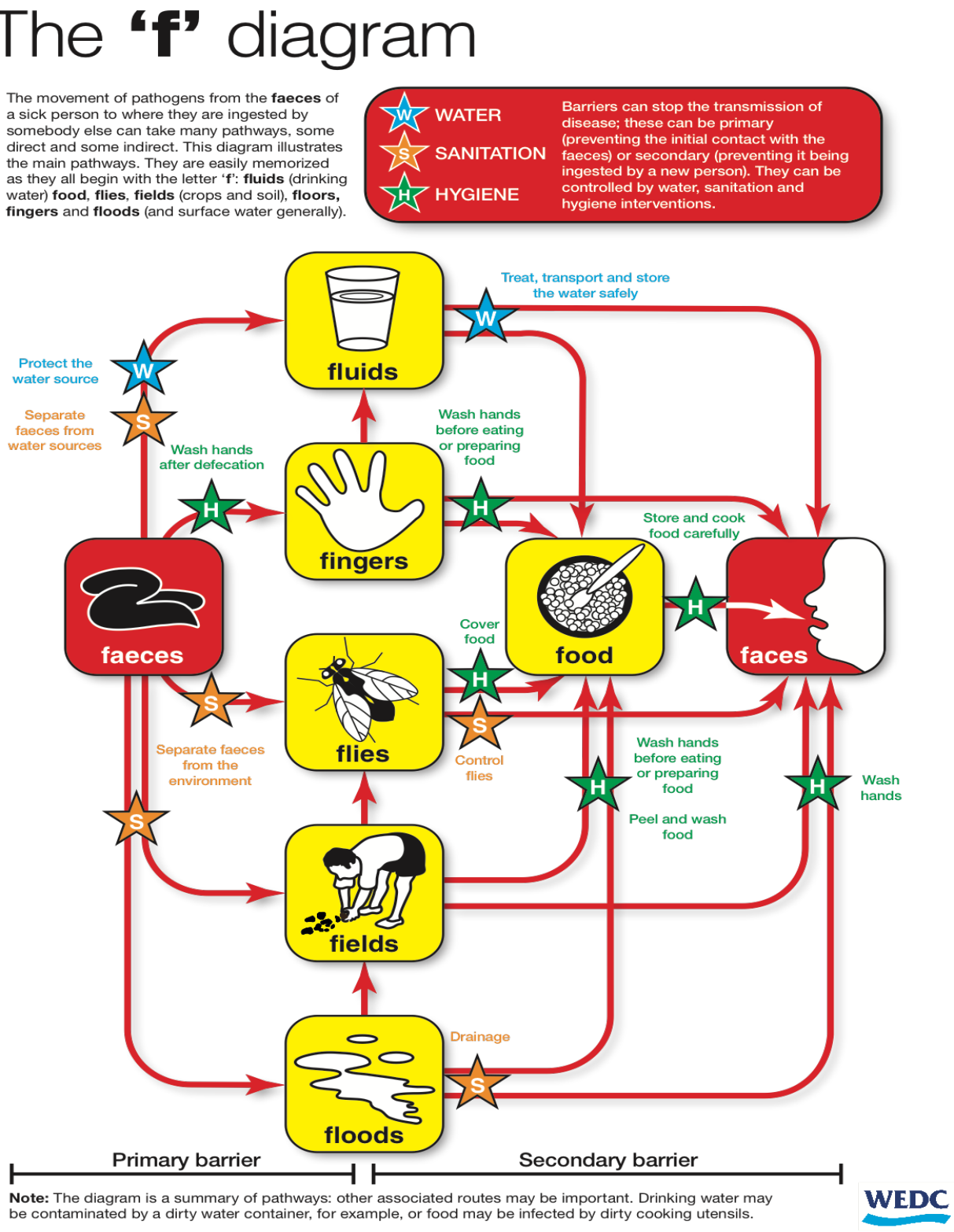

Figure 1: The F-Diagram

As is the case with water supply, the WASH sector has – in the main – moved on from counting toilets as a measure of success. The reason for this is most easily seen by

reference to the "F-diagram"[2], a diagrammatic representation of the pathogen pathways from environment into humans (see Fig 1). Essentially, sanitation (and hygiene, see section 1.3.4) provide barriers to the faecal-oral passage of pathogens from faeces into human digestive systems, and, so their importance can be seen in the annotated F-diagram, showing that use of an adequate water supply can place a barrier across two pathways, use of safe sanitation five, and the conduct of proper hygiene behaviours six.

The diagram makes clear too that the presence a toilet for use by a household is not the principal issue insofar as sanitation is concerned, the presence and usage of adequate toilets for all households is.

The realisation that the eradication of open defecation (OD) across whole communities was the main key to enabling all members of those communities to gain the wide range of benefits that arise, is visible in the f-diagram and is now close to universal. This has led to a situation in which the adoption of programmes under the guise of Community Led Total Sanitation (CLTS) is also very widespread.

It follows that monitoring should relate to that objective, and so sustainability monitoring should be in relation to the retention or otherwise of open defecation free (ODF) areas.

Whereas, at least in general terms, the monitoring of the presence and sustainability or otherwise of a water service is conceptually simple, the same cannot be said for ODF monitoring. Monitoring can be conducted either through being reported (by the service users or beneficiary community / members) and observed (by an independent external person or body. So, for example, it is straightforward for community members to report a non/functioning water-point and this is probably not a source of embarrassment; additionally, this can be very simply verified visually. On the other hand, ODF – being concerned with an intimate personal behaviour, albeit at a collective level - is liable to a false response based upon what people think they should be reporting. Furthermore, the presence or absence of ODF is not easy to observe positively (is it possible to inspect a whole area?). In essence, an ODF monitoring assessment is an exercise in finding evidence to disprove a negative.

The complexity doesn't end there. It is also subject to nuance – ODF is *triggered, declared, verified,* it can be seen as *actual* or *official*, so at which point in this chain of possible events or status represents the point of monitoring? We have chosen post-declaration but even this is subject to some difficulties (See Chapter 4).

[2] Courtesy: WEDC, accessed: http://wedc.lboro.ac.uk/resources/factsheets/FS009_FDI_A3_Poster.pdf 22nd March 2016

This collection of grey areas is compounded by the fact that some of these concepts are not necessarily easy to convey in Malagasy/local contexts which led us to adopt some additional measures in practice in the field (see Sections 2.3 and 2.4).

Whatever the conceptual and practical difficulties, the fact remains that the sustainability of ODF is the over-riding indicator of success in rural sanitation programmes. Despite this, it is good practice to seek to triangulate the findings in relation to continuation of ODF status, through establishing the numbers of latrines and their condition, in a similar vein to historical sanitation study methods – but not as an end in themselves.

Additionally, as with the investigation of sustainability of water service provision, we also sought to establish the status of variables thought to have a causational or explanatory status in retaining ODF, for example the extent of support received from external agencies post-ODF declaration, support within communities for those unable to build latrines themselves, and the presence or absence of an accessible sanitary supply chain.

1.3.4 Monitoring sustainability in hygiene behaviour

The f-diagram shown on the previous page provides a very clear indication that washing of hands places a barrier across four of the six hygiene-related faecal-oral pathways. For that reason, hand-washing (with soap – HWWS - or another effective cleaning agent where soap is not available) is viewed by many as the most important intervention in the WASH cannon.

As is the case with monitoring issues of personal behaviour, asking people whether or not they wash their hands is, of course, likely to be met a significant proportion of false answers. So, while such self-reporting has a role, observation is also important but, again, not simple. For a number of fairly obvious reasons, an interviewer can not roam around a community checking whether or not people wash their hands with soap after each incidence of the activities required in the f-diagram (principally, post-defecation, prior to food preparation and consumption). So, the proxy measure adopted by consensus across the WASH community is the presence or absence of a HWWS facility, which a) appears to be used and has soap available and b) is within a short distance of the toilet (usually seen as being about ten paces - but is contextual).

1.4 This report

In this report, the method of conducting the surveys is set out in the next chapter, with results and commentary then provided on rural water supply (in Chapter 3); on open defecation free (ODF) areas and on hand washing with soap (HWWS) in Chapter 4. Some overall concluding observations are made in the final Chapter (5).

2 Method

2.1 Introduction

In this section, we set out the method by which the data was sampled, collected and analysed. Several enhancements form SC1were implemented, in terms of sample range and also in terms of data collection hardware but the principles remained the same.

2.1.1 Unit of analysis

As with SC1, the unit of analysis was the community. The reasons for this are for rural water service (RWS) provision:

- infrastructure is usually provided through installations which are intended to provide service for whole communities.
- However, we did ask about experiences in service provision and usage that applied to community members, and so could derive responses for proportions of people within communities[3].

For sanitation:

- As in SC1, the emphasis, in line with current thinking on benefits of sanitation and the consequent concentration on CLTS, was to establish the continuation of ODF communities, irrespective of the fact that the decision to invest in building (and then using) toilets is largely a household one.
- However, as with RWS, questions were also asked in relation to proportions of community members who, for example, had toilets (see also footnote this page).

For handwashing:

- HWWS is universally accepted as the proxy measure of hygiene behaviour uptake. Quite clearly the decision to have a HWWS point, to buy soap and then to wash hands is a household / individual one. So we were attempting to address outputs in aggregate.

As the unit of analysis was the community:

- The WASH Committee was – generally – the respondent; variations are individually noted.
- The implication is that comparison of results with household based surveys may be inappropriate, so care needs to be taken in trying to do so.

[3] Measuring proportions of people within proportions of communities does lead to presentational issues, which are clarified in the sections of this report containing the results.

An important issue to note is that the questionnaires only allowed a numeric response from a pre-set list given for each question. The benefits are that any interviewer bias is minimised and so consistency is ensured, and that data handling is far easier and errors of transcription are eradicated; while the disbenefit is that nuances are more difficult to obtain compared with more qualitative means. We return to this issue in the conclusions in Section 5.

2.2 Rural water service delivery questionnaire

The survey was conducted through a questionnaire administered via smartphones that allowed the enumerator to record and store the data captured and send back for incorporation in the overall dataset when s/he had a mobile signal.

The questionnaire (reproduced in full in Annex C) was based upon that used in SC1, and covered the following themes:

- The water system, its functionality, usage and use of unsafe sources;
- The population of the community and the service level it gains from the waterpoint, including issues of access, water quality (incl. protection form environmental hazards) and availability (incl. months per year).
- Finance and planning provision for capital, operating and capital maintenance.
- Issues of management and maintenance by community or outsourcing.
- External support to the community and the existence of a supply chain.

As noted in the next section, the results in respect of usage of unsafe water sources (when a safe water service was available) yielded around a third of respondents indicating "other". Given a need to return to the field to gather additional information on the ODF /HWWS sample (see next section), the opportunity was taken to attempt to gather more comprehensive information on this issue in that return to the field.

2.3 ODF communities and HWWS questionnaire

As with the water service provision questionnaire, that for ODF/HWWS was based upon that used in SC1, comprising questions on:

- The nature of the location.
- Facts around the declaration and existence of ODF status.
- Whether or not measures supportive of the retention of ODF are in place.
- The number of toilets in the village (to triangulate with ODF related responses).
- The post triggering/declaration support received from external agents and the availability of supplies.

The analysis revealed some unexpected results, investigation revealed that they were affected by a translation issue, when the questionnaire was being translated from its original English into Malagasy. So, it was felt prudent:

- To return to the field to cross check those results.
- To take the opportunity to try and address issues relating to the use of unsafe water – as discussed in the previous part of this Chapter.
- To take the opportunity to undertake a transect walk to address any potential differences between reported and observed outcomes.

This second tranche of fieldwork was undertaken in Jan/Feb 2016.

2.4 Sampling method

2.4.1 Background and justification

Sustainability Check 1 (SC1, 2013) in Madagascar was carried out in ten regions on behalf of the then Ministry of Water. That evaluation covered both drinking water supply and open defecation status in rural areas and was intended to be repeated at intervals, ideally every two years.

Sustainability Check 2 (SC2) was planned for 2015 but it was decided that, for a combination of technical and visibility reasons, it should cover all regions in Madagascar. One of the improvements recommended in the SC1 focused on the development of a more rigorous sampling methodology about the selection of villages where the survey would be conducted. The use of smartphones for the data collection and data sending are also part of this innovation.

The objective was to establish a random sample in each region, representative and unbiased of all villages which had newly built or rehabilitated water points since 2005, and (separately) which have benefited from CLTS triggering program.

The "Population" referred to as **N,** therefore comprised two lists:

- 1st list: All villages with newly built or rehabilitated water points since 2005.
- 2nd list: All villages having been triggered with CLTS approach and which had progressed to ODF status.

However, further investigation was also conducted in declared ODF villages during the second visit in order to not only get more detailed and precise information from collected answers, but also to understand better the influencing factors on the situation of sustainability. If the village had benefitted from a drinking water supply system and if the system was still functional, a survey was also conducted among ten women, selected randomly, in order to know if some people in the village actually used water from unsafe

sources. The survey was intended to reveal factors which motivated them to use that unsafe water.

As noted above, the respondent in the initial survey was the WASH Committee.

2.4.2 Sampling

In order to obtain reliable information and eventually a more holistic understanding of the reality, we used an extremely rigorous sampling method in SC2. In general, the sampling methodology depends on the objectives of the study, the desired degree of accuracy and desired level of representativeness. It also depends on budgetary and time constraints, particularly in relation to the logistics of the enumerators, a major determinant of cost and timescale.

Based on these parameters, we adopted the sampling procedure for the first visit set out below. In the paragraphs which follow, we present in turn the level of sample representativity, the sample size, and the way sample was "drawn".

Level of representativity

Our intention was to be representative and significant at the *regional* level (as well as at the national level, which was, of course, a given). This means that in any region, the villages sampled should represent all villages with water points having been installed or rehabilitated since 2005; and the villages sampled in the second list significantly represent all the villages that have benefited from CLTS programmes in the same region.

The source of the full *Population* (as defined in Para 2.4.1) from which the sample was to be drawn was the Min EAH database. However, the numbers in the database in some regions did not allow this level of representativity. This means that the obtained results are significant at the national level but not necessarily at the regional level. In this report, results are quoted at the national level only.

Sample Size

Determining the sample size is a fundamental step for any statistical study. The sample size is the number of statistical units needed to make inferences about the characteristics of the entire *Population* from the obtained results. The calculation of the actual size requires results from different studies in the areas of intervention if there were any. It also requires the specification of some factors and the expression of plausible hypotheses. In this study, we used the method of estimation of a proportion to determine the size of the required sample. The description of this method is as follows:

Note that the confidence interval to estimate the proportion ***p*** is:

IC = $[p - z\,\delta_p\ ;\ p + z\,\delta_p]$ where

- ***p***: Estimated proportion of villages related to the key indicator of the study.
- δp: Sampling Error = $\sqrt{\frac{p(1-p)}{n}}$
- z value corresponding to a given confidence level

The general formula of this confidence interval is p **± z δ_p =** p **± m** (1)

- m: margin of error.

According to equation (1): **z δ_p = m**

⇨ m = z* $\sqrt{\frac{p(1-p)}{n}}$

⇨ $m^2 = z^2 * \frac{p(1-p)}{n}$

⇨ $n = \frac{z^2 * p(1-p)}{m^2}$

Since we do not have *a priori* the value of p key indicator for each region, then we set it at 50%, the value that maximizes the sampling variance in all cases. We also took m = 5% as a margin of error and z = 1.96 (the value corresponding to a confidence level of 95%).

This indicated a sample size of 384 villages for each component (ODF and RWS) throughout Madagascar so that the sample would be representative and that the results would be significant at the national level. However, the number of villages to visit in each region is proportional to the number of beneficiary villages in the region. It is also important to note that the spatial representativity of the sample in each region is essential in this study, since the distance between the village and the main town of the region and / or district and their remoteness or physical accessibility can be factors with respect to the issue of sustainability. So, it is better to work on a quite small sample size but spatially well distributed than to work on a large sample but concentrated in certain areas only. These are the reasons why this sample of 384 villages was adopted as representative of the *Populations* across Madagascar.

Sample drawing

The sample drawing procedure is part of the elements guaranteeing the neutrality and representativity of the sampled villages among all villages' beneficiaries of the project. Thus, we chose a Simple Random Sampling to ensure the criteria mentioned above. This method allows drawing a sample of villages, giving each community in the region (respectively for the two lists) the same probability of being drawn.

In this study, the sample drawing procedure is as follows (for the 1st and 2nd list at the frame):

- Step 1: Once the sample size in terms of villages "n" is determined, we calculate the selection interval "f": $\boldsymbol{f} = \frac{\mathbf{N}}{\mathbf{n}}$ as N is the number of all related villages in the region.
- Step 2: We draw a random integer number between 1 and "f". Let **x** be that number. We retain in the sample the statistical unit of the rank **x**.
- Step 3: "f" is added to **x**. We retain within the sample the statistical unit of the rank $\mathbf{x_2} = \mathbf{x} + f$
- In general, in step i, the sample's statistical unit of the rank $\mathbf{x_i} = [\mathbf{x} + (i - 1) f]$ is retained.
- We continue to obtain the n sample units.

NB: During the process of sample drawing, the lists were sorted by District, by Commune, then by Fokontany (the lowest formal hierarchical local administrative area in Madagascar) so that the sample was as heterogeneous as possible.

The actual number of villages surveyed was 378 (371 after data cleaning[4]) for the RWS component and 395 in the case of ODF.

2.5 Return to the field

To obtain more details on the data collected during the first run on land, a second run was performed in February 2016. Data were collected on both ODF and RWS according to the following methodology. There were two objectives:

- To address the status of sustainability of ODF villages and to look again at the factors that influence it;
- To identify the reasons why some community members choose to access unsafe water, when safe water is seemingly available; from the viewpoint of a selection of women in those communities.

For the ODF element, it was agreed that data collection should be carried out among the villages that were officially declared ODF, according to the statement of the members of the WASH committee during the first visit in November 2015.

Ideally, we would have returned to all villages visited in the first tranche but logistics prevented that. In the end, we sampled 162 ODF declared villages in six regions: Analamanga, Vakinankaratra, Androy, Anosy, Atsimo Atsinanana and Vatovavy Fitovinany; due to logistics, the actual sample was 159 villages. This sample gives sufficient representativeness at the national level. A transect walk was added to the questionnaire to cross-check the ODF responses.

[4] The shortfall of thirteen communities was not held to undermine the sample representativeness.

For the RWS component, data collection was carried out with women in households in the same villages as the second ODF sample - where there is a functioning drinking water system at the time the visit. Ten women per qualifying village were investigated - their choice was made randomly (the first ten women who intersected the investigating officer at the time of the visit).

2.6 Interpretation of results

In many cases, the interpretation of the results shown in the following sections is straightforward; however, there are some instances where guidance is required. This is particularly the case where proportions *within* communities are being assessed, as against proportions *of* communities. So, an example might be: in 12.5% of communities, many households (defined as 50% to 75% of the total) had HWWS facilities. These figures need to be presented in this way as they are not capable of being added across all communities. The reason for this method derives from the use of the community as the unit of analysis, not the household.

3 Rural Water Supply Service Provision – Results and Commentary

3.1 Introduction

As noted in the previous Chapter, the main questionnaire survey fieldwork was undertaken in November 2015. Issues that arose with the ODF element led to a decision to return to the field in January 2016; at that time the opportunity was taken to examine further the particular issue of the ongoing usage of unsafe water in communities that had access to safe water.

So, the results that are reported here are entirely from the first tranche of fieldwork except where stated, in the case where illumination of that particular issue was obtained in the second tranche. Most of the simple tabulations (frequencies) are presented, with a selection of cross tabulations where helpful to the analysis.

The reader should note again that the unit of analysis in this survey was the community; so data may not be comparable to that from household based surveys.

3.1 Systems and functionality

3.1.1 Technology

The range of system types encountered in the field is shown below, with nearly just over three-quarters being hand pumps, a fifth being gravity systems, with the remainder split between mechanised pumps and other types with a treatment method.

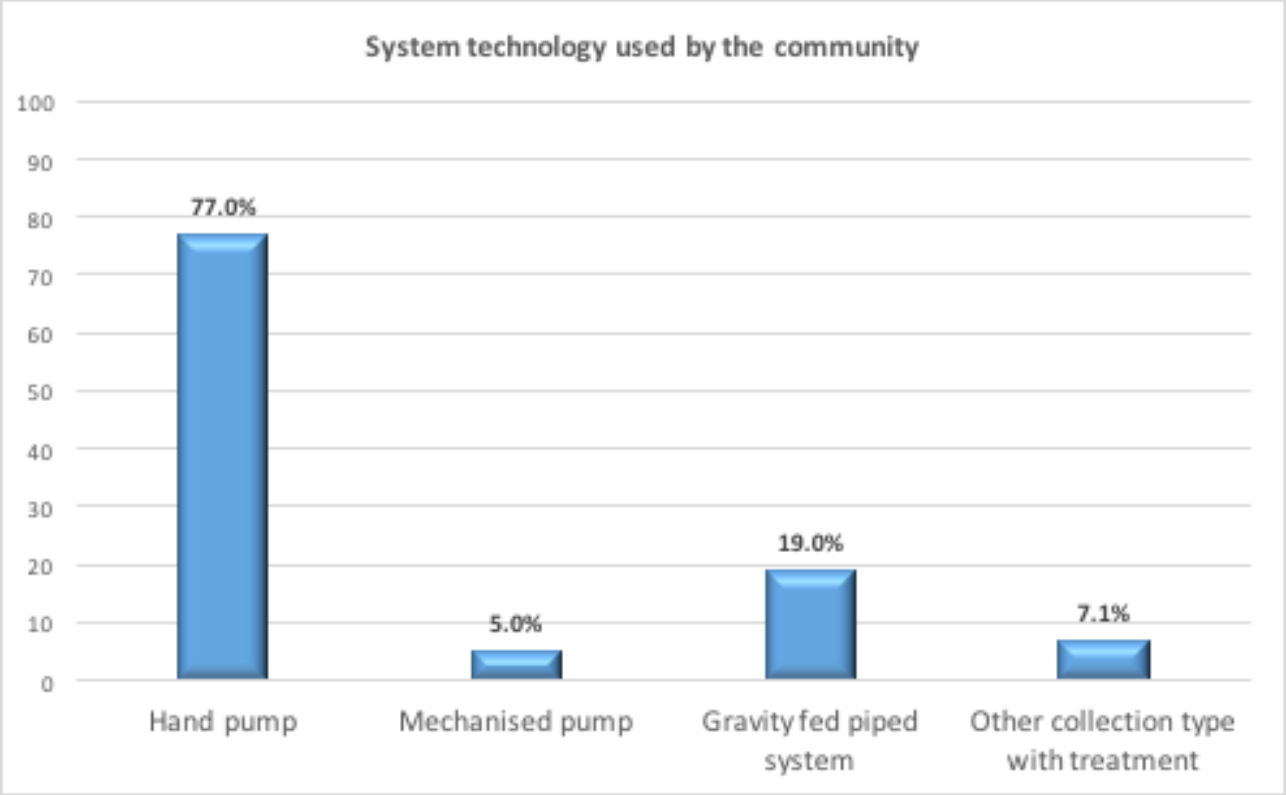

Figure 2: Technology Used

Note that in Figure 2, the total sums to over 100%. This is because a small number of communities reported that they used more than one system.

