



M&E Update 1 Sanitation in Niassa Province

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Introduction

WaterAid (Moçambique) has been conducting M&E work in water supply and sanitation for 3 years now, but the results have generally been for internal consumption or been included in “Lessons from the Field” reports. Moreover, the M&E system has been evolving. As such, the processes and questions explored have been fine-tuned over time as problems with the approach have emerged.

We are now at a stage where the approach to quantitative M&E is fairly sound, thanks in large part to the support of WaterAid staff and partners not only in Moçambique but also from Tanzania, Malawi and Zambia.

M&E Updates will therefore be written up more quickly in the future, and over time we will be able to compare results as questions explored stabilise.

This M&E Update focuses on sanitation results from the end of 2002.

Background

At the end of 2002, WaterAid's partners had supported families with a total of 331 Fossa Alternas, 11 “Improved Latrines” and 6 improvements to traditional latrines.

The M&E results described here are from:

- 45 Fossa Alternas (14% of total supported)
- 5 “Improved Latrines” (45% of total supported)
- 34 “Traditional Latrines” which have generally been built by families with little/no external support

The main problem with the results is that many of the questionnaires were lost in the handover between WaterAid staff from Malawi, Tanzania and Zambia and WaterAid Moçambique's partners. This should not happen again.

The M&E system is designed to assess whether the latrines are being used effectively and hygienically, and whether they in fact are creating the necessary conditions for improved health. The number of latrines we have supported are in fact irrelevant unless we can show that they are being used by all in a hygienic manner.

The results are from Lichinga, Mandimba and Maúa. “Improved Latrines” have historically been supported by donors and government in the city of Lichinga but not very far outside the city.

Results - General

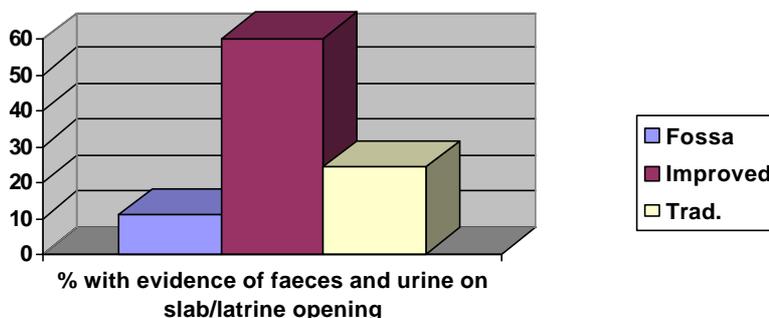
Families have had their latrines for varied lengths of time, with “traditional latrines” understandably being used for the longest periods of time. Forty-four percent of the “traditional latrines” surveyed had been in use for over 26 months, whereas only 6% of Fossa Alternas and only 1 of the “improved latrines” had been in use for comparable periods.

Family sizes are generally in the 4-6 people range, which is consistent with demographic information from Niassa.

All the latrines were in use although further investigation is needed to be clear on whether all family members use these latrines at all times of the day and night.

Results – Hygiene

The hygienic use of the latrines is varied as the graph below shows. The graph shows that a number of latrines had evidence of faeces and urine on the slab/latrine opening, which is a health hazard. Even though the figures are relatively small it suggests that improvement in this area is needed if pathogen rich faeces and urine are to be effectively removed from the immediate environment (perhaps the main goal of sanitation).



Handwashing is critical for improved health. M&E work tries to determine whether handwashing facilities/infrastructure (water, soap or other handwashing materials) are available at the latrine and whether there is evidence that these are being used. The results suggest that families with Fossa Alternas are at least most able to wash hands after using the latrine. Ninety-seven percent of families with Fossa Alternas have a handwashing area, 71% had water available on the day of the visit (during the dry season when water is hardest to acquire) and 41 percent had cleansing materials in the washing area, and 86% of the handwashing areas were clearly being used (water on the ground, soap showing signs of use... even though some families had little water left).

The reason these results are positive (although far from ideal) is that people who use Fossa Alternas are including ash and soil mixes in their latrines after each use. Importantly, families are suggesting that cleansing materials are not needed as the ash and soil used for the Fossa are

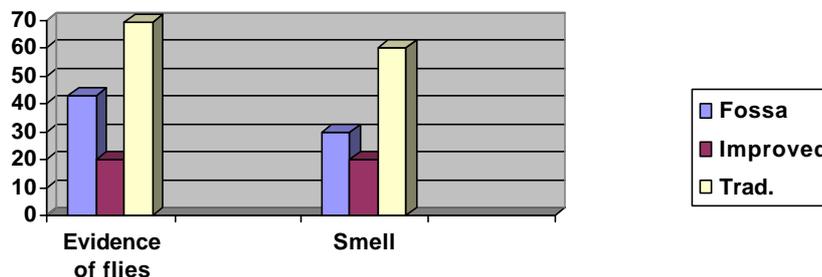
natural cleansing agents. As such, the fact that 86% of the families are using their handwashing facilities is encouraging. Again, work needs to be done to verify that all family members are washing hands after using the latrine or cleaning a child, but informal interviews suggest this seems to be the case (again, because people are saying they want to get the soil/ash off their hands).

Handwashing facilities/infrastructure is evident within families who have improved or traditional latrines, but perhaps not as strongly as for Fossa Alternas. Only 22% of the families with traditional latrines have handwashing materials. Water is available at traditional latrines (78%) and 60% at improved latrines although the water tends to be quite far from the latrine itself.

Flies and Smell

Flies were evident in all the latrines as was smell. The flies in the Fossa Alternas came from