Reference to the equivalent figures from SC1 show 62% hand-pump and 32% gravity systems, with 6% mechanised pumps, so a far greater proportion of handpumps this time. It is felt that, owing to a greater geographical spread than was possible in SC2, the proportions found in this instance are a better reflection of the spread across the country. Additionally, the proportion of hand-pumps in a community-based survey is unlikely to be the same as that arising in a household survey due to, among other things, the likely variability in number of households using different system types.

It is important to bear these in mind when considering the key findings which follow.

3.1.2 Headline functionality

The headline figure for system functioning on the day of the visit is 63%, i.e. well over a third of systems were not working that day. This is considerably lower than that identified in SC1. Apart from the system type difference, already referred to and returned to overleaf, there is one other key difference to note: in SC1 the questionnaire specified systems that were five years old or less. This time, as noted in the Method chapter, the timescale was set at a maximum of fifteen years.

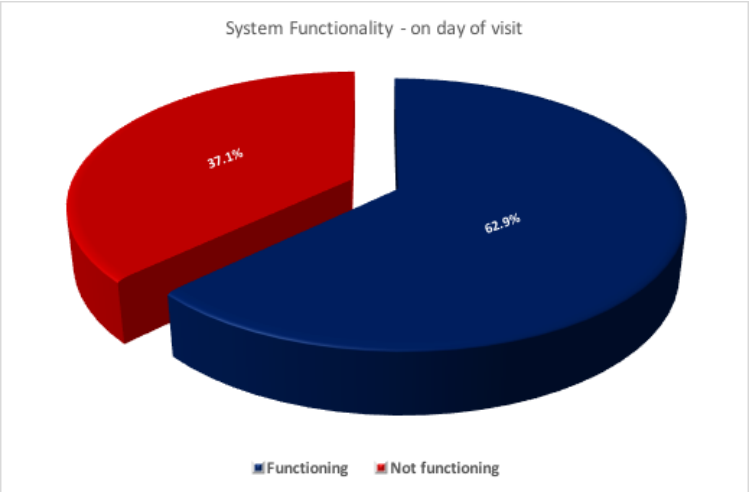

Figure 3: Functioning on Day of Visit?

A second issue is the mix of system types encountered, and so the question arises: do handpumps have a different deterioration pathway to gravity systems? Experience shows that it is expected that handpump functionality will typically deteriorate steeply in the first year after installation, then follow a straight line deterioration with age, with life expiry of perhaps ten to fifteen years, and so rates of non-functioning of this type of equipment would rise steadily in that last third.

However, gravity schemes can continue to work for many years with little expectation of failure but systems are only as strong as their weakest element, so many such systems in

reality do not have a longer expected lifespan that water-lifting systems. However, in this context, a greater functionality longevity is displayed by gravity systems (see Figure 4), therefore, as gravity fed schemes formed a lower proportion of the sample than was the case in SC1, the overall sample average functionality on-the-day is lower.

This greater longevity of gravity systems is implied in the functionality rates by system type shown below. Note that the sample size for mechanised pumps and other system types is low (see Figure 2).

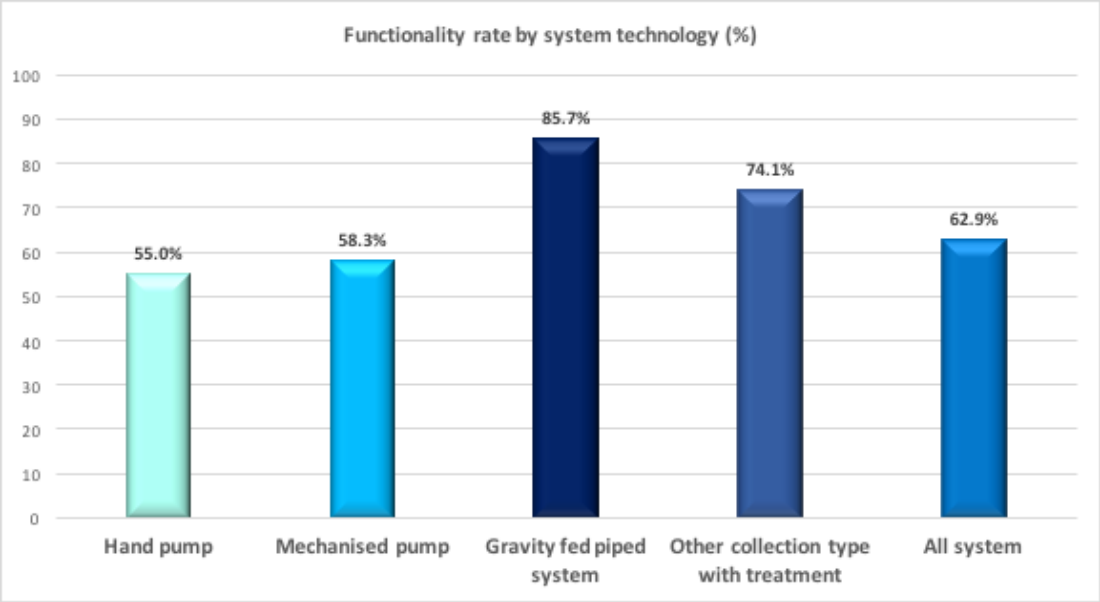

Figure 4: Functionality by Technology Type

3.1.3 Duration of functionality

The following two bar charts show the duration of functionality for the preceding year. Over a third of systems had been functioning for less than four months, while only a half had functioned for the entire period – inversely, half of all systems had failed in the previous year. Service availability appears quite polarised, either very good or very poor.

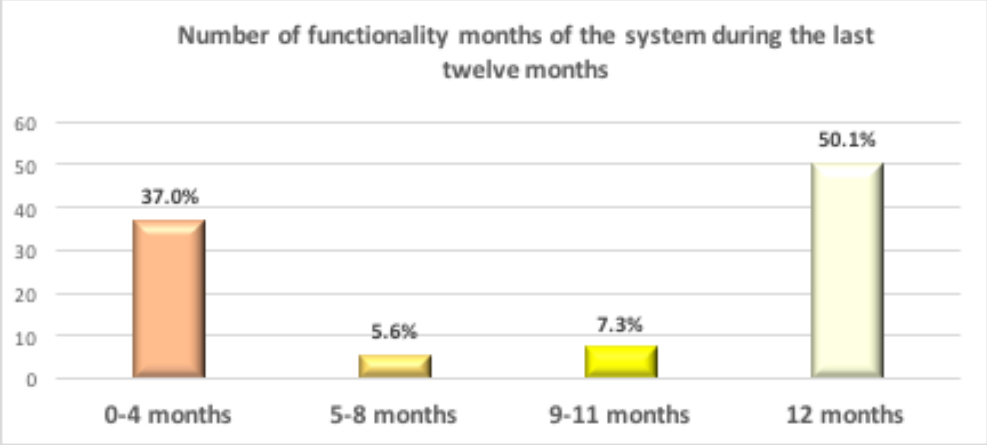

Figure 5: Period of Functionality

Figure 6 is an attempt to show how "chronic" is non-functionality - so, the longevity of functionality during the preceding year is displayed against "functioning today". A seemingly close relationship is apparent between not functioning today and overall length of lack of service.

The way to interpret the graph is: the longer that the system is functional, the greater the chance that it is functional today. That may sound like a tautology but actually it isn't.

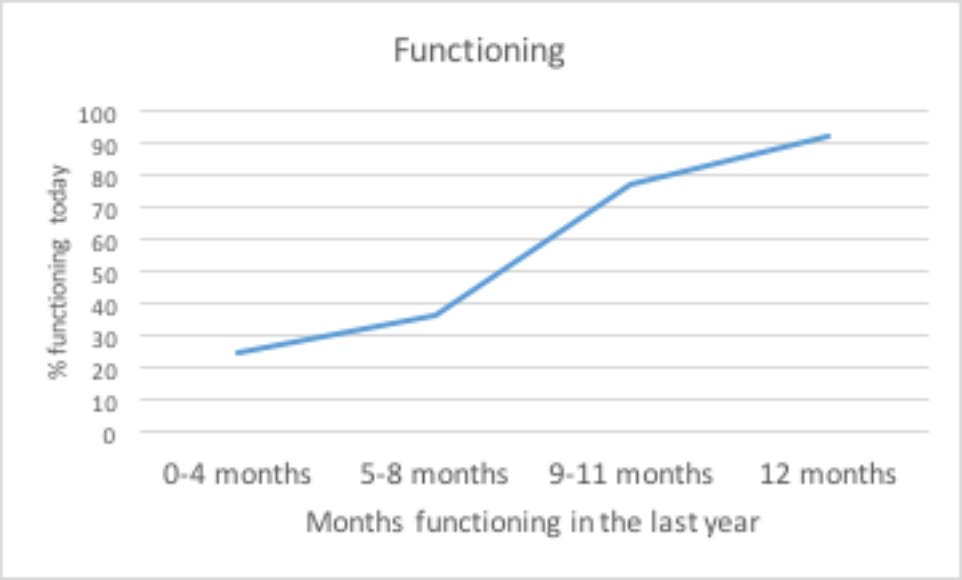

Figure 6: Duration of functionality vs functioning on day of visit

3.2 From functionality to service

The existence of a functioning waterpoint does not mean that all community members can use it: issues of access distance and queuing time, perceived and real water quality, the amount yielded, ability to pay and many others impact on that outcome. Equally, some community members do not use the system, even if it is functioning. This seeming discrepancy was spotted in SC1 and was the subject of further investigation in SC2 – it is reported in the next sub-section.

3.2.1 Usage of unsafe water

In Figure 7 we show that only 34% of communities across the sample always have water available and use it all the time – noting that the sample is of communities which have a water point (functioning or otherwise). Some 40% of those communities always use unsafe water.

(Note that the question (5a, see Annex C) should be interpreted as do members of this community ever use unimproved sources (pond, river, lake); it certainly doesn't mean that all members do so.

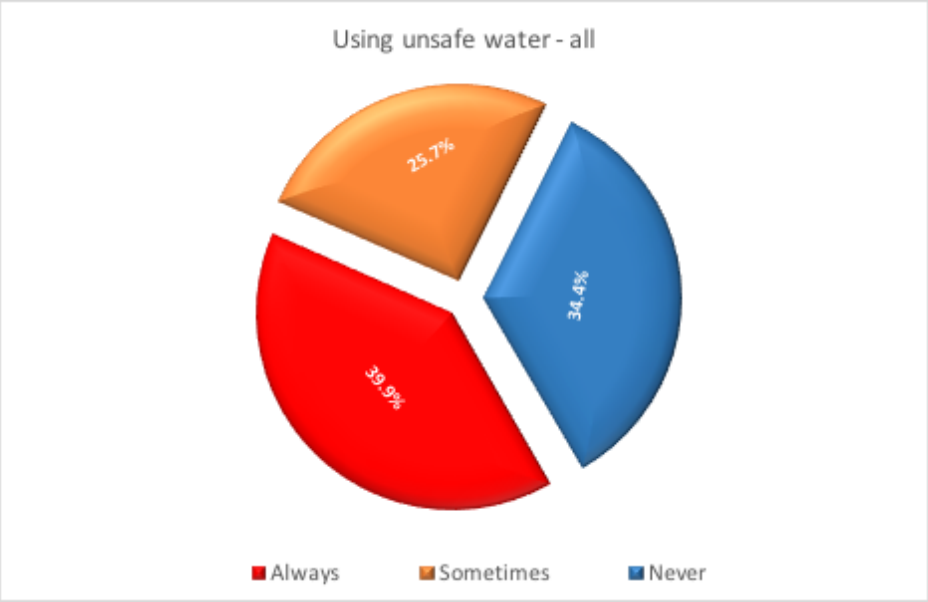

Figure 7: Percentage of communities using unsafe water

Then, perhaps more meaningfully, Figure 8 shows that 57% of communities indicated that they (or some community members) used unsafe water some or all of the time, even when safe water is available.

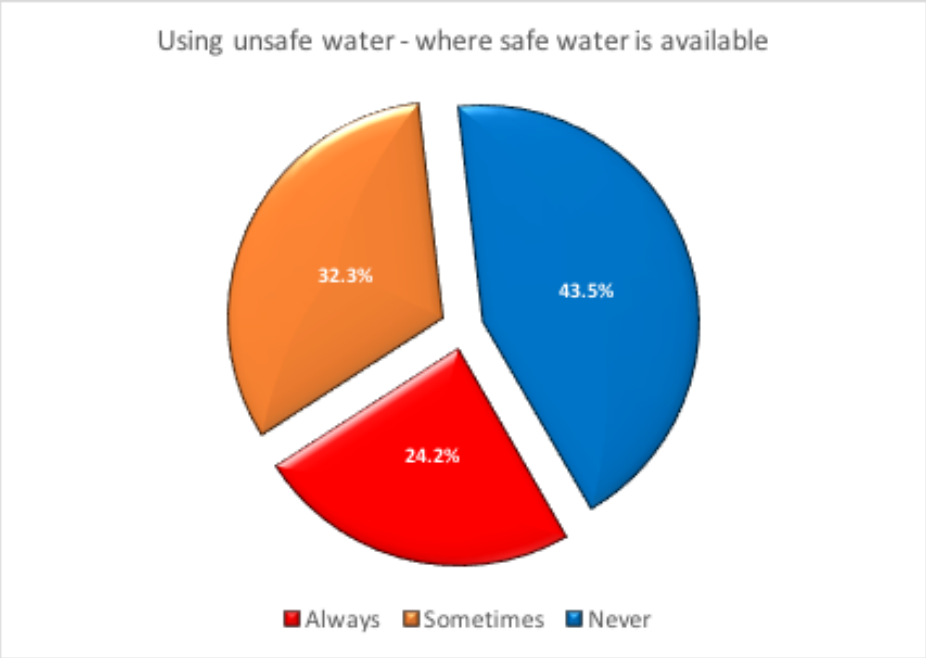

Figure 8: Percentage of communities using unsafe water when safe water is available

The reasons for this were examined and the answers are shown in Figure 9. It is interesting that cost is not seen as an impediment (but not many communities actually pay, see Section 3.5) while the main determinants appear to be a choice to use safe water for "critical" uses, and access/quality issues (noting however, that quality was not found to be problematic in responses to the direct question about this issue).

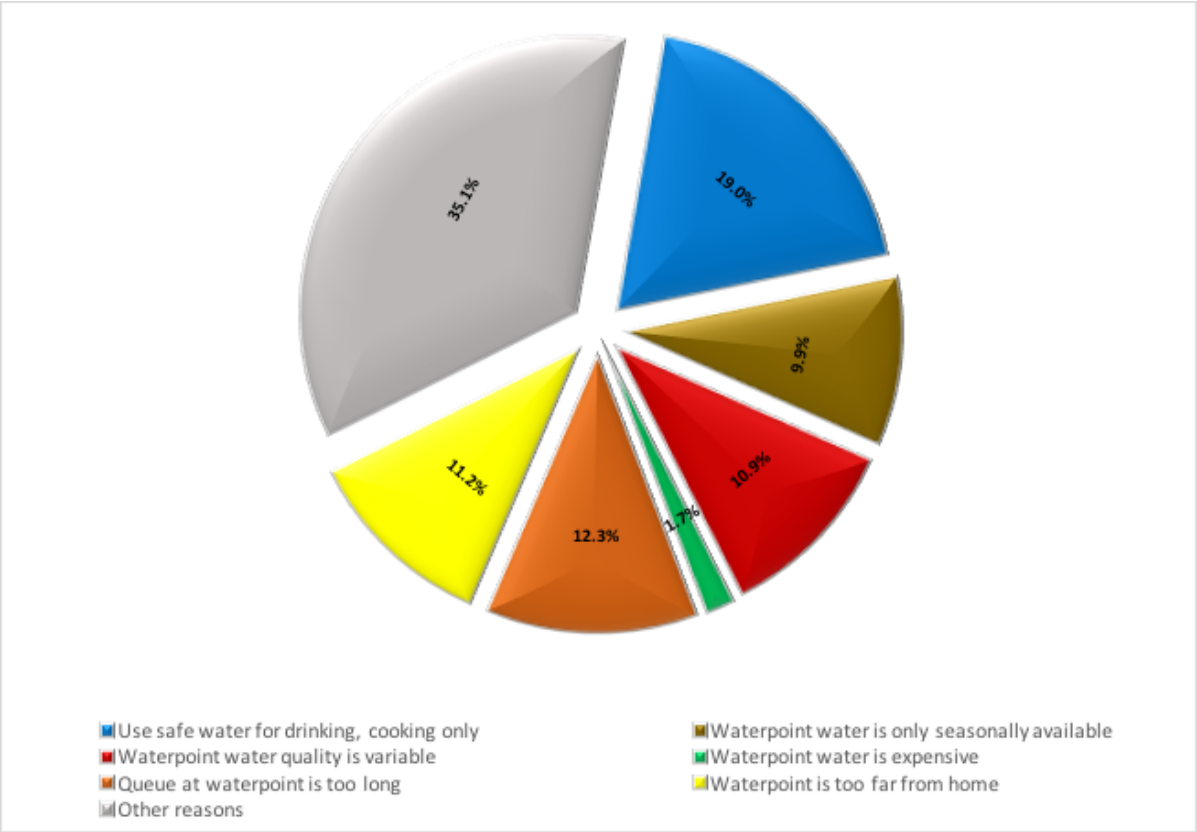

Figure 9: Reason for Using Unsafe Water, When Safe Water is Available

The item that puzzled those responsible for the survey was the extent of "other reasons" responses, at 32%. So, when a return to the field was mooted in response to issues arising with the ODF survey, the opportunity was taken to look at this particular issue again. Advice was specifically sought in relation to the items that might cause people to use unsafe water but which were not specified in the initial survey questionnaire; the indication being that more sensitive cultural issues may be at play. A revised question format and more detailed content therefore was asked of respondents second time round (See Annex D2), however, only a small sample size was achieved, so these results are indicative only.

The results of this second investigation were as follows:

- 24% indicated that they chose to use unsafe water for activities other than drinking and cooking (19% in original sample).
- 19% indicated that they could bathe or defecate in privacy at or on the way to collecting water from the unsafe source (not a specified response in the original sample).
- Only 5% said that the waterpoint in the community was to far (and so using an unsafe source would be referable because of the distance needed to fetch water home – as against 11% in the initial sample).
- Similarly, 5% indicated that the safe water was too expensive – necessitating use of the unsafe source (the equivalent figure in the first sample was 2%).

- Other reasons were given by 19% of the sample on this second occasion

The need to adopt a fully quantifiable questionnaire was indicated in the previous chapter – this allowed for consistency in provision of responses, cuts out interviewer bias/error, reduces response time and cuts out a need for interpretation of qualitative responses. The return to the field yielded some useful information but, as it was again constructed as an interviewer-administered numeric response only questionnaire, this placed a limit on the results obtained. Should further depth be sought in future on this issue, then group discussions and/or some other qualitative method should be adopted.

3.3 Access and availability

3.3.1 Population

An important determinant of the extent to which services can be provided is the number of people who are using them. The Figure 10 shows the distribution of population per system. Well over a half of communities are of less than 500, while just over a fifth shown more than 1,000 people being served.

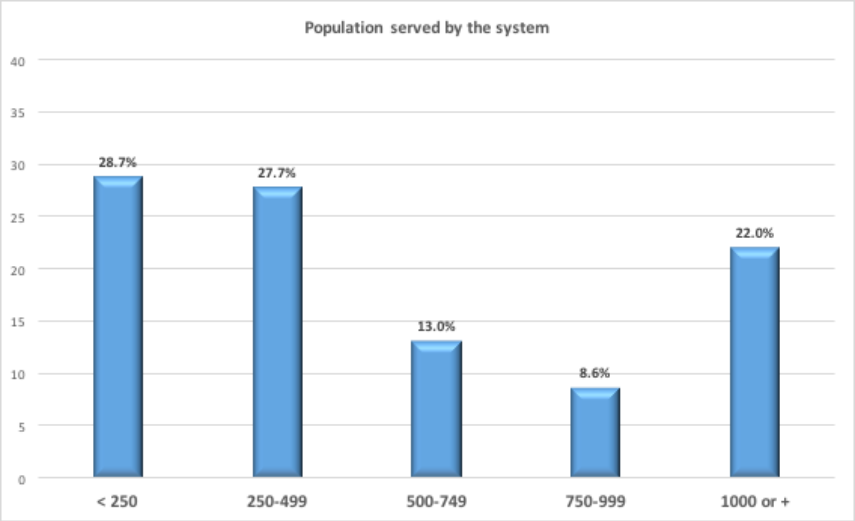

Figure 10: Population per Waterpoint

3.3.2 Access time and distance

In questionnaires of this nature it is necessary to try and find out proportions within communities who exhibit certain behaviours. This can lead to problems of interpretation when discussing the results across communities, where percentages of communities are involved.

So for example, in Figure 11:

- In 32% of communities most users were within ten minutes or 500m of the water points (where most is defined as >75% of users).

- In 20% of communities many users were within ten minutes or 500m of the water points (where many is defined as 50-75% of users).
- In 20% of communities some users were within ten minutes or 500m of the water points (where some is defined as 25-50% of users).
- In 28% of communities few users were within ten minutes or 500m of the water points (where few is defined as <25% of users).

Given that waterpoint users (typically women and children) are fetching very heavy containers then it is generally felt that "access" is applicable when waterpoints are within ten minutes (excluding queueing time)/500m. It is clear from these results that in around a half of communities many or most users were more than ten minutes' walk from their waterpoint. Whether or not this constitutes a reasonable "service" is a moot point, although it is approximately in line with the new SDG definition of 30 minutes' return time including queueing.

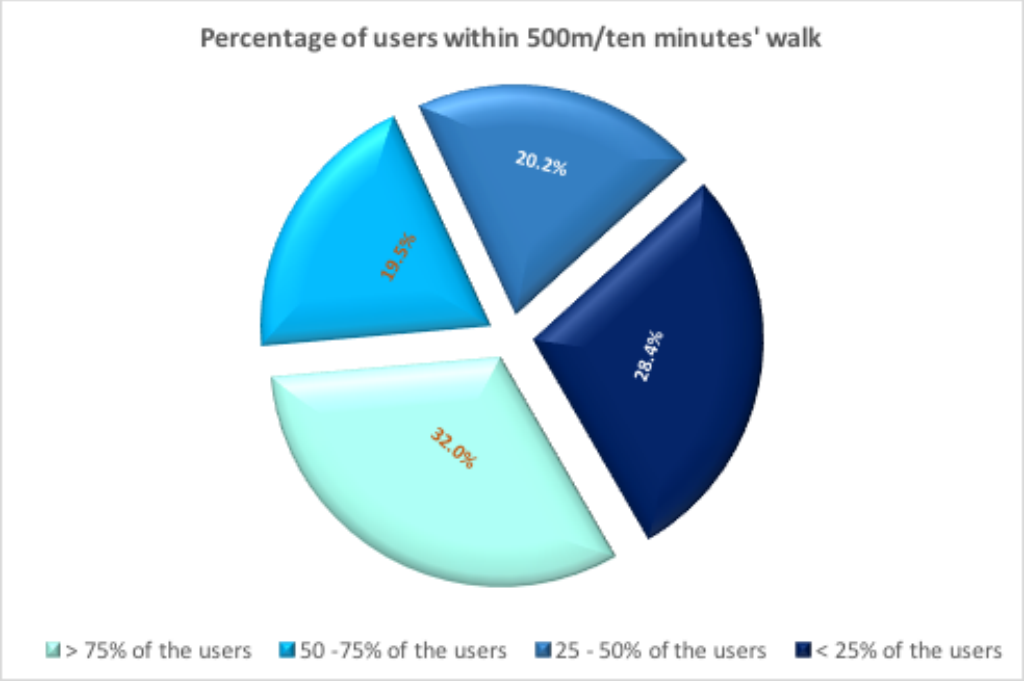

Figure 11: Access Time/Distance

A further issue regarding service level is the waiting time at the waterpoint. Figure 12 shows the situation, the interpretation of which is that:

- Most users queue for more than ten minutes in 19% of villages.
- Many users do so in 10% of villages.
- Some users do so in 15% of villages.
- Few users do so in 57% of villages.

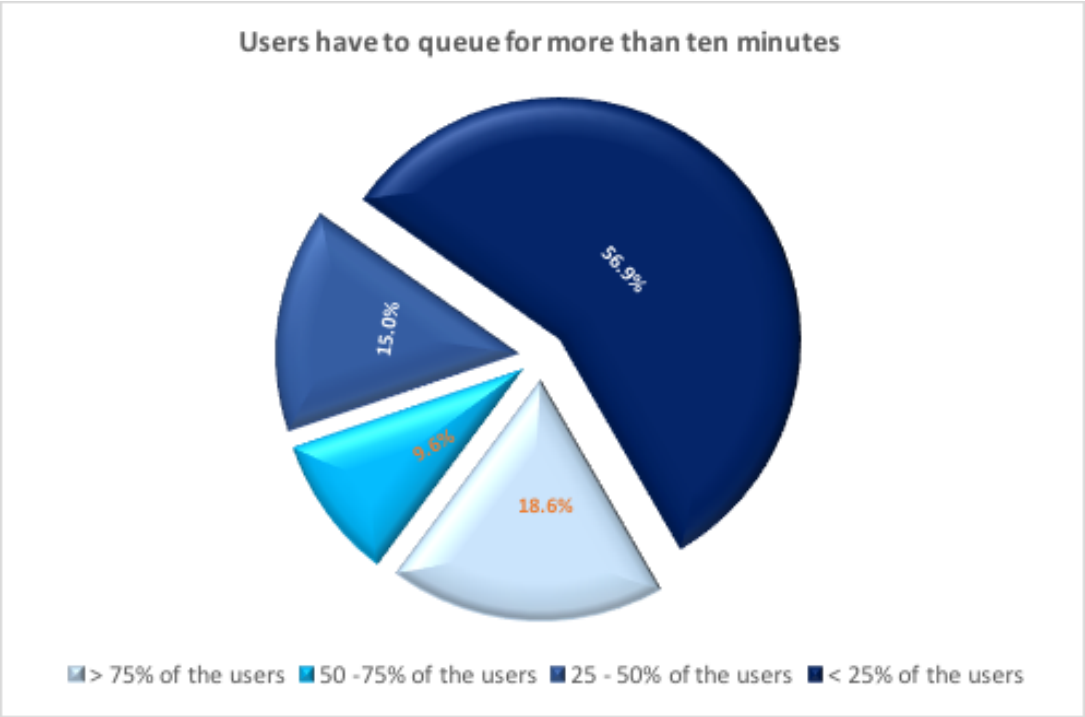

Figure 12: Queuing Time at Waterpoint

3.3.3 Water quantity and quality

It is felt that every individual requires a minimum of 20 litres for their very basic daily requirements of drinking and cooking, while 50 litres per person per day (l/p/d) covers the wider range of requirements including for personal hygiene and washing[5]. The extent to which this is available in the sample obtained in rural Madagascar can be seen in Fig 13.

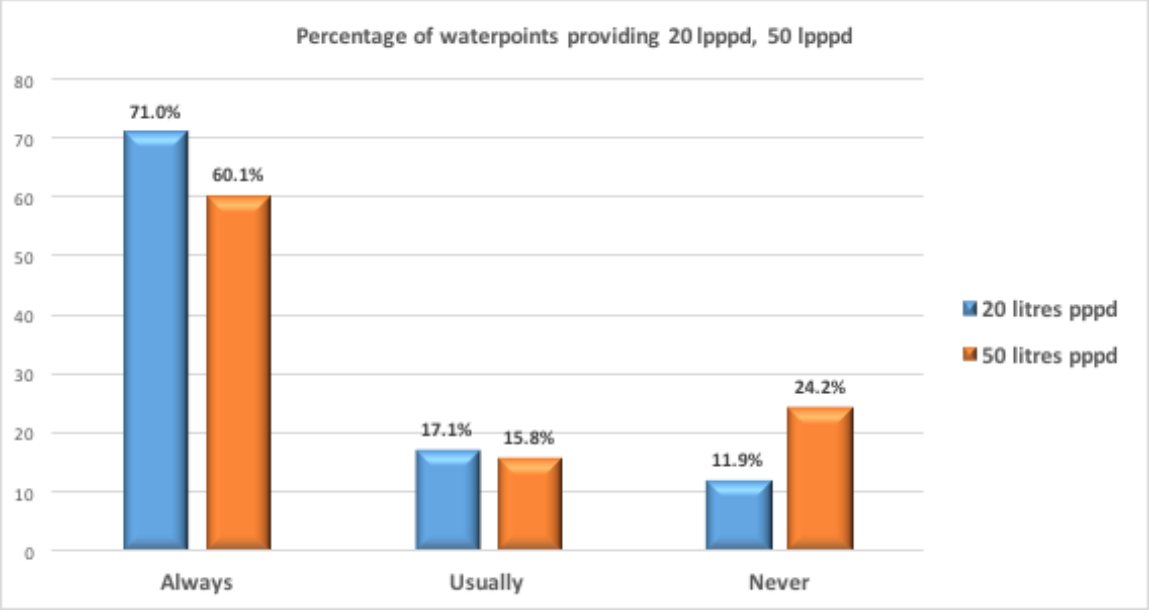

Figure 13: Amount of water users can collect

[5] These are referred to respectively as *basic* and *intermediate* levels in Hutton and Bartram (see References)

The extent to which water quality was found to be acceptable to community members is portrayed in Fig. 14, with low levels of acceptance being relatively rare.

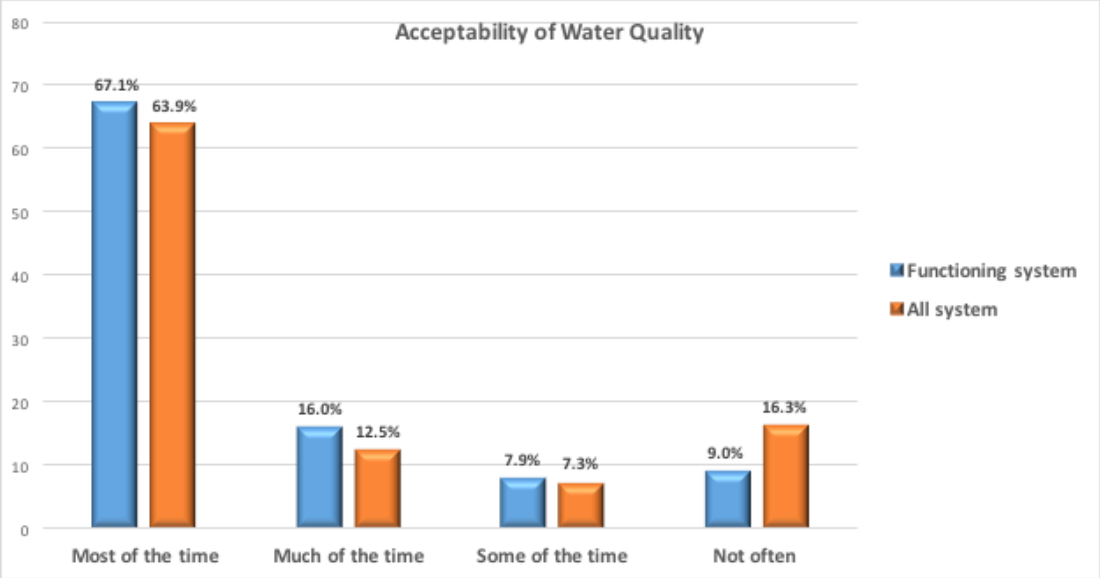

Figure 14: Perceived Water Quality

In Fig 14 (Quality), there is a clear correlation between lower levels of those parameters and lower levels of functionality on the day of the visit, the possible inference being that community members are less inclined to look after systems which do not give them what they need.

3.4 Community contribution and finance

3.4.1 Construction

Perhaps the most important determinant of service continuity is finance. The first element relates to the contribution made to the construction of the system, and the second to its ongoing upkeep.

In relation to the former, it is judged to be important that community members contribute to construction either through a cash contribution or in kind. Commentators judge it to be unlikely that full ownership responsibility will be taken of a system if community members have made no contribution.

Figure 15 shows the position for the SC2 sample in rural Madagascar, indicating that nearly two thirds of communities contributed in-kind (i.e. generally through provision of labour), with seven per cent making a cash contribution and another seven per cent contributing though both cash and in-kind. The remaining 22% made no contribution.

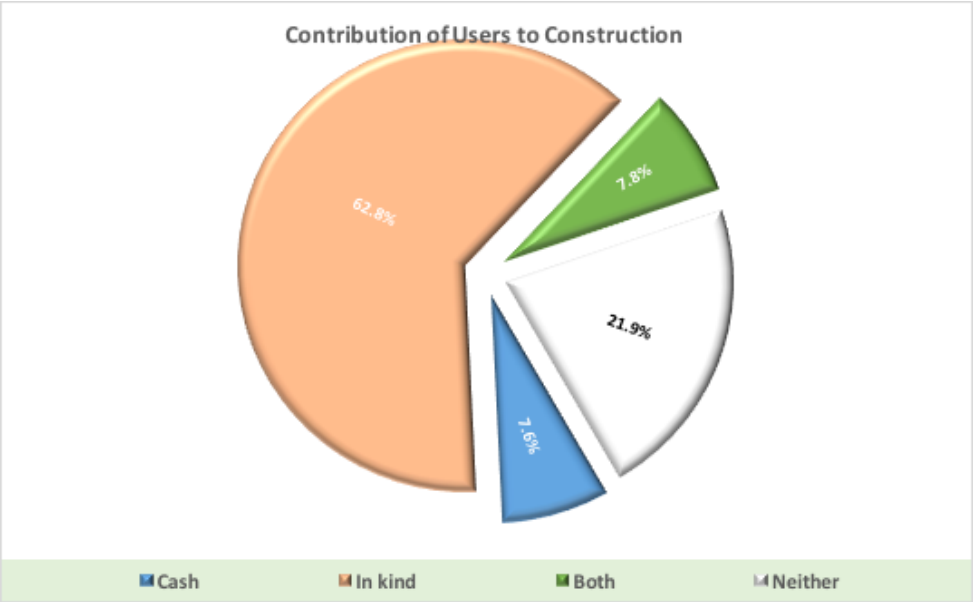

Figure 15: User Contribution to Construction

3.4.2 Operating costs

The subsequent figure (Fig 16) addresses the issue of types of payment was made to the ongoing cost of operation. It is obvious that a system for which a cash contribution is being made has a better chance of being maintained, and therefore of service being continued, than in the case where no such contribution is being made. On that basis, this is almost certainly the single most important element of sustainability.

The chart shows that well over half, at 55%, pay through a household levy, only 6% through a pay-as-you-fetch mechanism, while fully 39% pay on an *ad hoc* basis.

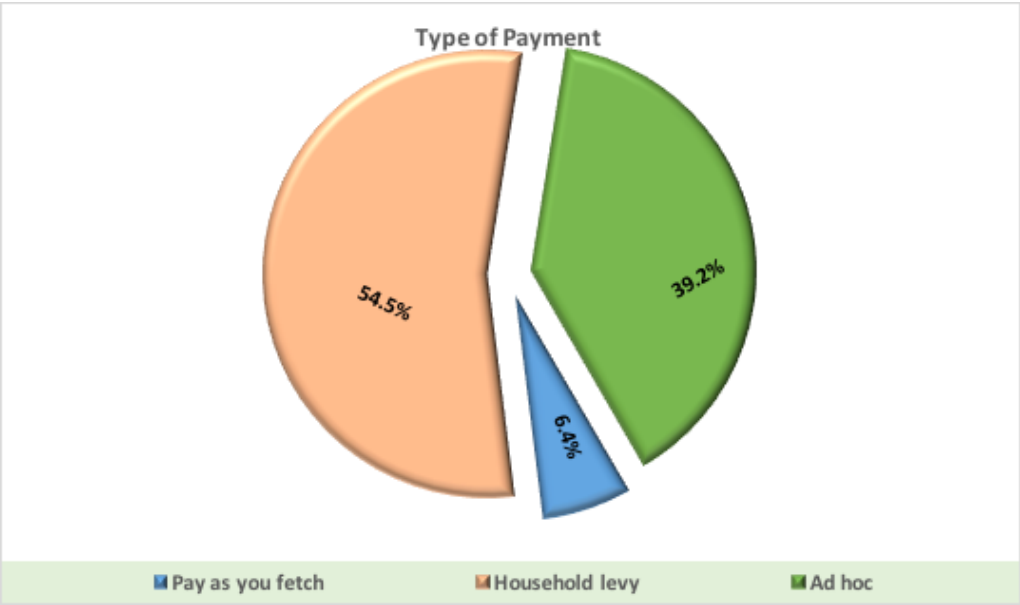

Figure 16: Operating Cost Types

Much depends, of course, upon whether or not the sum of the contributions is sufficient for the needs of the system, therefore making general comments about payment types is

not sufficient. However, it is likely that contributions will be likely to be closer to sufficiency if they are collected steadily, through pay-as-you-fetch, or by a consistent household levy payment, than through *ad hoc* payment, which may well simply be reactive to a failure. Figure 17 addresses this issue, confirming a high correlation between pay-as-you-fetch and functionality, with household levy and *ad hoc* lagging behind.

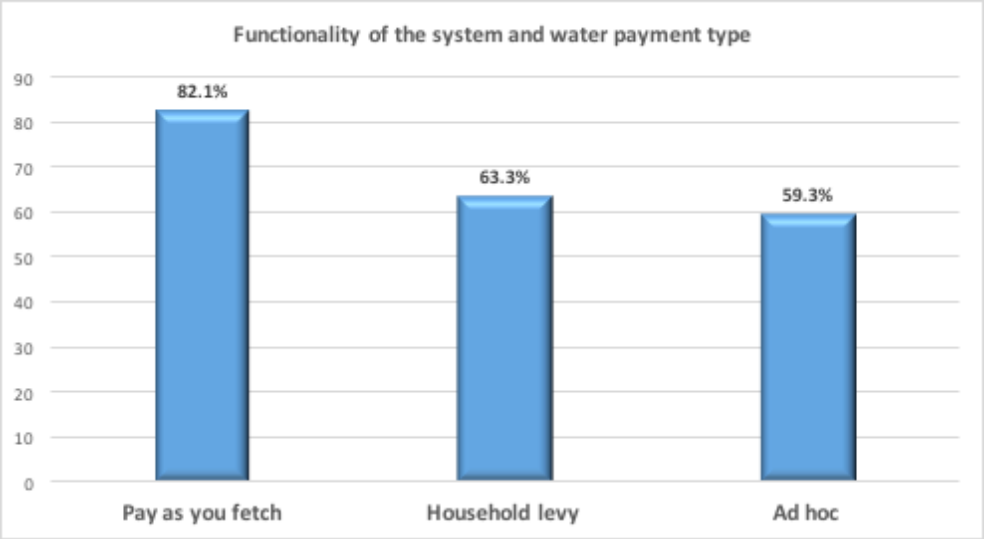

Figure 17: Payment Type and Functionality

It is worth noting that in Madagascar the ability of poor rural communities to meet usual operating costs is extremely limited, whatever the form of payment, reinforcing that collecting something at the point of collection is likely to be the most likely method to achieve success. So, the central point is: do users *actually* pay? This is illustrated in Figure 18, showing that the best part of two thirds do so only rarely (defined here as less than 25% of the time).

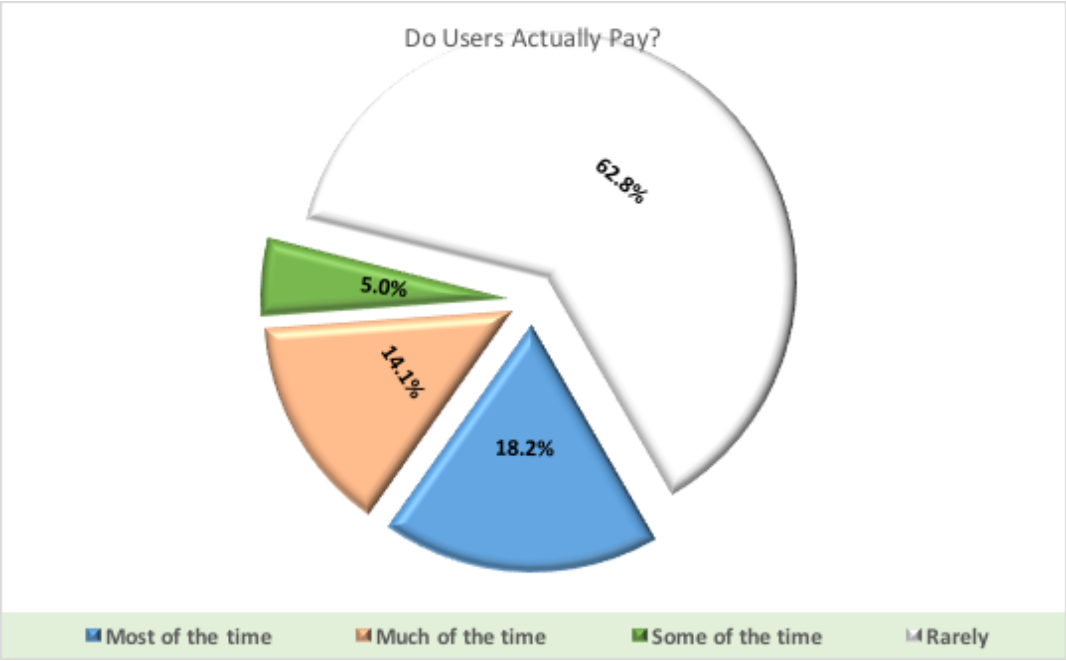

Figure 18: Do Users Actually Pay?

It can be seen that in only 18% of communities do they pay most of the time (75%+). Sustainability of the delivery of water service in rural Madagascar cannot be guaranteed until this issue is confronted.

3.5 WASH committee performance and issues of system maintenance

3.5.1 The WASH Committee

It has been, and in many places remains the case, that the implementation of water system is accompanied by the development and training of a WASH Committee, whose collective job it is to try and oversee system operation. The survey results reveal that 85% of communities had such a WASH committee, so the question arises as to how effectively these Committees function.

The results of five elements thought to be important in this regard are shown in Fig. 19. Around two thirds of committees have the number of members agreed at their implementation, a similar proportion has the requisite gender balance, and again a similar proportion has received the training that was promised, in order to help them to function.

Lower numbers were found for meeting frequency (just over a third meet as often as they initially said they would) and for having a bank account or rural equivalent: where only 13% had this, in line with the findings of the finance element of the survey, reported above.

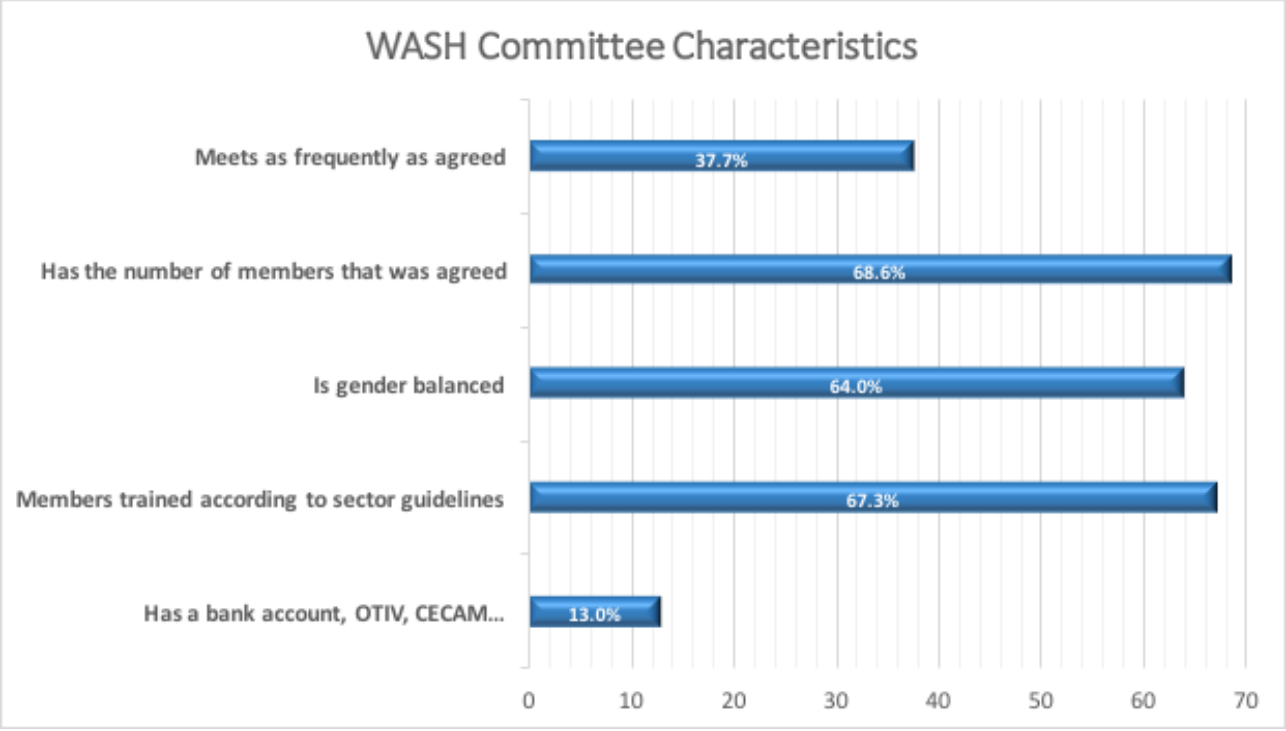

Figure 19: WASH Committee Characteristics

3.5.2 Maintenance and planning

The key practical issues for a WASH Committee are to ensure that maintenance takes place and, ideally to make provision for future heavy maintenance and replacement when equipment is life expired. These last two elements are receiving greater prominence now than has been the case, arising from the emphasis now being placed upon service continuity.

In terms of ensuring that maintenance takes place, the community will require one of its members to be a trained mechanism or for these tasks to be outsourced. Reference to Fig 20 shows that 57% of communities had such a mechanic, while outsourcing to the local private sector had taken place in eight percent of locations.

This would indicate then that fully 35% of locations had no mechanism in place for system maintenance; so a breakdown would require an *ad hoc* response or the system would remain out of service, in the absence of any other external support.

The three lower bars in Fig 20 reveal the extent to which communities indicate they are planning for future needs. The figures reveal a problem but probably not as great as might have been expected. So, a half of all communities had a routine (preventative) maintenance in place – in line with the 65% of communities that had a trained community member or an outsourced mechanic. Just under a third indicated that they had a plan for heavy maintenance[6] with 42% indicating that they have a plan for capital replacement upon life-expiry of current equipment.

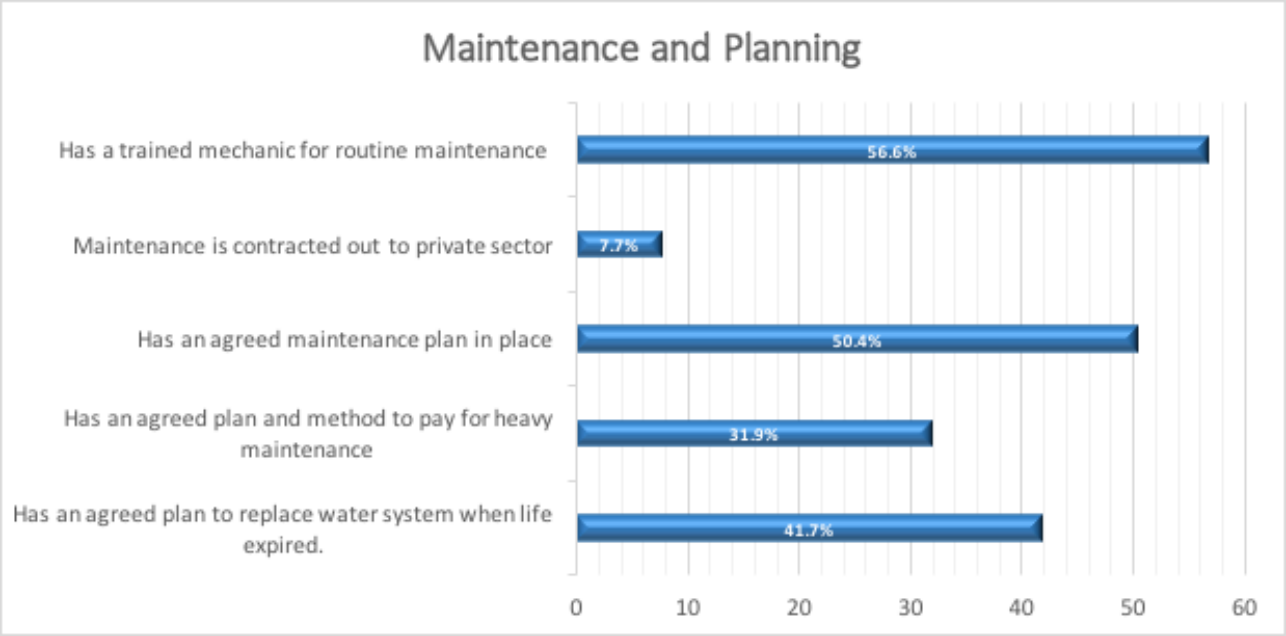

Figure 20: Community Maintenance and Planning.

[6] CapManEx in WASH Cost terminology

3.6 The impact of maintenance and planning regimes upon functionality

One area of considerable debate in WASH circles whether or not outsourcing of maintenance to a local private sector (or another external agent, which could be an NGO or even a local government agency) would result in greater degree of service availability. Figure 21 shows that in our sample, the functionality on the day was higher for locations where such outsourcing had taken place but this was from a small sub-sample (eight percent of the total, see Fig 20).

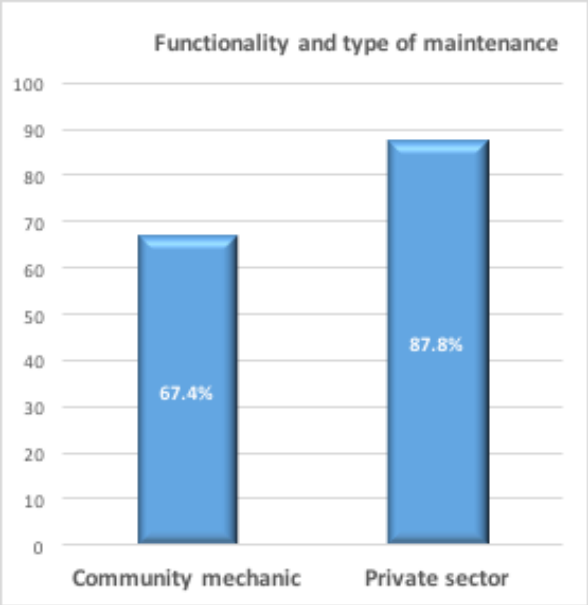

Figure 21: Maintenance Type vs Functionality

Similar cross tabulations were undertaken for a range of other parameters, against functionality on the day of the visit. These are illustrated in the following charts. The first is whether or not the WASH Committee was fully formed, with the results in Fig. 22 showing a marginally positive correlation.

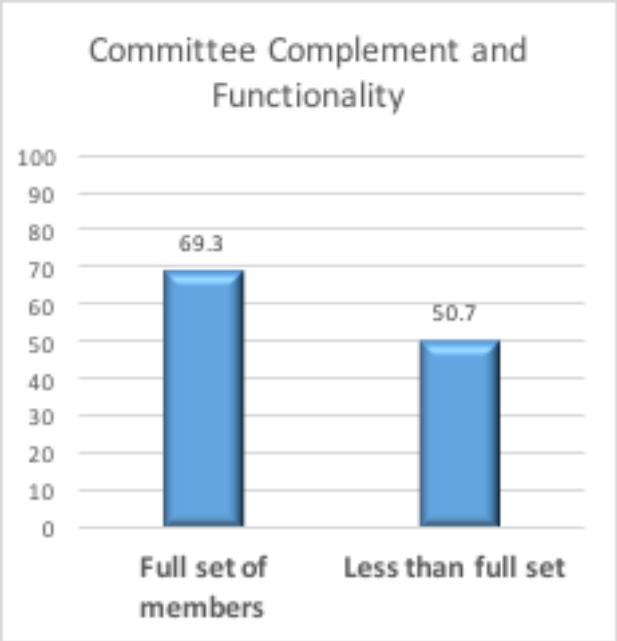

Figure 22: Committee Membership vs Functionality

The second, in Fig. 23, shows a higher correlation between the Committee having a bank account (or equivalent) and there being a functioning system on the day of the survey visit.

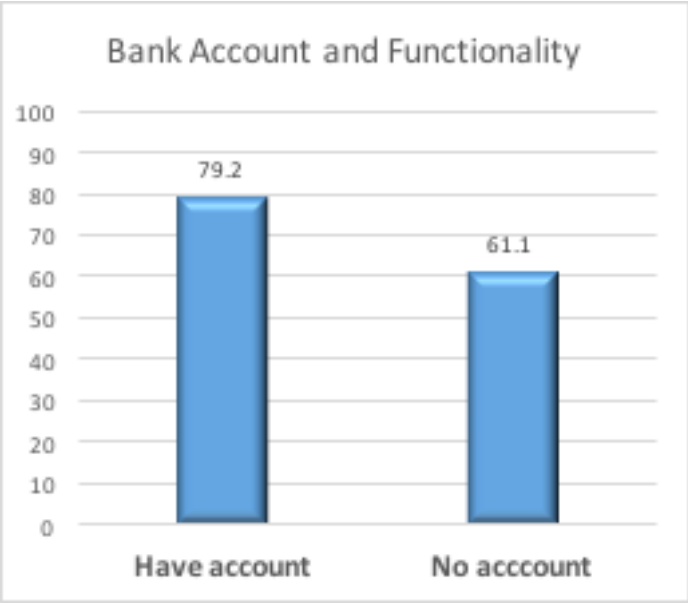

Figure 23: Bank Account vs Functionality

The third relates to whether or not the Committee having a suitable gender balanced membership would impact upon functionality. As women and girls generally bear the burden for water collection responsibilities, it might be expected that a correlation would be visible, but this is not the case in this survey, see Fig. 24.

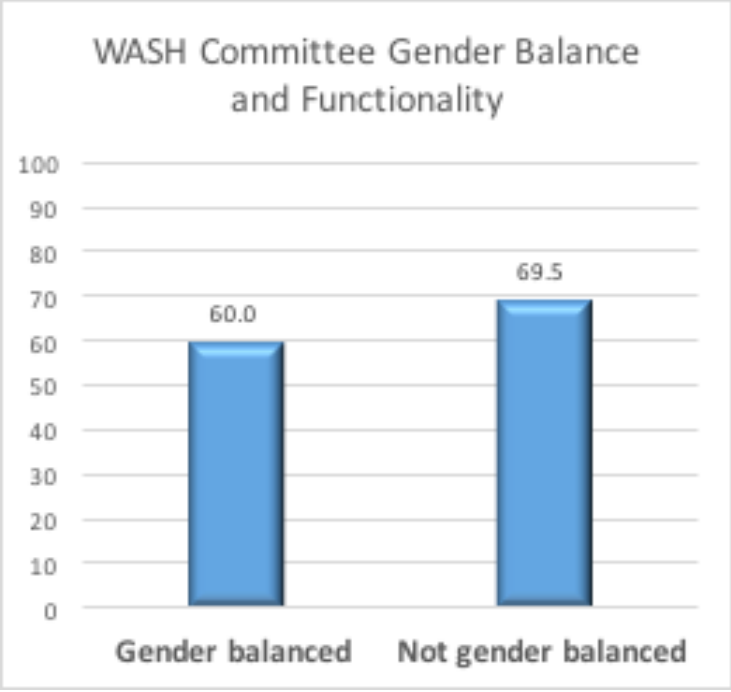

Figure 24: Committee Gender Balance vs Functionality

The community was asked whether or not the water is acceptable (in terms of taste and appearance), most of the time, much of the time, or less often. The correlation between these and system functioning is shown in Fig. 25, with a distinct low functionality where water quality is perceived to be acceptable only a small amount of the time, while this correlation is not present when comparing "mostly" vs "much of the time".

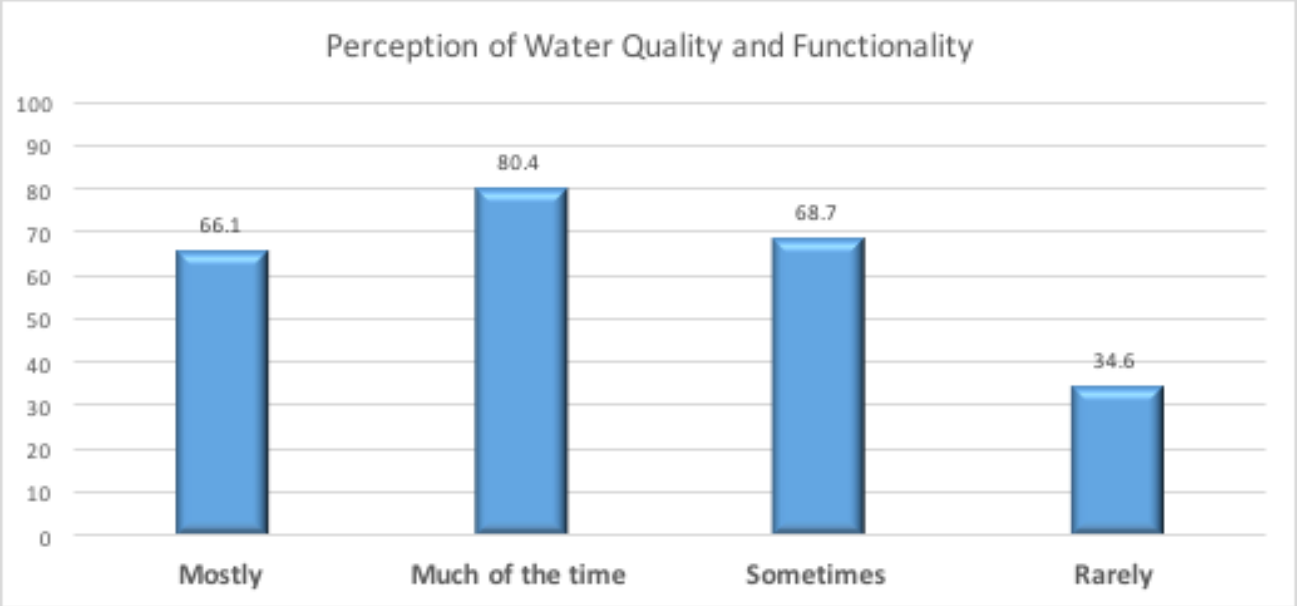

Figure 25: Perceived Water Quality vs Functionality

The two questions in relation to future planning yielded a very strong correlation with functionality on the day of the visit. The first, being in relation to planning for heavy maintenance (CapManEx), is shown in Fig. 26, while that for planning for capital replacement (CapEx) is shown in Figure 27. The first shows that 78% of communities which have a CapManEx plan had a functioning system on the day of the visit, as against 56% for those which had no such plan.

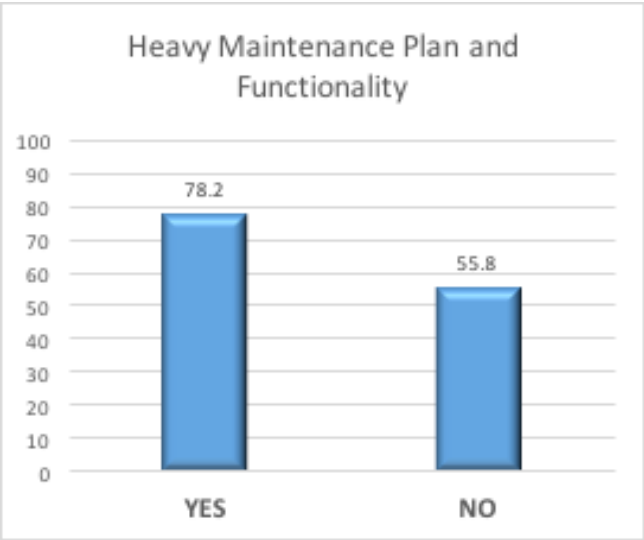

Figure 26: Heavy Maintenance vs Functionality

80% of communities which had a replacement plan had a functioning system on the day of the visit, as against 51% for those that did not.

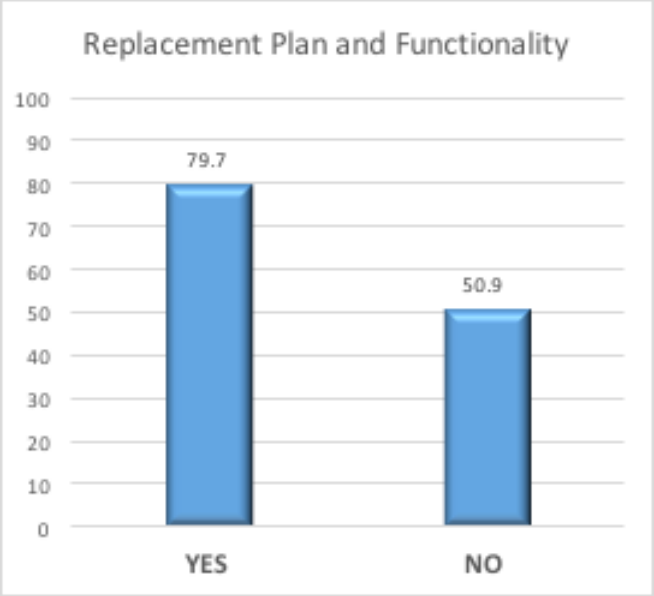

Figure 27: Replacement Plan vs Functionality

3.7 Supply chain and external support

3.7.1 Supply Chain

The final element of the RWS analysis relates to items outside the community which are known to have a bearing upon the ability to deliver a continuous water service in rural communities.

The first item is the distance that community members need to travel to access spare parts and the responses are presented in Fig. 28, showing that a huge proportion, at over 60%, need to travel more than 100km to access spares. Whether or not community members are able to estimate distances accurately is one thing but the fact that such large distances are estimated is proof enough that the supply chain is ill-formed in rural Madagascar; this item requiring attention.

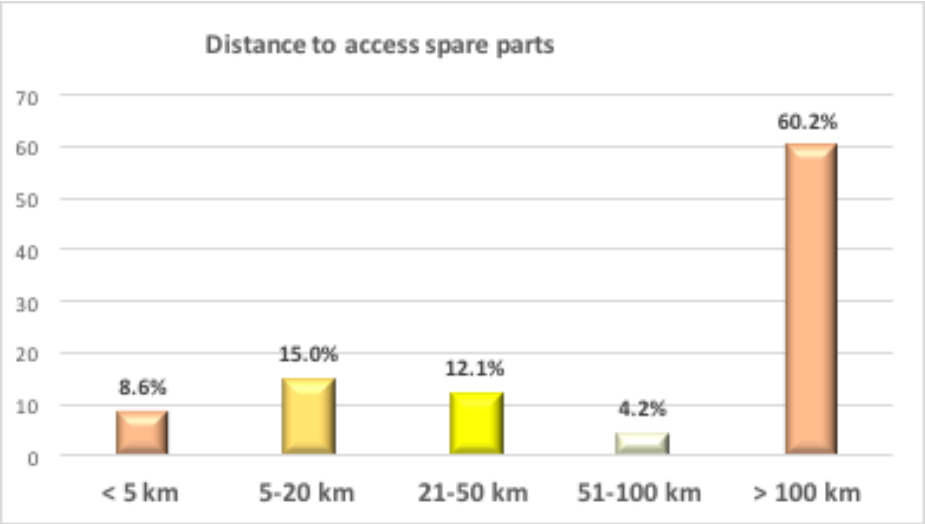

Figure 28: Distance to Supply Mart

The correlation between these huge distances and functionality is visible, certainly for the greatest distance, in Fig. 29 (note that the sample size for the response 51-100 km was very small, see Fig 28).

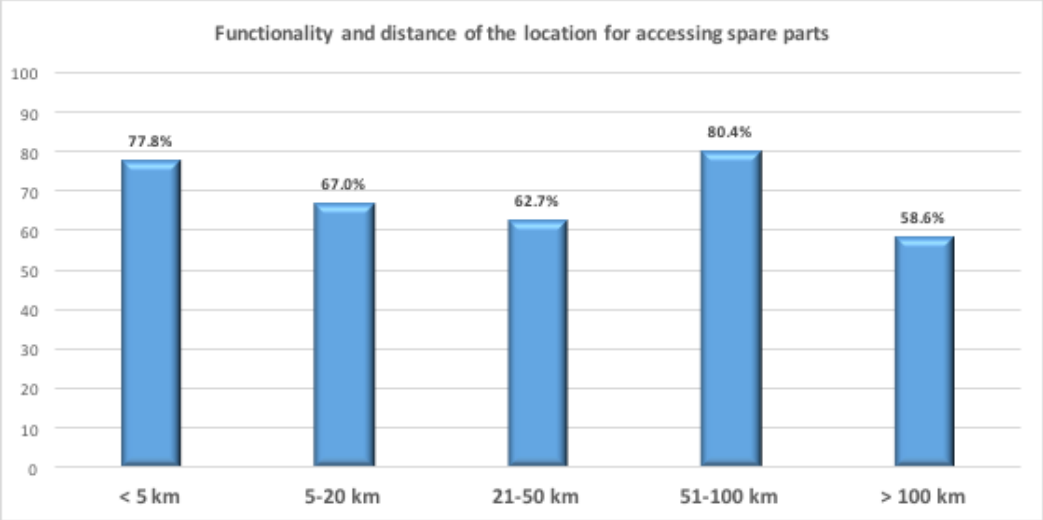

Figure 29: Impact of Supply Chain Distance upon Functionality

3.7.2 Support to communities from Communes

89% of communities had no agreement (inc MoU) for accessing support from Communes in the event of failure that the mechanic or contractor could not fix. In any event it is known that most Communes do not have the resources to provide such assistance, even if such an arrangement was in place.

3.8 Commentary

The headline figure for whether or not community members were able to access safe water on the day of the survey visit is low, at around two thirds. As noted above, a greater sample size and a different mix of technology types will have influenced this figure, in comparison with that found in SC1.

When looking at the issues that are felt to have an impact upon sustainability of water service delivery, the picture is mixed for issues of access, water quantity and quality and the presence of functioning of WASH Committees.

Two items stand out, as follows:

- Communities receive very little or no external support and access to spares is extremely poor in most places – these will undermine whatever is going well in each community, at the time when assistance is needed most.
- Only a third of communities make payments towards operating costs much or most of the time. What is happening with regard to the other factors relating to sustainability is almost immaterial if there is no money to pay for routine maintenance. It is felt that this is the single largest obstacle that lies in the oath of sustainable water service provision in Madagascar. External development partners and the Government of Madagascar need to grasp this nettle – can/should the operating cost of the poorest communities' water supply be supported, at least until they are able to pay it, or are they (or some of them) actually able but unwilling to do so?

Lastly, the jury remains out on a comparison between the effectiveness of community management vs private sector maintenance provision. This is partly because of the low number of private sector maintained services in the sample but, more importantly, because the real comparison, with "Community Management Plus" (i.e. strongly externally supported community management) cannot be made in Madagascar.

4 ODF and HWWS - Results and Commentary

4.1 Introduction

In this section we set out the main results of the sanitation and hygiene elements of the survey, focussed upon – respectively - the retention of an ODF area, and the presence and usage of facilities for handwashing with soap. As previously noted, this element of the survey was initially undertaken in November 2015 and, due to uncertainty around the impact of ambiguous translation or interpretation of some questions (see Section 4.2.1), was repeated in February 2016. This has the beneficial effect that some of the questions were asked in both tranches of field-work and so some consistency obtained.

The initial sample comprised 393 communities, the second 149 villages which had previously been declared or considered to be ODF. Given that there is uncertainty surrounding some of the results, where appropriate we present them all here, with commentary for guidance.

4.2 The ODF surveys – reported responses

4.2.1 Critical issues in monitoring ODF sustainability

The assessment of ODF sustainability is far more complex than for rural water services. While a non/functioning water-point can be visually verified and is probably not a source of embarrassment to respondents, ODF is not easy to verify visually and is open to a false response based upon what people think they should be reporting or are embarrassed to convey accurately to an interviewer.

It is also subject to linguistic and actual nuance – the status of ODF varies, it can be *triggered, declared, verified, actual, official*: which are not necessarily easy to convey in English, leave alone in Malagasy language and in local village contexts. The response to a question *Is this community actually ODF*? is therefore open to a variety of interpretations.

Because the results of the initial fieldwork in this survey were found to be to a degree affected by these issues, we felt it prudent to seek confirmation of reported responses through observation, in the form of a transect walk – i.e. adding rapid observation onto the reported responses of WASH Committees. In that instance, the interviewer is left trying to find evidence to disprove a negative: is there no evidence that would indicate that the ODF status has not been retained…?

The results of the transect walk observation are also presented here; the significant differences between reported and observed ODF levels is highly visible, commentary on this issue is provided.

4.2.2 ODF Status

The initial survey used as its source information the government database of communities which were considered to be ODF. Actually, when the interviewer asked if those communities had ever been declared ODF, only two thirds had.

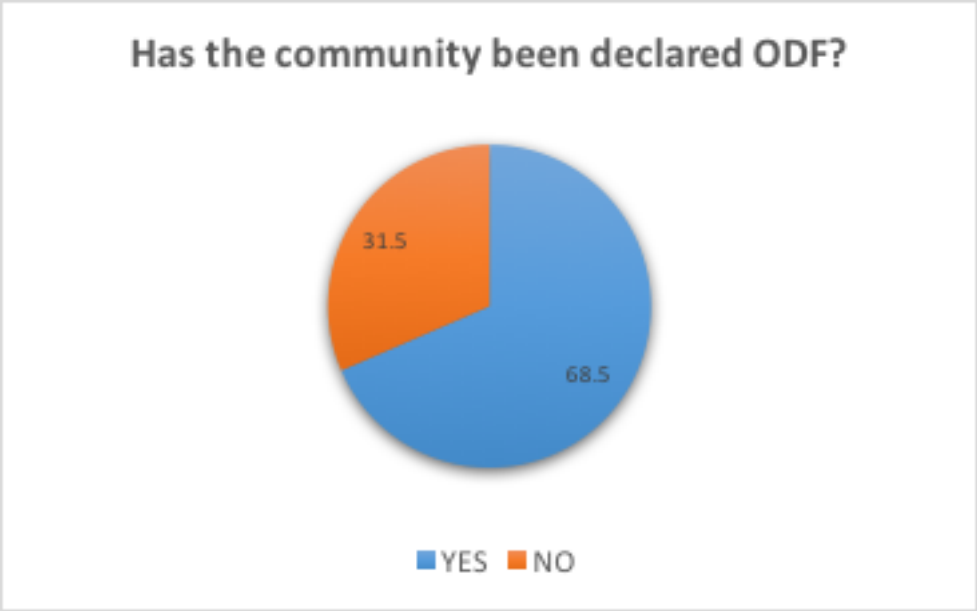

Figure 30: Declared ODF? (first survey)

In the second survey, villages were selected from the initial sample, and therefore should all have been declared ODF; however, while 159 communities were visited, in ten of them it indicated that ODF had not been declared, hence the sample number quoted above (4.1) of 149. The key question for the survey was: is this community ODF now?

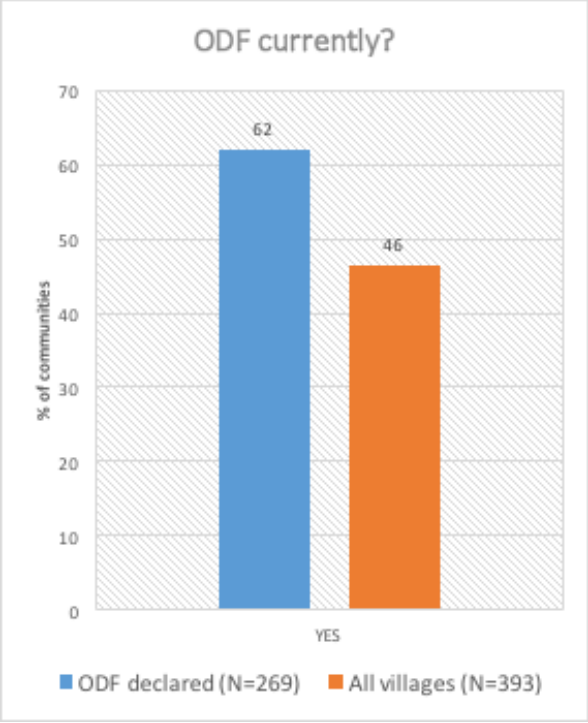

Figure 31: ODF now? (first survey)

The results show that 62% of communities which indicated that they had been declared ODF at some stage were ODF on the day of the interviewer's visit; while 46% which had never made such a declaration were also stated to be ODF.

In the second sample, the question was repeated, with the word *actually* inserted for clarity. Nearly three quarters of communities responded positively:

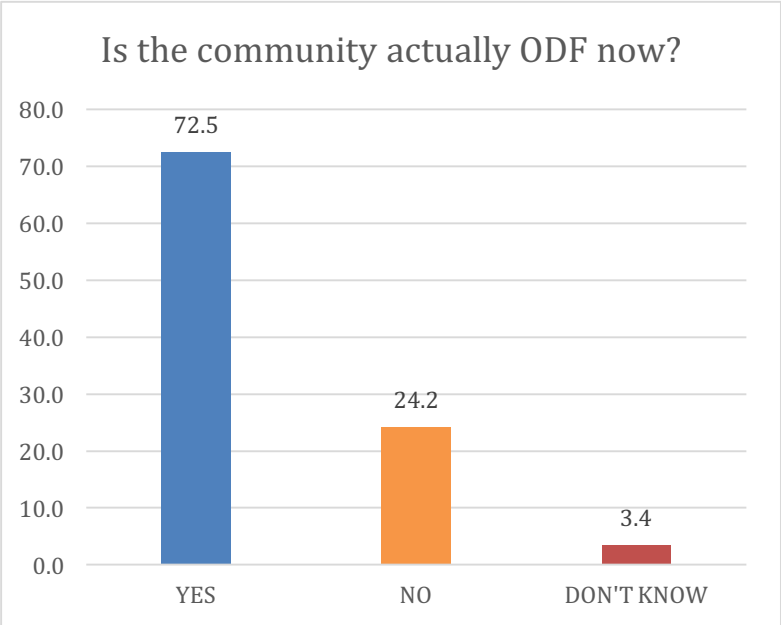

Figure 32: Actually ODF now? (second survey)

So, it was reported that between 62 (Fig 31) and 73% (Fig 32) of villages that have been declared ODF remain so.

There appears to be some confusion about the declaration, so the survey attempted to identify who had made it (Fig 33).

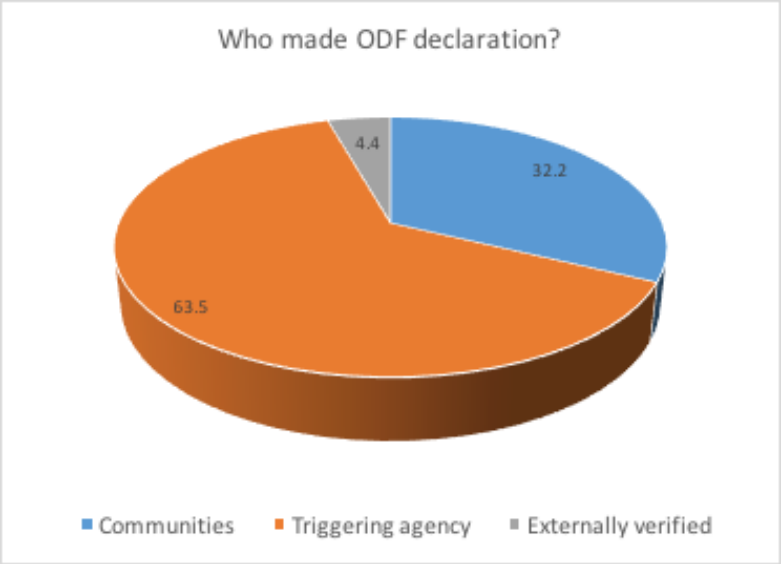

Figure 33: Who made ODF declaration (first survey)

It would appear that between half and sixty percent were declared to be ODF by the triggering agency, with community declaration at 32%-36%. External verification accounts for a very small amount, in line with current low levels of practise in Madagascar. By definition, in CLTS processes, ODF is supposed to be declared by communities themselves – this is a landmark element of the process. So, at a third of all communities, such low levels of self-declaration post a warning sign.

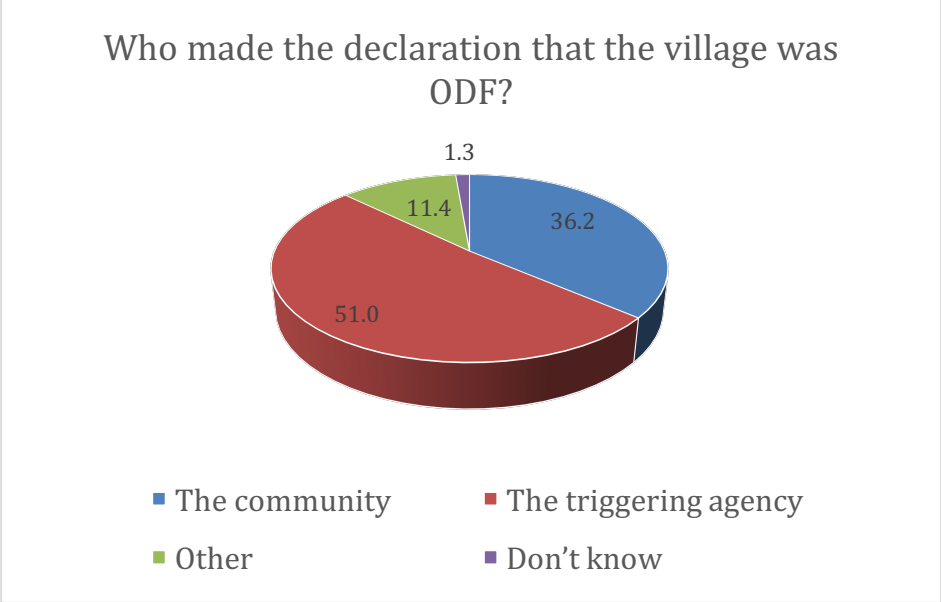

Figure 34: Who made the ODF declaration? (second survey)

Is this actually a factor in ODF retention? Figure 35 would indicate that it is.

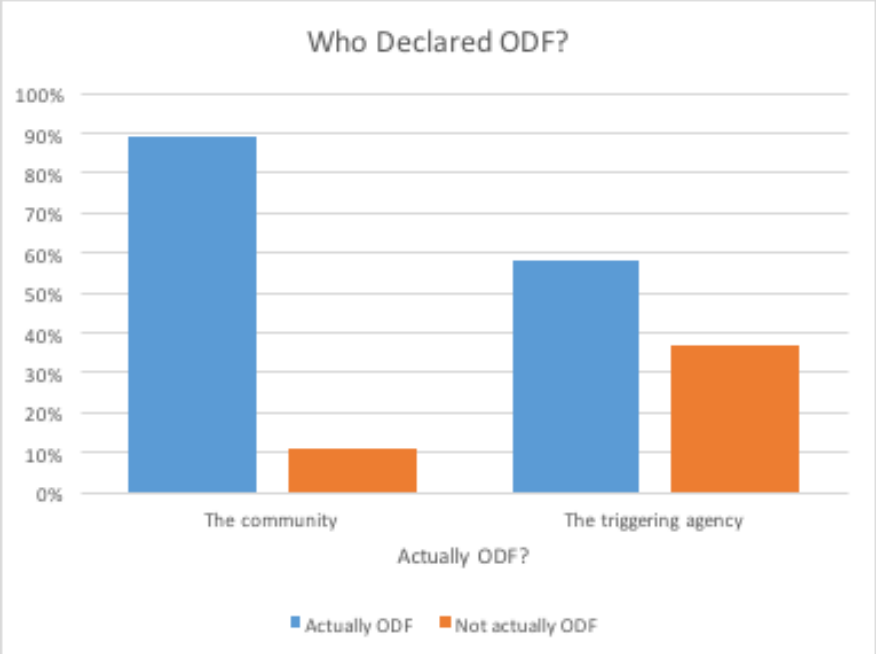

Figure 35: ODF actually vs who declared ODF (second survey)

4.2.3 Community support for ODF retention

A number of factors are widely felt to have an impact upon the retention of ODF status, some relating to supportive activities undertaken within communities, others relating to ongoing external support. We deal with the internal measures here first.

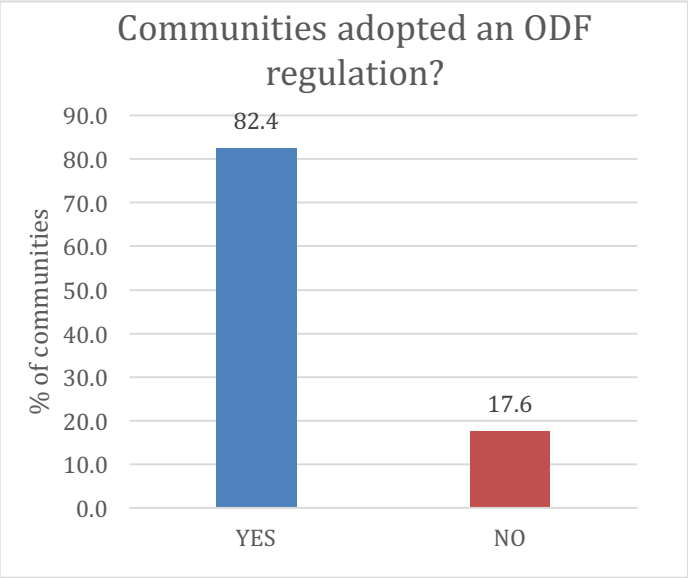

Figure 36: Adoption of Regulation of ODF

The first indicator is whether or not communities had adopted a regulation supporting ODF. i.e. indicating clearly that residents and visitors should not practise OD – in Madagascar such a regulation is known as a "Dina". The second survey indicated that an overwhelming proportion had done so (Fig 36). The second survey indicated that this Dina is generally enforced (Fig 37).

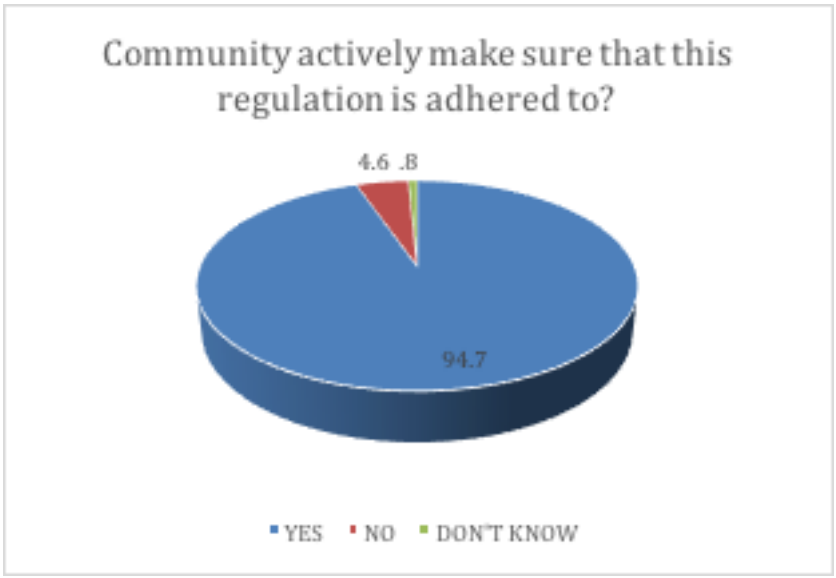

Figure 37: Ensuring regulation is adhered to

Does this *Dina* have any impact? Noting that the vertical axis is not set to zero, Fig 38 shows a small difference in ODF status between those that had and had not adopted such a *Dina*.

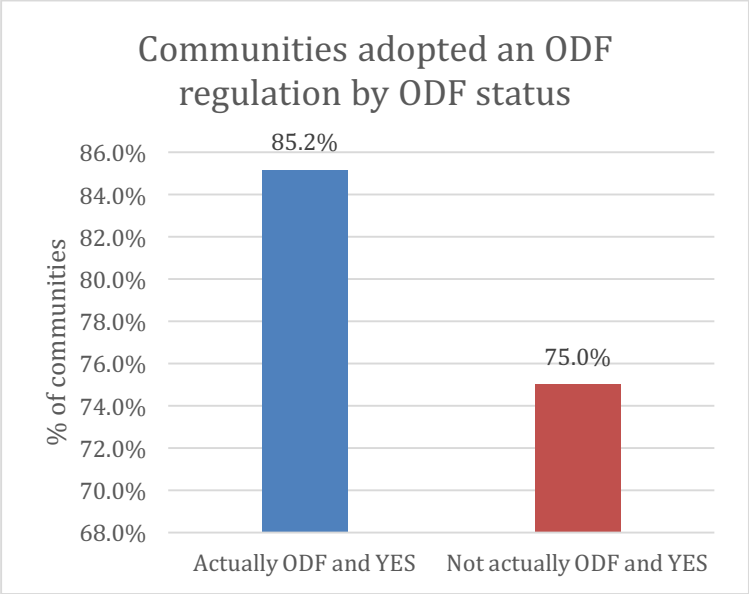

Figure 38: Impact of ODF Dina adoption (second survey)

Many reports on successful CLTS programmes indicate that community members, when triggered, will become so motivated to attain ODF status, that they will build latrines for those unable to do so. In the second survey, half of communities indicated that they never did so, a third said always, the remaining sixteen per cent sometimes. Whether or not these quite positive indications are accurate, there was almost no impact upon ODF status in the resultant cross-tabulation.

4.2.4 External support for ODF retention

A major criticism of CLTS programmes (indeed most sanitation related community level interventions) has been that communities are not assisted in retaining ODF status by the external agency which did the triggering, or by health extension workers, who might otherwise be expected to do so. Figures 39 and 40 indicate that the extent of such visits is insufficient, being between only 44% (HEWs) and 56% (triggering agencies).

What impact does this have on ODF? In Figure 41, the relationship is indicated for the case of *frequent* visits by the triggering agency which shows a high positive correlation, as would be expected and provides a solid pointer for all CLTS interventions in Madagascar.

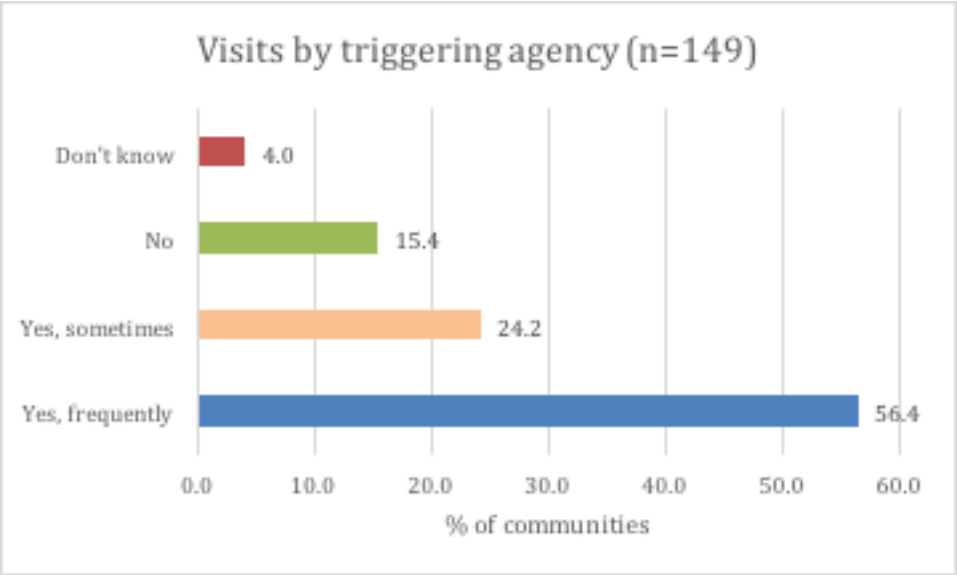

Figure 39: Support visits by triggering agency (second survey)

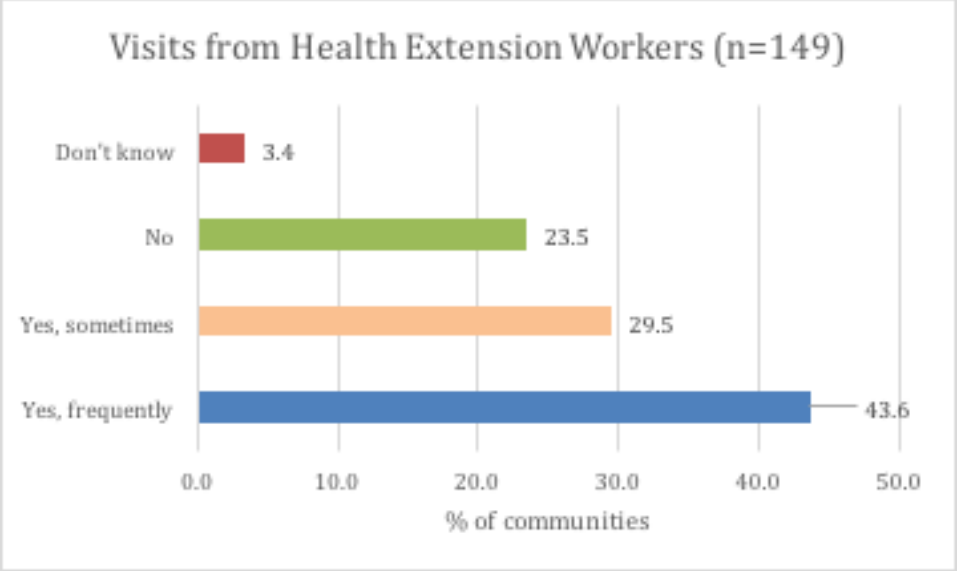

Figure 40: Support visits by health extension workers (second survey)

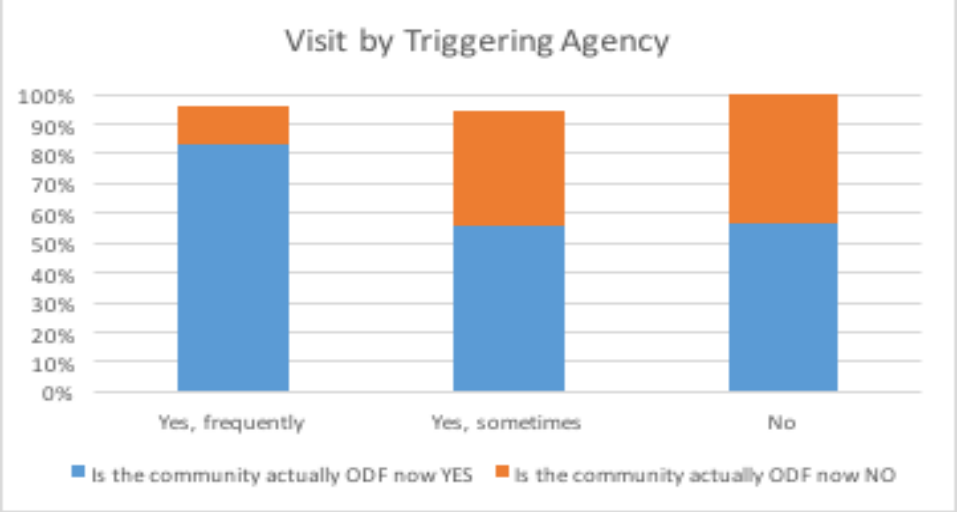

Figure 41: Visits by triggering agency vs ODF actually (second survey)

A clear impact can be seen, in Figure 42, between the distance to a place where sanitary spares can be purchased, and the level of ODF. The 25km distance was chosen as this can be seen as a reasonable distance for a (50km) round trip in a day in a rural context in Madagascar.

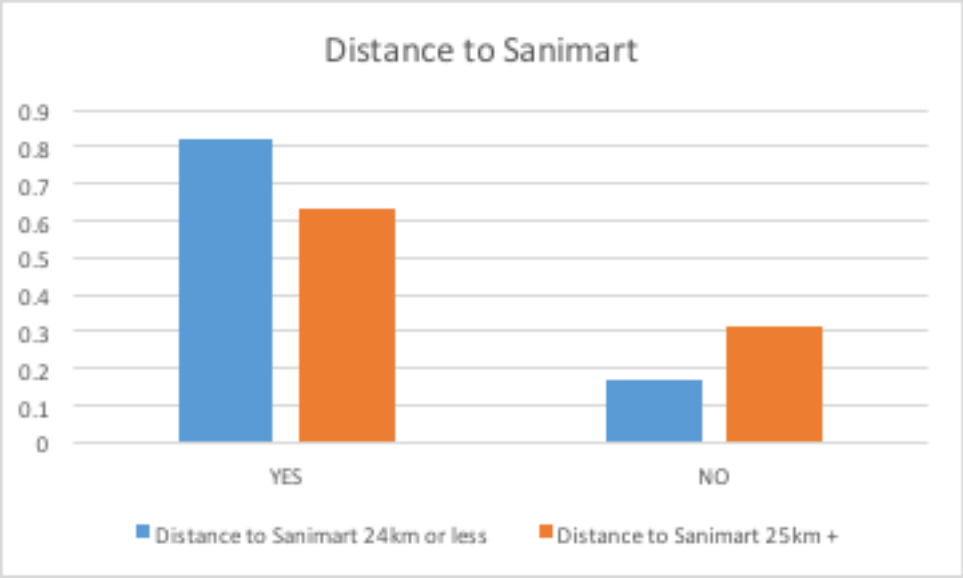

Figure 42: Distance to Sanimart vs ODF now (second survey)

4.3 ODF Survey – observational findings

The difficulty in establishing wholly reliable responses to questions relating to personal behaviours such as defecation was remarked upon at the start of this chapter. This, allied with the grey area which surrounds ODF status and the ability to convey that in local languages (triggered, declared, officially, actually…), led us to undertake some observational work in the second ODF/HWWS survey.

The questions asked of interviewers (observers) and guidance they were given is presented in Annex D2 but for this critical question is reproduced here (it was administered in Malagasy, or a local vernacular where relevant; the English original only is shown here). Note that interviewers/observers were asked to interact with community members to substantiate their own observation.

1: You see or smell the evidence that some adults are practicing open defecation (shortened in Fig 43 to "clear").

2: There is no visual evidence but some people say that some other people are practicing open defecation ("anecdotal" in Fig 43).

3: There is no evidence and is it said that the place is free from open defecation ("none" in Fig 43).

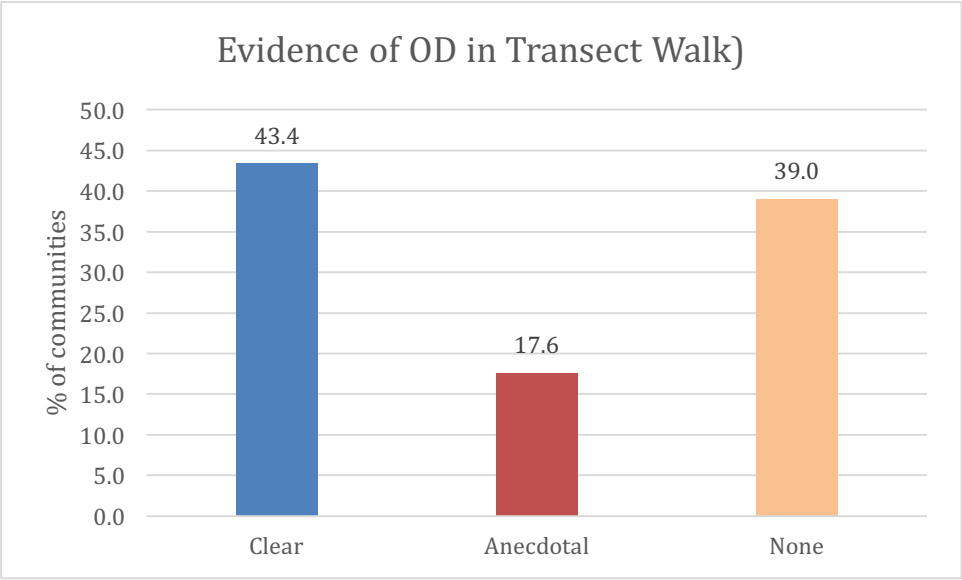

Figure 43: Evidence of OD from transect walk (second survey)

So, the *observed* response is that as many as 43% of villages in which the WASH Committee had indicated were actually ODF on the day of the visit, had clear evidence of open defecation on the same day; with as many as 61% having clear or anecdotal evidence of OD. Put another way, in locations said to be ODF, between 39% and 57% actually were.

The survey included an attempt to triangulate ODF related answers thorough establishing what proportion of houses actually had toilets (even in a ODF village, this would be less than 100% owing to a degree of sharing, but still should be a significant proportion). The question asked of the interviewer/observer was "what proportion of houses had latrines" and the allowed answers were quite approximate, as follows:

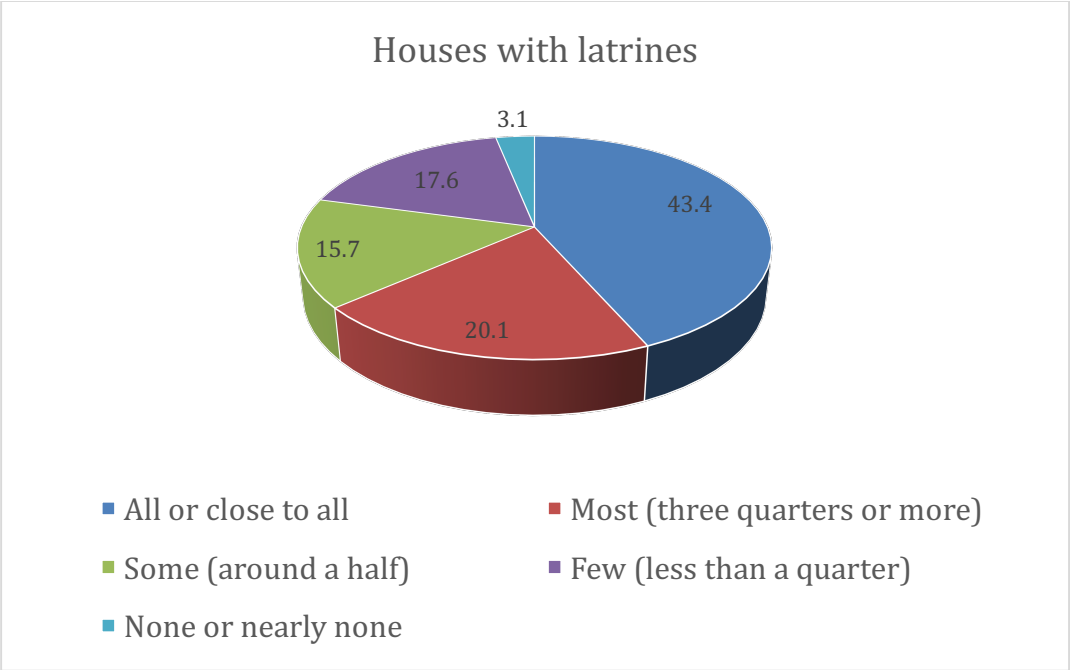

Figure 44: Proportion of houses with latrines in ODF villages (second survey)

Note that in Madagascar, 13% of the rural population share toilets[7]; houses are not arranged in an extended-family compound as is the case in parts of sub Sharan Africa. So, it would be reasonable to expect that - in that context - more than three quarters of households in an ODF community would have a latrine. However, Fig 43 shows that this is the case in 64% (rounded) of communities, with the remaining 36% having half or fewer of the households with a latrine.

Clearly, these figures are very approximate but, nonetheless, do lend some support to the other observational figures around evidence of OD.

So, to summarise re ODF sustainability:

- In the initial survey, the reported level of ODF retention was 62%.
- In the second survey, the reported level of ODF retention was 73%.
- In the second survey, the observed and confirmed level of ODF retention was 39%, up to a maximum of 56% if all the anecdotal evidence of OD is ignored.

The general inference that might be drawn therefore is that ODF retention from this evidence is around 40-50%, heavily caveated.

It can be seen that an independent verification system is required and that this is embedded in the evolving WASH monitoring system at the Min EAH.

4.3.1 Quality of toilets

In the first survey the opportunity was taken to address some qualitative issues regarding the toilets, the first being quality of construction.

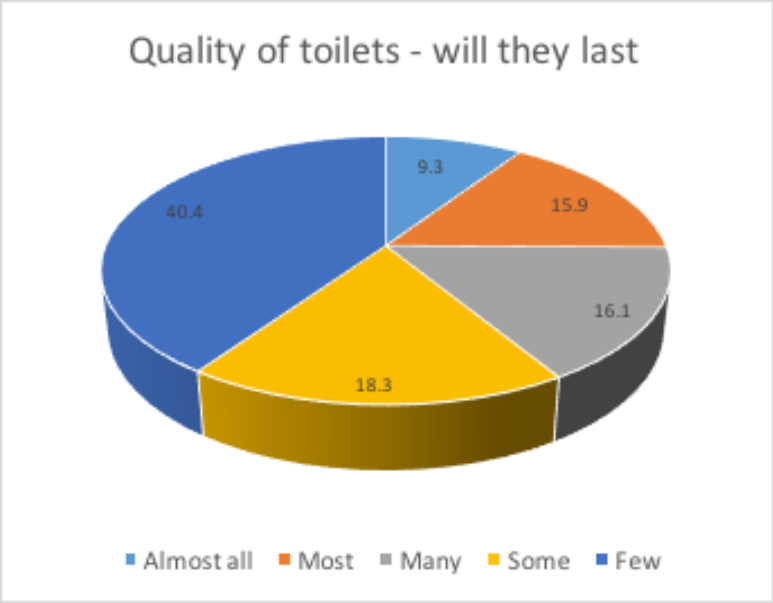

Figure 45: Quality of latrine construction (first survey)

[7] JMP 2015, Annex 3, page 66.

In 59% of communities only few or some latrines would be likely to last, and so the issue of ongoing support to and within communities is apparent. The observer also did a rapid assessment of toilet cleanliness (what proportion of households which had toilets in this community had very clean toilets), showing that in only 36% (16.8 + 19.3) of communities were toilets all or mostly clean.

Figure 46: Cleanliness of toilets (first survey)

4.4 Handwashing with soap (HWWS)

HWWS is one of the most important behavioural parameter to monitor but perversely, one of the most difficult. Reference back to the F-diagram (Fig 1 on Page 3 of this report) illustrates the extent to which HWWS at critical times will block the path of pathogens from the environment into humans, and therefore generate major health benefits.

The extent to which people overstate HW practise is conclusive in WASH literature, so it is accepted that observation is required in order to establish actual levels, noting however that this is far from easy. For example, it is not possible to try and find out if people do wash their hands at every critical point but it is possible, through rapid observation, to find out if people have a handwashing facility, if there is water present at that facility and if they have soap or a locally available suitable alterative.

If this was a household survey, then results would be quoted on that basis but as a community based survey the results become a little more unwieldy.

So, from Figure 47 it can be seen that in 12.5% of communities, almost all households had HW facilities, while most or almost all had HW facilities in some 31% of communities (18.1+12.5). [The guidance given to interviewers was almost all = 90%+, most was around

75%, many was around half, some was around a quarter, and few was less than ten per cent, to be within some ten paces of the latrine, and close to the house].

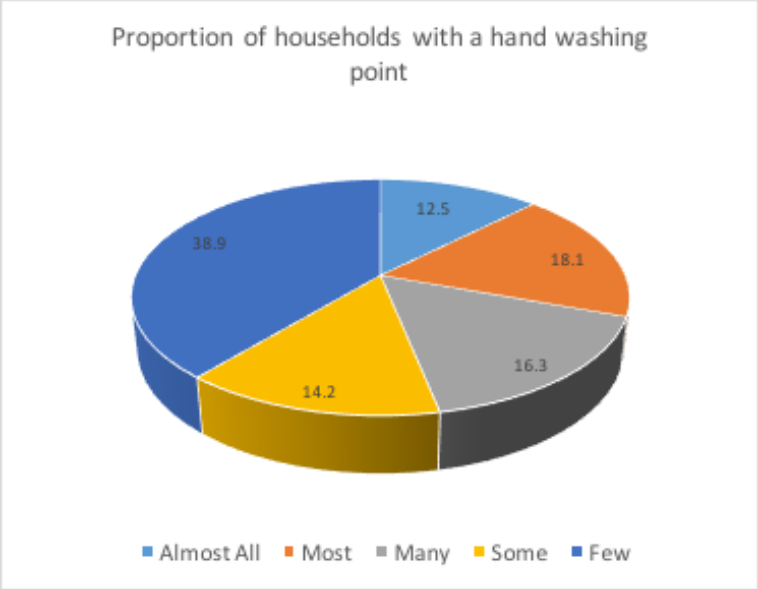

Figure 47: Handwashing point (first survey)

For effective HW, the household requires water and a cleansing agent (preferably soap) to be accessible at that point. In Figure 48, it can be seen that in 33% of communities most or all households had water for HW, while in 52% of communities only none, few or some households had water in place for HW.

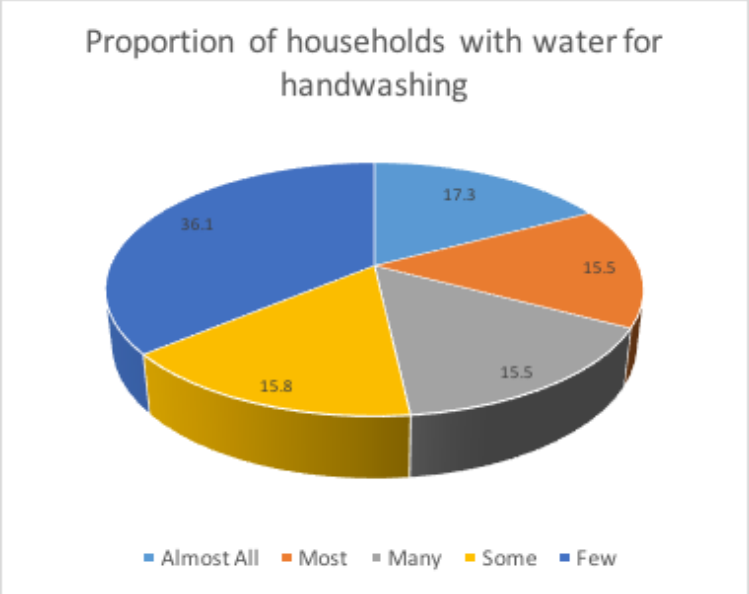

Figure 48: Water for handwashing (first survey)

Handwashing is far more effective if soap is used properly, not just by rinsing hands with water. Figure 49 shows that the level of soap availability is only slightly lower than that for the presence of water – probably indicating that if people had gone as far as having water for washing then most of them had also got soap: in 32% of communities all, almost all or

most households had soap at a HW station, while in 54% of communities, none, few of only some had this.

Figure 49: Presence of soap or other cleansing agent (first survey)

4.5 Some concluding remarks about ODF and HWWS

The figures for retention of ODF status and HWWS remain low, probably as is expected in current circumstances. However, the support that is given to communities to preserve ODF is at a high level, if this could be extended to support people to continue with HWWS, then that would be beneficial too.

An area of concern remains the extent to which declaration of ODF is made by triggering agencies. The philosophy of CLTS leaves no room for doubt that it is the community itself that must make such a declaration.

What is also evident is the need for external verification, such that the confusion apparent among community residents in this survey is removed.

With sanitation levels among the rural population of Madagascar remaining resolutely among the lowest in the world[8], there must be scope for all concerned to get together without the defensiveness that has characterised some of the recent relations in the sector, and construct a national programme to get to all Madagascans. This programme needs to be as immune as is possible from the vagaries of political shifts that afflict the Ministry currently and must cover urban as well as rural sanitation and hygiene.

In effect, Madagascan sanitation and hygiene is in a critical position and should be treated as a national emergency.

[8] 9% of the rural population of Madagascar have access to improved sanitation (JMP 2015, Annex 3, page 66), 52% still practise OD according to the same source.

5 Conclusions

5.1 Introduction

In this last, short, section we address issues arising from the survey conduct, as against the findings of the surveys themselves, already provided in the previous Chapters.

5.2 Future Sustainability Checks

These Sustainability Checks were instigated as a result of widespread concern about the durability of hardware, the longevity of behaviours and the quality of the parameters which, when all taken together, provide for an environment in which WASH provision – seen as services – will be likely to continue, or not.

In the first, SC1 and this subsequent SC2, the emphasis has been on collecting data which is representative of rural communities across the country – certainly with a larger sample in SC2 it is felt that this has been achieved, whereas SC1 was seen more as a snapshot. Doing it this way required a quantitative approach, with questionnaires administered by interviewers through a simple Q&A routine. All answers needed to be capable of being answered numerically, even those relating to items arising in the transect walks in both SCs.

This numeric approach has the obvious benefit of restricting the answers to a pre-set list, and creates good conditions for a numerical analysis, either using Excel (in SC1) or a more rigorous statistical package (in SC2). So, simple tabulations (frequency tables) could be easily produced and cross tabulations specified and run in a relatively straight-forward manner.

The downside of this quantitative approach is the lack of nuance, although the experience form SC1 (and other surveys in Madagascar and elsewhere) was used to obtain as much qualitative information as possible, as can be seen in this report. Had a more qualitative approach been used, then more depth could have been extracted but at the cost of a smaller sample – given that resources are finite.

Looking forward we need to weigh up the benefits and limitations of quantitative versus qualitative surveying of behavioural issues.

It is worth noting the ongoing development of the Ministry's own monitoring system, SE&AM. Resources are being put into its development to ensure a robust nation-wide monitoring system. So, in those circumstances, it may be considered appropriate that the quantitative matters of service provision for water, sanitation and hygiene are covered by the national system, while the qualitative issues are covered periodically by future SCs?

In this way, it could be that community level quantitative surveys are conducted through the national monitoring system, while back up qualitative surveys, with households as the unit of survey, are conducted through future SC type initiatives.

Before embarking on a new regime of this sort, it would be required to ensure that, in combination, these surveys did cover the range of variables now stipulated by the Sustainable Development Goals framework. For example, water quality is receiving more prominence (alongside issues of *access*) and would need to be included. Since this can only be done at the household level, its inclusion should be in future SC exercises.

It may also be appropriate to consider WASH issues as they impact on particular groups. This is certainly the case for children, who carry the illness and death burden of poor WASH very disproportionately.

Sustainability discussion in this report (and in the SC1 exercise) have concentrated upon field level issues but it is recognised that there are parameters related to institutions, governance, sector finance, human resources… which are also vital. These also need to be monitored, via SE&AM, and/or the GLAAS process.

So, in conclusion consideration should be given to:

- "Exporting" the main quantitative elements, at the community level, to the national WASH monitoring programme SE&AM.
- Focusing future SCs more to qualitative matters, and operate at a household survey level.
- Ensuring that all survey processes are aligned with the new SDG parameters, as well as those known to be important in Madagascar (if these are different).
- Ensuring that special issues, especially in relation to children, to women and of equity receive prominent consideration.

Finally, the engagement – indeed leadership of the Min EAH in undertaking sector monitoring is fundamental. This was very much the case in SC1, where leading Ministry staff were heavily and productively engaged. This engagement has been less so in SC2, partly because the involvement of INSTAT in data collection precluded the need for the involvement of regional Ministry staff. With the process alterations recommended above, this ownership by Government is almost certain to increase.

Annexes

Annex A Terms of Reference

Title of Consultancy	Sustainable Delivery Strategy and SWAP Approach.
Purpose	To advance four of the recommendations of the WASH Sector Development Task Force produced during the initial contract. This additional work is related to "Analytical frameworks and reality checks in support of WASH sector development"
Location	Home based with missions in Antananarivo - Madagascar
Duration	[Extended to end March 2016]
Start Date	16th September 2015
Funding Source (WBS, Grant and GL Code)	WBS: 2670/A0/06/200/101/007 Grant : SC130518

Background

The development of a Sustainable Service Development Strategy has been completed and the draft report accepted. It recommends a set of actions which are designed to lead the Madagascar WASH sector into a new era, where enhanced sector leadership, alongside much improved coordination and harmonisation, attract more and better finance for the sector, and lead towards a period of massively increased and sustained service delivery across the country

Justification

The expectation is that the major sector agencies will contribute to the achievement of the goals through support for the actions set out. UNICEF is supporting four of them, and is asking its existing contracted consultants to undertake the work as the budget extensions required lie within the stipulated limits set by the organisation

Specific Tasks

The four short term actions required here are summarised below and detailed in the following text. These tasks all focus on rural water services, but similar principles apply to sanitation, and it is anticipated that subsequent work can apply similar approaches to sanitation too.

Item	Summary	Deliverable
WASH Cost analysis	Analysis of the cost breakdown of rural water service provision.	A simple analytical framework and likely magnitude of the cost components of rural water services.
Financial modelling	Modelling of the interaction of expenditures, population growth and service coverage, as a basis for sector planning.	A model framework with realistic input data and projected budget requirements to meet national post-2015 targets for rural water services.
O&M model study	An analysis of the range of rural water service management models in relation to community / user context.	Preliminary guidelines for rural water services on appropriate management models matched to context.
WASH sector diagnostics	Implementation of a bi-annual analysis of WASH service sustainability.	Clear recommendations for sector strengthening in relation to sustainability.

WASH Cost study. It is increasingly understood that the capital cost of rural water supply infrastructure only represents part of the full cost of service provision. It is vital that the WASH sector can go to funders with confidence that the complete cost of service provision, and the consequent funding gap, are understood. These complete costs are not yet known for the Madagascar context and should be built up through a WASH Cost study and then updated continuously. This task will establish the framework and definitions to be used in such a cost analysis, and provide likely ball-park magnitudes for the various cost elements. It will provide the basis for more detailed subsequent collection of data on rural water service costs.

Sector financial modelling. It is readily possible, using realistic assumptions about unit costs and other relevant factors, to build a financing model for the Madagascar WASH sector, which takes account of population growth and which models rural water supply coverage over time. This can assist in future investment planning, especially as better WASHCost data emerges. The task here will be to build a simple and user-friendly model which can allow exploration of the interactions between investment, population growth and coverage, in the context of realistic assumptions about unit costs and other key parameters.

Management model review. The rural water supply sub sector is characterised, as is the case in so many other countries, by a community management model which has evolved largely through the lack of a suitable alternative; and has regressed into a position where communities are largely unsupported once water supply infrastructure has been provided.

Many see the private sector as an alternative, whereby through area franchise or other methods, the local private sector takes on responsibility for ensuring on-going service provision, in return for payment by users. While there are many attractions to this general principle, it is vital that the benefits obtained and lessons learned though community engagement and management are not lost, and that management models are matched to context. It is apparent that the most appropriate management model in any given situation is the one which is best matched to the local user context and the wider institutional context. This task will set out preliminary definitions of these contexts and management models, and provide guidance on how the latter can be matched to the former.

WASH sustainability review. The Ministry of Water (as it was then) oversaw the first sector sustainability check in late 2013, funded by UNICEF with assistance from WaterAid, and mentioned previously in this report. This should be a feature of the WASH sector, carried out biannually. At the recent Sustainability Forum, representatives from the Global Sanitation Fund signalled their desire to assist with funding and management of this review, a development which would be most welcome, helping to achieve still greater sector coverage and legitimacy.

The work here is to oversee the DREAH and UNICEF team carrying out the second Sustainability Check, drawing in the co-operation of other sector actors like WaterAid and the GSF if appropriate and helpful.

Expected Deliverables

1. A framework (based on WASHCost principles), set of definitions and likely cost breakdown for rural water services.
2. A model which allows the user to explore the interactions of capital and recurrent expenditure and coverage, against the background of rising population.
3. Definitions of contexts and management models for rural water services, and guidance on the matching of model to context.
4. Completed survey of service delivery status in rural regions.

Reporting

- Once a month email to the Chief of WASH setting out progress against deliverables, and any challenges encountered or expected.
- One report at the end of the work, setting out the full details of the work conducted, and its outputs, plus any necessary software.
- Attendance at an end of projects seminar in Antananarivo for discussion and handover.

Annex B References

Carter, Richard and Peter Ryan, 2015. *Sustainable WASH Services and an Effective WASH Sector in Madagascar*. Government of Madagascar, Ministry of Water, Sanitation and Hygiene, Antananarivo.

Hutton, Guy and Jamie Bartram, 2003. *Domestic Water Quantity, Service Level and Health*. World Health Organisation, Geneva, Switzerland. See particularly Table S1 reproduced below this list.

Joint Monitoring Programme (JMP), 2015. *Progress on Sanitation and Drinking Water – 2015 update and MDG assessment*. UNICEF and World Health Organisation; Geneva, Switzerland.

Ryan, Peter, 2014. *Madagascar WASH Sector Sustainability Check*. Government of Madagascar, Ministry of Water, Antananarivo

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From Hutton and Bartram

Table S1: Summary of requirement for water service level to promote health

Service level	Access measure	Needs met	Level of health concern
No access (quantity collected often below 5 l/c/d)	More than 1000m or 30 minutes total collection time	Consumption – cannot be assured Hygiene – not possible (unless practised at source)	Very high
Basic access (average quantity unlikely to exceed 20 l/c/d)	Between 100 and 1000m or 5 to 30 minutes total collection time	Consumption – should be assured Hygiene – handwashing and basic food hygiene possible; laundry/ bathing difficult to assure unless carried out at source	High
Intermediate access (average quantity about 50 l/c/d)	Water delivered through one tap on- plot (or within 100m or 5 minutes total collection time	Consumption – assured Hygiene – all basic personal and food hygiene assured; laundry and bathing should also be assured	Low
Optimal access (average quantity 100 l/c/d and above)	Water supplied through multiple taps continuously	Consumption – all needs met Hygiene – all needs should be met	Very low

Annex C RWS Questionnaire

	Region			Faritra		
	District Name			Distrika		
	Commune Name			Kaominina		
	Fokontany name			Fokontany		
	Community Name			Vohitra		
	Enter GPS co-ordinates			Ampidiro ny coordonnees GPS		
	Interviewer name			Mpanadihady		
	Interviewer email address			Email mpanadihady		
	Interviewer phone number			Laharan-telefaonin'ny mpanadihady		
	Date of interview			Daty nanaovana ny fanadihadiana		
	Water System		**Drafitrasa ahazoan-drano**			
1	What sort of improved water system technology is used by this community (answer all that apply)?		Inona no karazana tekinika famatsian-drano ampiasan'ny tanananareo (mariho avokoa izay mety ho valiny)			1

1a	Hand pump/s (shallow well)	Yes=1, No=2	Paompy tanana	Eny=1, Tsia=2		1a
1b	Mechanised pump/s (electric, diesel or solar pump)	Yes=1, No=2	Paompy mandeha amin'ny gazoil na herin'ny masoandro	Eny=1, Tsia=2		1b
1c	Gravity fed piped system	Yes=1, No=2	AEPG	Eny=1, Tsia=2		1c
1d	Other collection type with treatment	Yes=1, No=2	Fanangonan-drano hafa misy fanadiovana	Eny=1, Tsia=2		1d
1e	Are there household connections (Yes=1), or is supply solely communal (No=2)?	Yes only HH =1, No, communal only =2	Misy tambazotra mamatsy ny isan-tokantrano ve (Eny=1), sa famatsiana iraisan'ny besinimaro fotsiny ihany no misy (Tsia=2)?	Eny=1, Tsia=2		1e
1f	How many waterpoints are there in THIS system?	Number	Raha tsia, firy ny isan'ny baorina vatsian'ny paompin-drano (water point)?	Isa		1f
2	When was the water system constructed? (enter years since construction)	Number	Tamin'ny oviana no namboarana io fotodrafitrasa famatsian-drano io? (sorato ny isan'ny taona hatramin'ny fanamboarana)	Isa		2
3	Has the water system been rehabilitated? (Enter years since rehabilitation - or 999 if not rehabilitated)	Number	Efa nisy fanavaozana natao ve tamin'io fotodrafitrasa io? (Sorato ny isan'ny taona hatramin'ny fanavaozana - na 999 raha tsy navaozina)	Isa		3
4	Is the water system functioning today? (Interviewer: do visual check to confirm response)	Yes=1, No=2	Mbola mandeha ve io fotodrafitrasa io amin'izao fotoana izao? (Mpanadihady: jereo maso hanamarinana ny valin-teny)	Eny=1, Tsia=2		4
5a	Does the community ever use unimproved sources (pond, river, lake)?	1=Always, 2=Sometimes, 3=Never	Mbola mampiasa fomba famatsian-drano tsy manaraka ny fenitra ve ny eto antanana? (rano miandrona, renirano, farihy)?	1=Mampiasa hatrany, 2=Mampiasa indraindray, 3=Tsy mampiasa mihitsy		5

5b	If 1) or 2) to 5,ask what is the main reason? DO NOT PROMPT	1 = use safe water for drinking, cooking only 2 = waterpoint water is expensive 3 = waterpoint water is only seasonally available 4 = waterpoint water quality is variable 5 = Queue at waterpoint is too long 6 = Waterpoint is too far from home 7 = OTHERS?s	raha 1) na 2) ny valiny @ fanontaniana faha 5,anontanio ny tena anton'izany ? AZA NANDROSO VALINY ALEO IZY NOHO HAMALY FA TSY TORONA VALINY ISAFIDIANANA	1 = mampiasa rano madio sotroina sy handrahoina 2 = lafo loatra ny rano 3 = ny rano tsy mandava taona 4 = miovaova ny (kalitao'ny)rano 5 = lava loatr any filaharana rehefa handeha hatsaka 6 = lavitra ny trano ny fotodrafitrasa mamatsy rano 7 = HAFA ?		
	Population and Accessibility		**Mponina sy fahafahana mampiasa**			
6	What is the population of the area served by this water system?	Number	Firy ny isan'ny mponina vatsian'io fomba famatsian-drano io?	Isa		6
7	Is the population of the project area growing so much that it can affect the performance of the facilities? (prompt for evidence to show growth may take usage beyond sustainable levels)	1=Definitely 2-Maybe 3=No	Mitombo haingana loatra ve ny isan'ny mponina eo amin'ny tanana iasan'ny tetikasa ka tsy maharaka intsony ny fotodrafitrasa? (mangataha porofo mampiseho fa mitombo haingana loatra ny mponina ka tsy maharaka sy mety tsy haharitra ny fotodrafitrasa)	1=Tena marina 2=Mety ho marina 3=Tsy marina		7

8a	Does the water system provide water for 20 litres per person per day?	1=Always, 2=Usually, 3=Never	Maharaka ny hanome rano 20 litatra isan'olona isan'andro ve ilay fotodrafitrasa?	1=Manome hatrany, 2=Manome matetika, 3=Tsy manome mihitsy		8
8b	Does the water system provide water for 50 litres per person per day?	1=Always, 2=Usually, 3=Never	Maharaka ny hanome rano 50 litatra isan'olona isan'andro ve ilay fotodrafitrasa?	1=Manome hatrany, 2=Manome matetika, 3=Tsy manome mihitsy		9
9	What proportion of users are within 500m/ten minutes' walk of a/the waterpoint?	1: Most - >75% 2: Many 50-75% 3: Some 25-50% 4: Few <25%	Firy isan-jaton'ireo mpampiasa rano no mipetraka latsaky ny 500 metatra/10 minitra an-tongotra misy ny fotodrafitrasa ve ny ankamaroan'ny mpanjifa?	1: ny ankamaroany >75% 2: maro 50-75% 3: sasantsasany 25-50% 4: Vitsy <25%		10
10	Does the water system yield sufficient water all year round?	1: Most >75% of days 2: Many 50-75% 3: Some 25-75% 4:Few <25%	Manome rano ampy mandavan-taona ve ilay fotodrafitrasa?	1: ny ankamaroany >75% 2: maro 50-75% 3: sasantsasany 25-50% 4: Vitsy <25%		11
11	Do users have to queue for more than ten minutes?	1: Most >75% 2: Many 50-75% 3: Some 25-75% 4: Few <25%	Mila milahatra mihoatra ny 10 minitra ve ny mpanjifa?	1: ny ankamaroany >75% 2: maro 50-75% 3: sasantsasany 25-50% 4: Vitsy <25%		12

12	Can users fill their containers without pausing during drawing water?	1: Most >75% 2: Many 50-75% 3: Some 25-75% 4: Few <25%	Afaka mameno tsy tapaka ny fasian-drano ve ny mpanjifa rehefa maka rano?	1: ny ankamaroany >75% 2: maro 50-75% 3: sasantsasany 25-50% 4: Vitsy <25%		13
	Quality and Quantity		**Hatsara sy habetsaky ny rano**			
13	Is the water acceptable to the community (taste, appearance)?	1: Most of the time >75% 2: Much of the time 50-75% 3: Some of the time 25-50% 4: Not often <25%	Mety amin'ny mponina ve ilay rano? (tsirony, endriny)	1: Matetika >75% 2: Ny ankamaroan 'ny fotoana 50-75% 3: Indray indray 25-50% 4:Mahalana <25%		14
14a	Do members of the community treat the water before drinking?	1: Usually >75% 2: Often 50-75% 3: Sometimes 25-75% 4: Rarely <25%	Manadio rano ve ny mponina alohan'ny isotroany azy?	1: Matetika >75% 2: Ny ankamaroan 'ny fotoana 50-75% 3: Indray indray 25-50% 4:Mahalana <25%		15
15	Do community members cover their water inside their homes?	1: Usually >75% 2: Often 50-75% 3: Sometimes 25-75% 4: Rarely <25%		1: Matetika >75% 2: Ny ankamaroan 'ny fotoana 50-75% 3: Indray indray 25-50% 4:Mahalana <25%		
	Environment		**Tontolo iainana**			
16	Is the water source sufficiently distant from toilets? (defined as: toilets are >50 metres downstream - interviewer do visual check)	Yes=1, No=2	Mifanalavitra tsara amin'ny kabone ve ny loharano na ny famatsian-drano? (toy izao: mihoatra ny 50 metatra mankany mbany - Mpanadihady: zahao)	Eny=1, Tsia=2		16

17	Is the water source sufficiently protected from animal effluents solid waste and industrial emissions? (interviewer should conduct visual check – industry using chemicals should be considerably downstream, fencing should be provided around the waterpoint to keep animals away)	Yes=1, No=2	Voaaro tsara amin'ny biby sy ny fako sy ny loto avoakana orinasa (raha misy) na tanimbary ve ny loharano na famatsian-drano? (Mila mijery maso ny mpanadihady - Ny orinasa na tanimbary mampiasa akora simika dia tokony avy any ambany, tokony asiana fefy ny fotodrafitrasa tsy hidiran'ny biby)	Eny=1, Tsia=2		17
	Finance		**Ara-bola**			
18	Did the community make a cash and/or in-kind contribution to the construction of the water system?	1: Cash 2: In kind 3: Both 4: Neither	Nitondra anjara biriky ve ny mponina tamin'ny namboarana ny fotodrafitrasa? (vola, fitaovana na asa)	1: vola 2: fandraisana anjara (tsy vola) 3: izy roa mitambatra 4: tsy mandray anjara mihintsy		18
19	Did the community agree to pay a tariff for the water used?	Yes=1, No=2	Nifanaraka ve ny mponina fa misy vola aloa amin'ny fampiasana rano?	Eny=1, Tsia=2		19
20	Does the community actually pay what it has agreed?	1: Most of the time >75% 2: Much of the time 50-75% 3: Some of the time 25-50% 4: Rarely <25%	Mandoa vola araka izay nifanarahana ve ny mponina amin'izao fotoana izao?	1: Matetika >75% 2: Ny ankamaroan 'ny fotoana 50-75% 3: Indray indray 25-50% 4:Mahalana <25%		20
21	Are those who do not pay suspended from using the system?	1: Most of the time >75% 2: Much of the time 50-75% 3: Sometimes 25-50% 4: Rarely <25% 5: Not an option n/a	Tsy avela mampiasa ny fotodrafitrasa intsony ve ireo tsy mahaloa ny vola?	1: Matetika >75% 2: Ny ankamaroan 'ny fotoana 50-75% 3: Indray indray 25-50% 4:Mahalana <25% 5: tsy azo eritreretina na tsy azo ampiarina		21

22	Is the tariff 1: pay as you fetch, 2: household levy or 3: ad hoc?	1, 2 or 3	Ahoana no fomba andoavana ny vola? 1: isaky ny manovo 2: isan-tokantrano 3: arakaraky ny zava-misy	1, 2 na 3		22
	Community Management		**Fitantanana iandraketan'ny mpiaramonina**			
23	Is there a functioning WASH Committee currently in place?	Yes=1, No=2	Misy komitin'ny rano sy ny fahadiovana miasa ve eo an-tanàna amin'izao fotoana izao?	Eny=1, Tsia=2		23
24	Does the WASH Committee meet as frequently as it is meant to? (i.e. as agreed at the start)	Yes=1, No=2	Mivory matetika araka ny tokony ho izy ve io komity io? (izany hoe araka ny nifanarahana teny ampiandohana)	Eny=1, Tsia=2		24
25	Does the WASH Committee have the number of members that it was agreed it would have?	Yes=1, No=2	Araka izany nifanarahana ve ny isan'ny mpikambana ao anatin'ny komity ?	Eny=1, Tsia=2		25
26	Are WASH Committee members trained according to sector guidelines?	Yes=1, No=2	Nahazo fiofanana araka ny torolalana ho an'ity sehatrasa ity ve ireo mpikambana ao amin'ny komity?	Eny=1, Tsia=2		26
27	Is the WASH Committee gender balanced (around half being women)?	Yes=1, No=2	Mifandanja ve ny isan'ny vehivavy sy lehilahy ao amin'ny komity? (farafahakeliny 3 amin'ny 7 dia tokony ho vehivavy)	Eny=1, Tsia=2		27
28	Are vulnerable groups included in WASH Committee decision-making? (probe: disabled, elderly, minority ethnic groups)	Yes=1, No=2	Mandray anjara amin'ny fandraisana fanapahan-kevitra ao anatin'ny komity ve ireo vondron'olona marefo? (alalino: olona tra-pahasembanana, be antitra, foko vitsy an'isa)	Eny=1, Tsia=2		28
29	Does the WASH Committee have a bank account?	Yes=1, No=2	Manana kaonty any amin'ny banky na amin'ny sehatra tahirimbola hafa (OTIV, CECAM,…) ve ny komity?	Eny=1, Tsia=2		29

30	Are the financial records/books available for scrutiny by the community? (Interviewer: ask to see the record/books if there is any uncertainty)	Yes=1, No=2	Azon'ny mponina atao ve ny mijery ny bokim-bola? (Mpanadihady:raha misy fisalasalana dia angataho ho jerena ilay boky)	Eny=1, Tsia=2		30
	Maintenance		**Fikojakojana**			
31	Does the community have a trained mechanic for routine maintenance of the water system?	Yes=1, No=2	Manana tekinisianina voahofana ve ny tanàna miandraikitra tsy tapaka ny amin'ny fikojakojana ny fotodrafitrasa?	Eny=1, Tsia=2		31
31a	Is the community satisfied with the mechanic work and performance?	Yes=1, No=2	Afa-po amin'ny asan'ny tekinisianina voahofana ve ny eo an-tanàna ?	Eny=1, Tsia=2		31a
32a	Has maintenance been contracted out to private sector management?	Yes=1, No=2	Nomena ho tantanan'ny sehatra tsy miankina ve izany fikojakojana izany?	Eny=1, Tsia=2		32
	If yes to 32a, do the other Q32s, if no, go to Q33		Raha “Eny” ny valiny @ fanontaniana 32, dia anontanio ny fanontaniana 32b Raha “Tsia” ny valiny @ io fanontaniana 32 io, dia anontanio ny fanontaniana 33			
32b	Does this contractor serve other waterpoints ?	1 = More than ten 2 = 6-10 3 = 2-5 4 = Just this one	Ny sehatra tsy miankina mikarakara an’io fotodrafitrasa io ve miandraikitra fotodrafitrasa hafa?	1 = Mihoatra ny 10 2 = 6-10 3 = 2-5 4 = Io fotodrafitrasa iray io ihany		32b

32c	Do you feel you get value for money from your contractor	1 = Yes 2 = No	Mahatsapa ve ianao fa mahaleo ny sarany ny vidin'ny rano iandraitan'ilay sehatra tsy miankina mikarakara ny fotodrafitrasa?	Eny=1, Tsia=2		32c
33	Is there an agreed maintenance plan in place? (Probe what is it, is it real?).	Yes=1, No=2	Misy drafitra mipetraka sy nifanarahana ve momba ny fikojakojana ? (Alalino inona ilay izy, ary tena ampiharina ve?).	Eny=1, Tsia=2		33
34	Is the actual frequency of preventive maintenance according to the plan and sufficient?	Yes=1, No=2	Mifanaraka amin'izay voalaza ao amin'ny drafitra ny fotoana iverenan'ny fikojakojana ary ampy ve izany?	Eny=1, Tsia=2		34
35	Has there been a breakdown of the water system in the last year?	Yes=1, No=2	Nisy fotoana ve tamin'ny taon-dasa tsy nandehanan'ilay fotodrafitrasa noho ny fahasimbana?	Eny=1, Tsia=2		35
36	If yes, was this satisfactorily attended to by the mechanic or contractor?	Yes=1, No=2 3: N/a	Raha eny, nahafa-po ve ny fanamboarana nataon'ny tekinisianina na izay nampanaovina azy tamin'izany?	Eny=1, Tsia=2 n/a=3		36
37	For how many months out of the last twelve has the water system been fully functional?	1-12	Tao anatin'ny 12 volana farany, firy volana no nandeha tsara ny fotodrafitrasa?	1-12		37
38	Is there an agreed plan and method to pay for heavy maintenance (defined as non-routine, unexpected)?	Yes=1, No=2	Misy drafitra manokana sy fomba famatsiam-bola manokana napetraka ve itsinjovana ny fotoana ilana hanaovana fanamboarana na fikojakojana goavana? (izany hoe tsy ara-potoana, tampoka)	Eny=1, Tsia=2		38
39	Is there an agreed plan and method to replace and finance the water system equipment when it becomes life expired?	Yes=1, No=2	Misy drafitra sy fomba napetraka ve hanoloana sy ividianana fitaovana ho solon'ny fitaovana efa antitra loatra amin'ny fotodrafitrasa?	Eny=1, Tsia=2		39
	Supply Chain		**Famatsiana fitaovana**			

40	Do you know where to access spare parts?	Yes=1, N=2	Fantatrao ve aiza no ahazoana fitaovana asolo ny simba?	Eny=1, Tsia=2		40
41	Approximately how many kilometres away is the location for accessing spare parts?	Number	Firy kilometatra miala eto no misy an' izany fitaovana izany?	Isa		41
42	Are spare parts affordable?	Yes=1, No=2	Takatry ny fahafaha-mividinareo ireo fitaovana ireo?	Eny=1, Tsia=2		42
43	Are the spare parts of sufficient quality?	Yes=1, No=2	Tsara kalitao ve ireo fitaovana ireo?	Eny=1, Tsia=2		43
	Institutional		**Ara-panjakana**			
44	Is there an agreed method for the community to inform the Commune when there is a breakdown that the mechanic/contractor cannot fix?	Yes=1, No=2 Don’t know = 3	Misy fomba ifanarahana ve eo amin'ny mponina hampilazana ny kaominina rehefa misy fahasimbana tsy voavahan'ny tekinisianina?	Eny=1, Tsia=2 Don’t know = 3		44
45	Is there a contracted agreement (or MoU) between the community and the Commune specifying the Commune’s responsibilities when there is a breakdown that the mechanic/contractor cannot fix?	Yes=1, No=2	Misy fifanarahana an-tsoratra mazava ve eo amin'ny mponina sy ny kaominina mametraka ny andraikitry ny kaominina rehefa misy fahasimbana tsy voavahan'ny tekinisianina?	Eny=1, Tsia=2		45

46	Does the Commune actually provide this support to the community when it has a water system problem that the mechanic/contractor cannot fix?	1=Always, 2=Usually, 3=Never 4 = N/A	Manampy ny mponina ve ny kaominina amin'izao fotoana rehefa misy fahasimban'ny fotodrafitrasa tsy voavahan'ny tekinisianina?	1=Manampy hatrany, 2=Manampy matetika, 3=Tsy manampy mihitsy 4=Tsy voakasiky ny fanontaniana		46
47	Does the Ministry of Water provide satisfactory support to the Commune when it has a water system related problem the Commune cannot deal with?	1=Always, 2=Usually, 3=Never 4= N/A	Manampy ny kaominina ve ny Ministeran'ny rano rehefa misy olana mikasika ny fotodrafitrasa izay tsy voavahan'ny kaominina?	1=Manome hatrany, 2=Manome matetika, 3=Tsy manome mihitsy 4=Tsy voakasiky ny fanontaniana		47

Annex D1 ODF/HWWS Questionnaire – initial field work

Open Defecation Free and Hand Washing With Soap: Questionnaire	**Fangerena ankalamanjana, fanasana tanana @ savony: Fanadihadiana**	**VALINY**
Region	Faritra	
District Name	Distrika	
Commune Name	Kaominina	
Fokotany name	Fokontany	
Community Name	Vohitra	
Enter GPS coordinates	**Ampidiro ny coordonnes GPS**	
Interviewer name	Mpanadihady	
Interviewer email address	Email mpanadihady	
Interviewer phone number	Laharan-telefaonin'ny mpanadihady	

Date of interview		Daty nanaovana ny fanadihadiana	

Questions to ask WASH Committee and CLTS leaders	**Fanontaniana apetraka amin'ny komitin'ny rano sy ny fahadiovana ary ireo mpitarika/mpanamora CLTS**
Basics	**Fanontaniana ankapobeny**

1	What is the population of this community?	Number	Firy no isan'ny mponina ao anatin'ity vohitra ity?	Isany		1
2	How many households are there?	Number	Firy no isan'ny tokan-trano? (iray fatana)	Isany		2
3a	Has this community been declared ODF	1=Yes 2=No	Efa voamarina tanteraka ve fa tsisy fangerena ankalamanjana (ODF) intsony eto?	1=eny, 2=tsia		3a
3b	If yes to 3a, when was the community declared ODF?	YYYY	Raha eny, oviana ?	Taona		3b
3c	Who made the declaration that the village was ODF?	1: The community 2: The triggering agency 3: It was externally verified	Iza no manao ny fanambarana fa ilay tanana dia tsisy fangerena ankalamanjana intsony?	1. Ny fiarahamonina ve 2. Ny mpiaramiombon'natoka 3. Olona hafa		3c
4	Who was the triggering agency?	Name	Iza no mpiara-miombonantoka nanantanteraka ny fanairana? (CLTS/ Declenchement)	Anarana		4
5	Was a prize given for the award of ODF?	1=Yes 2=No	Nisy fanomezana natokana ve fankasitrahana ho fanatanterahana ny ODF	1=eny, 2=tsia		5

6	If yes to q5, was the prize 1 - cash, 2 - other	1=Cash 2=Other 3= n/a	Raha eny , 1- Lelavola, 2- fomba hafa	1=lelavola, 2=hafa, 3=n/a		6
7	Has the community adopted a regulation declaring that all who live and visit here must not practice open defecation?	1=Yes 2=No	Nisy lalana na dina ve nampiharinareo mametra ny mponina rehetra sy izay vahiny mandalo ao ny amin'ny tsy tokony hanaovana ny fangerena ankalamanjana?	1=eny 2=tsia		7
8	Does the WASH committee/community **manage** the adherence to this regulation?	1=Yes 2=No	Ny komitin'ny rano sy ny fahadiovana ve mampihatra na manaramaso ny fampiharana ny lalana/dina?	1=eny 2=tsia		8
9	Does the community build latrines for those unable to do so in order to ensure ODF?	1=Always 2=Sometimes 3=Never	Misy fandraisana anjara @ fanamboarana ny lava-piringa ho an'ireo sahirana ve eto aminareo?	1=mandavan-taona 2=indraindray 3=tsy misy		9
10	Is the community ODF now?	1=Yes 2=No	Voalaza ofisialy ve fa "Tanana tsy misy fangerena ankalamanjana" ny vohitrareo?	1=eny 2=tsia,		10
11	How many latrines are there in the village?	Number	Firy ny isan'ny kabone eto amin'ny tanana?	Isany		11
12	How many latrines are shared by more than one family?	Number	Firy ny isan'ny kabone itambarana fianakaviana mihaotra ny roa?	Isany		12
	Sanitation Ladder		**Dingana vita momba ny fahadiovana**			
13	Since the community was declared ODF, how many latrines have collapsed?	Number	Firy no isan'ny lava-piringa rava hatramin'ny naha ODF ny tanananareo?	Isany		13
14	Of that number, how many have been rebuilt and are being used again?	Number	Firy tamin'ireo no efa potika ka naverina natsangana indray?	Isany		14

15	Since the community was first declared ODF, how many households have made replacements to the latrines? (I.E NOT AFTER COLLAPSE)	Number	Hatramin'ny naha ODF ilay vohitra, firy ireo tokan-trano nanatsara ny lava-piringany?? (Fanamarihana: tsy ireo izay taorin'ny faharavana)	Isany		15
15a	Was the community sensitized for improved and sustained latrines in your community?	1=yes 2=no	Efa nisy **nanentana** ho amin'ny fanatsarana ny kabone ho manara-penitra sy maharitra ve teto amin'ity vohitra ity	1=eny 2=tsia		15a
15b	Did your community receive training on how to improve your latrine and how to make it durable in your community?	1=yes 2=no	Efa nisy **nampianatra** ho amin'ny fanatsarana ny kabone ho manara-penitra sy maharitra ve teto amin'ity vohitra ity	1=eny 2=tsia		15b
16	What latrine replacements have been made?		Inona ny fanatsarana nataony??			16
16a	o Replacements of same quality	Number	Natao nitovy t@ kalitaony teo aloha	Isany		16a
16b	o Better latrine sanplats	Number	Natao tsaratsara kokoa (sanplats etc)	Isany		16b
16c	o Better superstructures	Number	Natao foto-drafitsara manara-penitra	Isany		16c
17	Is there a seller/s of sanitary wares in the locality?	1=Yes 2=No	Misy mpivarotra kojakoja na fitaovana momba ny kabona ve eto aminareo?	1=eny 2=tsia,		17

	Hand washing with soap		**Ny fanasana tanana amin'ny savony**			
18	Has the community had sensitisation on hand washing with soap?	1=Yes 2=No	Efa nahazo fanentanana momba ny fanasana tanana @ savony ve io vohitra io?	1=eny, 2=tsia		18
19	Who was the triggering agency?	Name	Iza ny mpiara-miombonantoka nanatanteraka ny fanairana? (Declenchement CLTS) A enlever	Anarana		19
20	When did this take place?	YYYY	Oviana?	Taona		20

Questions to fill in after a visual inspection around the community

Fanontaniana fenoina rehefa avy nizaha ny tontolo manodidina

	ODF confirmation		**Fanamarinana ny tsy fisian'ny fangerena ankalamanjana**			
21	What proportion of the homes you visited have functioning and used latrines? (refer particularly to the guidance below)	1 = Almost all (80-100%) 2 = Most (approx 60-80%+) 3 = Many (approx 40-60%) 4 = Some (approx 20-40%) 5 = Few or None (<20%)	Firy ireo tokan-trano notsidihinao no mampiasa lava-piringa? (jereo ny torolalana ery ambany).	1 = zary izy rehetra (80-100%) 2 = ny maro an'isa (approx 60-80%+) 3 = Maro (eo @ 40-60%) 4 = Sasany (eo @ 20-40%) 5 = vitsy na tsy misy (<20%)		21
	Toilet quality		**Ny kalitaon'ny kabone**			

22	What is your assessment of the quality of the sanplats and superstructures, especially to last periods of rough weather etc - will they last?	as above	Ahoana ny fandrefesanao/na ny hevitrao momba ny fahatsaran'ny DSP sy ny foto-drafitrasa, indrindra taorian'ny andro ratsy, mety haharitra ve ny fampiasana ny lava-piringa?	Toy ny t@ 21		22
23	What proportion of houses had very clean toilets ?	as above	Firy isan-jaton'ny tokantrano no manana lavapiringa madio?	Toy ny t@ 21		23
	Hand washing with soap		**Ny fanasana tanana amin'ny savony**			
24	What proportion of houses had a hand washing point within around ten paces of the latrine?	as above	Firy isan-jaton'ny tokatrano misy toerana fanasana tanana, fa miataka lavitra ny lava-piringa??	Toy ny t@ 21		24
25	What proportion of houses had water available at that handwashing point (e.g. a functioning tippy-tappy: you can get a household member to indicate how to use it to confirm their use)?	as above	Firy isan-jaton'ny tokantrano no manana rano vonona avy hatrany azo hanasana tanana (ohatra hoe TiPPY-Tap :afaka nanao fanandramana niaraka t@ solontenan'ny tokantrano, ny fomba fampiasa azy ve enao)?	Toy ny t@ 21		25
26	What proportion of houses had soap or other cleaning agent present at the hand-washing point which is clearly being used	as above	Firy isan-jaton'ny tokantrano no manana savony na zavatra mahasolo ny savony ve teo @ toerana fanasan-tanana izay hita fa afaka ampiasaina/na nampiasaina??	Toy ny t@ 21		26

Annex D2 ODF/HWWS Questionnaire – second tranche fieldwork

Section 1 – Water Supply: Fotodrafitrasa famatsiana rano fisotro madio safe water supply infrastructure

Mila mahazo ny valin-teny ho an'ny fanontaniana dimy voalohany amin'ny olona hadihadiany voalohany ny mpanadihady, ary tokony manontany vehivavy farafahakeliny 9 hafa isaky ny vohitra ho an'ny fanontaniana faha-6 sy faha-7. The enumerator must obtain the answers for the first 5 questions from the first interviewee, and then she/he must interview a least nine more women in every village (place) for question 6 and question 7

	Water System	
1	Misy fatsakana rano madio manarapenitra ve eto amin'ity vohitra ity? **Is there a water point where one can fetch safe water in this place (village)?**	1=Eny **Yes** 2=Tsia **No**
2	1: paompy voizin-tanana **hand pump** 2: paompy mekanika (elektrika, mandeha lasantsy na mandeha amin'ny herin'ny masoandro) **mechanic pump (using electric power, petrol/gasoline or solar energy)** 3: AEPG **gravity scheme** 4: Karazany hafa fa misy fotodrafitrasa manadio rano **others but with a water treatment facility**	Ampidiro 1, 2 3, or 4 **Enter 1, 2 3, or 4**
3	Oviana no naorina ny fotodrafitrasa rano fisotro madio? (taona nahavitany) **When was this waterpoint set up? (Year of completion)**	Taona **Year**

4	Efa nasiana fanarenana na fanavaozana ve ny fotodrafitrasa rano fisotro madio? (valio ny taona naverina nanamboarana azy – na 9999 raha ohatra mbola tsy nokitihana) **Have this waterpoint been already repaired or replaced up? (Year of repair or replacement – or 9999 if never need fixing)**	Taona na 9999 **Year or 9999**
5	Mandeha tsara ve ny rano androany? (Amafisin'ny mpanadihady @ fanamarinana hita maso) **Is the waterpoint infrastructure ~~currently~~ working properly today? (the enumerator must check and see the infrastructure)**	1 = Eny **Yes** 2 = Tsia **No**
6	Na dia mandeha tsara ary ny paompy fatsakana rano madio, mbola mampiasa rano hafa tsy manarapenitra ve ianareo (ohatra hoe renirano, na loharano na dobo/farihy)? **Even if the water point is working properly, do you still fetch water at unsafe water sources (like rivers, spring source or traditional well or lake)?**	1= eny mandavataona - izany hoe mampiasa rano tsy manarapenitra foana @ fotoana rehetra; **1 = Yes always – which means they are always using unsafe water** 2 = Indraindray – izany hoe arakaraka ny zava-misy no ampiasana na tsia rano tsy manara-penitra **2 = sometimes - which means that depending on the situation they are using or not unsafe water** 3 = Tsia mihitsy – izany hoe raha mbola mandeha ny rano manarapenitra dia io ihany no ampiasaina @ ilaina rehetra (afa-tsy ny biby fiompy) **3 = Never - which means that as long as the water point is functional on the situation they are using it (this does not include/refer to animals and livestock)**
7	Raha **(1)** na **(2)** ny valin'ny fanontaniana faha-6, dia anontaniana hoe:"inona no antony?" AFAKA SORATANA VALINY MAROMARO – AZA MAIKA FA ALEO ANONTANIANA TSARA NY VALINY **If the answer to question 6 is (1) or (2), the question "why?" should be asked**	1= mampiasa rano madio rehefa misotro sy mahandro (ohatra) ary rano hafa toy ny renirano sy ny dobo rehefa manasa lamba …sns … ; **1 = using safe water for drinking and cooking (for example), and water from the river or the pond to wash clothes..etc…** 2 = Ratsy kokoa ny tsiro na ny fofon'ny rano avy @ paompy noho ny avy eny an-drenirano na eny @ dobo…

	YOU CAN WRITE DOWN MANY ANSWER/REASONS – DON'T HURRY UP ITS BETTER TO TAKE TIME AND ASK IN A CLEAR MANNER TO HAVE GOOD AND COMPLETE ANSWERS	**2 = the taste or the smell of the water from the waterpoint is worse than for the water from the river or the pond** 3 = Lafo loatra ny rano @ paompy dia aleo matsaka eny an-drenirano… **3 = the water at the water pump is too expensive, and we prefer to fetch water at the river or the pond…** 4 = Ilaharana be loatra ny rano @ paompy **4 = the queue is too long at the water pump** 5 = Lavitra loatra ny paompy na koa sarotra be ny mandeha an-tongotra matsaka rano, miohatra amin'ny matsaka eny an-drenirano na dobo… (olona tsy tra-pahasembanana fa matanjaka tsara.) **5 = the water pump is too far away or fetching water is a too difficult walk, fetching at the water pump is too complicated in comparison with fetching at the river or or the pond… (for people with no disability with no handicap)** 6 = Lavitra loatra ny paompy na koa sarotra be ny mandeha an-tongotra matsaka rano, miohatra amin'ny matsaka eny an-drenirano na dobo… (olona tra-pahasembanana) **6 = the water pump is too far away or fetching water is a too difficult walk, fetching at the water pump is too complicated in comparison with fetching at the river or at or the pond … (for people with disability)** 7 = Tsy fantatro mialoha ny hialako ato an-trano raha mandeha na tsia ny paompy, dia aleoko matsaka avy hatrany eny an-drenirano mba tsy handany fotoana. **7 = when I leave my house to fetch water I don't know if the water pump is functional or not , I'd rather prefer fetch water at the river or pond to not waste my time** 8 = Tsy avelan'ny olona hafa ato anatin'ny fiaraha-monina mampiasa ny paompy izaho (izahay) satria mahantra. **8 = the other people in the community doesn't allow me (us) to use the water pump because we are poor** 9 = Tsy avelan'ny olona hafa ato anatin'ny fiaraha-monina mampiasa ny paompy izaho (izahay) satria tsy iray foko na tsy mitovy finoana.

		9 = the other people in the community doesn't allow me (us) to use the water pump because we are not from the same tribe or we don't have the same religion 10 = Mahatsara ny fifandraisana ara-piaraha-monina kokoa ny miresaka samy vehivavy eny amoron-drano (na dobo na renirano) eny rehefa matsaka, noho ny hoe milahatra eny amin'ny paompy. **10 I find it better to collect water where I can sit with my friends and chat at the riverside or by the pond, rather that wait in a line at the waterpoint.** 11 = Afaka mandro mitokana tsy misy mpanelingelina eny an-drenirano (dobo,…) rehefa matsaka, izay tsy afaka ataoko eny @ paompy. **11 = we can bathe in privacy at the river (or pond) when we fetch water, we can't do that at the water pump** 12 = Misy toerana afaka hangerena milamina tsara tsy misy mpanelingelina amin'ny lalako mandeha matsaka eny an-drenirano (dobo,…), izay tsy afaka ataoko eny @ paompy. **12 = there is as quite place where i can defecate in peace on my way to the river (or pond)I cannot do this when I go to the water pump** 13 = antony hafa (afaka soratan'ny mpanadihady amin'ny taratasy manokana ny valinteny ary taterina @ INSTAT) **13 = other reason please probe for any other answer (the enumerator can write it down separately on a sheet of paper and report it back to INSTAT)**

Section 2 Open Defecation: Fangerena ankalamanjana Open defecation

This is a series of questions to be asked of the WASH Committee. Fanontaniana apetraka amin'ny komity WASH. Questions that should be addressed to the WASH Committee

1	Efa voalaza fa afaka tanteraka amin'ny fangerena ankalamanjana (ODF) ve ity vohitra ity? **Has this place ever been declared open defecation free ODF ?**	1=Eny **Yes** 2=Tsia **No** 3=Tsy hay **Doesn't know**
2	Raha eny, tamin'ny taona firy no voalaza fa afaka tanteraka amin'ny fangerena ankalamanjana (ODF)? **If yes, in what year has it been declared open defecation free ODF ?**	Taona **Year**
3	Iza no nanao ny fanambarana fa afaka tanteraka amin'ny fangerena ankalamanjana ity vohitra ity? **Who declared this place open defecation free ODF ?**	1: ny fokonolona **the community** 2: Ny mpanamora **The facilitator** 3: Hafa **Other** 4: Tsy hay **Doesn't know**
4	Iza no nanatanteraka ny programa CLTS niarahana tamin'ny fokonolona teto? **Who was in charge of the CLTS program with the community ?**	Anarana **Name**
5a	Vao vita ilay fanambarana fa afaka tanteraka amin'ny fangerena ankalamanjana (ODF) ity vohitra ity, nanaraka avokoa ve ny 100% ny mponina? **When this community was declared open defecation free ODF :** **1) did 100% of the community practise ODF or** **2) Does some people still practice open defecation even at that time?**	1=Eny **Yes** 2=Tsia **No** 3=Tsy hay **Doesn't know**
5b	Raha tsia ny valin'ny fanontaniana 5a, firy isan-jaton'ny mponina no mbola manger ankalamanjana amin'izao fotoana iresahantsika izao?	Isa % mangery ankalamanjana
6	Nisy olona na vondron'olona na mpiantsehatra hafa nanamarina ny maha tanana afaka @ fangerena ankalamanjana teto ve? **Is there someone, or a group of people, or other stakeholder(s) that verified the open defecation free status of the village?**	1=Eny **Yes** 2=Tsia **No** 3=Tsy hay **Don't know**
7	Misy dina nifanaovanareo teto ve mandrara ny fangerena ankalamanjana ho an'ny mponina na ny mpandalo eto? **Is there a dina (traditional law) between community members prohibiting the open defecation**	1=Eny **Yes** 2=Tsia **No** 3=Tsy hay **Don't know**

	for the community and for any visitors?	
8	Ny komity WASH na ianareo fokonolona ve manaramaso tsara ny fanarahana sy ny fampiharana io dina io? **Do you or the WASH committee are seriously following the application of the dina ?**	1=Eny **Yes** 2=Tsia **No** 3=Tsy hay **Don't know**
9	Ny fokonolona ve manangana kabone ho an'ireo tsy afaka manao izany mba ahafahana mahatratra sy manamarina ny maha-ODF ilay Tanana? **Does the community build latrines for those that are not able to build one to reach the open defecation free status?**	1= Izany foana **Always** 2 = Indraindray **Sometimes** 3 = Tsy manao mihitsy **Never**
10	Mbola ODF na afaka amin'ny fangerena ankalamanjana tanteraka ve ny tanananareo **amin'izao fotoana iresahantsika izao?** **Is the village still ODF or open defecation free right now (while we are talking)?**	1=Eny **Yes** 2=Tsia **No** 3=Tsy hay **Don't know**
11	Raha tsia (fanontaniana 10), firy isanjato eo ho eo no niverina nangery ankalamanjana? **If "No" (question 10), approximately what percentage of the population is back to free defecation?**	% **%**
12	Firy ny isan'ny kabone ato amin'ity vohitra ity? **How many latrines are in the village?**	Isa **Number**
13	Firy ny kabone iraisan'ny tokantrano mihoatra ny iray? **How many multifamily (multi-households) latrines are in the village?**	Isa **Number**
14	Ny Komity WASH ve mampahatsiahy ny fokonolona ny amin'ny tokony mila hitazonana ny maha-ODF? **Does the WASH committee still reminding the community the need to remain ODF**	1=Eny **Yes** 2=Tsia **No** 1.
15	Efa nisy fitsidihana nataon'ny tompon'andraikitra momba ny fahasalamana avy amin'ny kaominina ve hatramin'ny naha-ODF anareo, nanaovana jery todika ny fandrosoana na nahafahana nanao tan-tsoroka na fa famporisihana ny mba hitandroana ny maha-ODF? **Do people in charge of health from the municipality ever come to visit the the village since its**	1 = Eny, matetika **Yes frequently** 2 = Eny, indraindray **Yes sometimes**

	became ODF, did someone look back to check progress or get support or encourage you to keep your open defecation free status?	3 = Tsia **No** 4 = Tsy hay **Don't know**
16	Ny mpiara-miombon'antoka nanao ny fanairana teto ve mbola niverina nitsidika ny vohitra hatramin'ny naha-ODF, nanaovana jery todika ny fandrosoana na nahafahana nanao tan-tsoroka na fa famporisihana ny mba hitandroana ny maha-ODF? **Do the stakeholders that trigered the village still came back since the village became ODF, did someone look back to check progress or get support or encourage to keep the open defecation free status?**	**1 = Eny, matetika Yes frequently** **2 = Eny, indraindray Yes sometimes** **3 = Tsia No** **4 = Tsy hay Don't know**
17	Firy kilaometatra miala eto no misy mpivarotra momba ny resaka fahadiovana (mpivarotra kabone manarapenitra na dalle) akaiky indrindra? **How many kilometers from here is the nearest shop selling hygiene products (selling slabs, superstructures, other sanitation goods))?**	**Soraty eto ny elanelana Km** **Write here the distance in kilometers**

Section 3 – Transect Walk: Fandehandehanana mizaha ny manodidina Walk to see around

Ny famaranana ny fanadihadiana dia ny fandehanana mizahazaha ny ao anaty fiaraha-monina, ka ahafahan'ny mpanadihady manamarina araka ny hitany, indrindra ny hafonjan'ny valim-panontaniana voarainy.

To end the questionnaire interview there will be a look around in the community, to enable the enumerator to cross check the answer collected

Mazava loatra fa miankina amin'ny ho enti-manatanteraka sy ny faneken'ny olobe mpitarika ao an-tanana (izay tokony angatahana ary tokony ho azo ny fanekeny), ny halavan'ny fotoana ho lany amin'io.

It's clear that this exercise depends on agreement from the village wise men leading the village (we should ask for their agreement and we should have it), and how long is the time allocated to this.

Maro ny taridalana momba ny fanaovana fandehandehanana mizaha ny manodidina fa amin'ny ankapobeny dia mandeha eny anivon'ny fiaraha-monina, mandinika ny tena fiainany.

There are many guidelines on how to conduct "transect walks" on the internet but in general, the transect walk allows an informal view of real life in the community, concentrating on particular issues.

Hirika iray fanararaotra ahafahana miresaka @ olona anatin'ny fiaraha-monina izy io, ary ahafahana manamarina izay voalaza, indrindra ny firesahana amin'ny ankizy izay ahazoana valin-teny tena marina.

This is an opportunity to discuss with people in the community, and to cross check what have been reported, especially talking with children that will give true answers.

Mazava loatra, tsy afaka hoe ny fanontaniana rehetra no hohamarinina, saingy mariho tsara hoe afaka manamarina ireto manara ka ireto farafaharatsiny:

It's clear that it's impossible to cross check all the questions, but be sure to cross check at least the following:

1. Ny momba ny paompy fatsakana – afaka hamarininao ve ny fandehanany miohatra amin'ny valiny azo? Raha misy tsy fitoviany, ahitsio ny valiny ao anaty fanontaniana. Tsy ilaina tatitra akory ny momba izay fa mila valiny marina tsara fotsiny.
- Regarding the water pump – can you cross check how is it working vs what have been said in questions answers? If there are some difference, correct the answer in the questionnaire (Q5). There is no need to report on this, we only need to have true answers
2. Hitanao maso ve (na henoina ny fofony) – na hamarinin'ny ankizy ao amin'ny tanana – fa mbola ODF na tsia ilay tanana. Ny fisian'ny tain'olombelona miparitaka no tena manamarina indrindra izany.
- Did you see (or smell) – or have it been confirmed by the children living in the village – if the village is still ODF or not. Seeing human faeces spread will the best confirm this answer
3. Manana kabone isan-tokantrano ve? Ampiasainy ve izany? Anisan'ny teboka iray hanamarinana ihany koa izany.
- Do they have a latrine per household? Are they using it? This is one element that confirms it
4. Misy petra-pitaovana fanasana tanana ve isan-tokan-trano? Ahafahana manamarina ilay fanontaniana momba ny fanasana tanana tamin'ilay fanadihadiana teo aloha io.
- Are there handwashing stuff in every household? This can confirm what have been said with the question on hand washing in the questionnaire

Azafady ataovy tatitra toy ity manaraka ity:

Please do report its as indicated below:

T1	Porofon'ny fangerena ankalamanjana Evidence of open defecation	1: Hitan'ny mason a fofonin'ny orona ny porofo fa mbola misy olon-dehibe mangery ankalamanjana you see or smell the evidence that some adults are practicing open defecation 2: Tsy misy porofo tazana fa saingy misy miteny fa mbola misy mangery ankalamanjana There is no visual evidence but some people say that some other people are practicing open defecation 3: tsisy porofo mivaingana no sady voalaza fa efa afaka tanteraka amin'ny fangerena ankalamanjana hatramin'izao There is no evidence and is it said that the place is free from open defecation
T2	Habetsaky ny tokantrano manana kabone? Proportion of household having latrines?	1: Izy rehetra na mila ho izy rehetra All of them or almost all of them 2: Ny ankamaroany (telo ampahefany 3/4 na mihoatra) most of them (three quarter 3/4 or more) 3: Sasantsasany (manodidina ny atsasany 1/2) some of them (around half 1/2) 4: Vitsivitsy (latsaky ny fahefany <1/4) few of them (less than a quarter <1/4)

		5: Tsy misy na mila ho tsy misy No one or almost none of them
T3	Habetsaky ny tokantrano misy petra-pitaovana fanasana tanana amin'ny savony, akaiky ny trano ary ampiasaina? Proportion of household having stuffs for hand washing purpose, soap, near the house and utilised?	1: Izy rehetra na mila ho izy rehetra All of them or almost all of them 2: Ny ankamaroany (telo ampahefany 3/4 na mihoatra) most of them (three quarter 3/4 or more) 3: Sasantsasany (manodidina ny atsasany 1/2) some of them (around half 1/2) 4: Vitsivitsy (latsaky ny fahefany <1/4) few of them (less than a quarter <1/4) 5: Tsy misy na mila ho tsy misy None or almost none of them

Note – the Malagasy translation was re-checked after this point and some fine-tuning made.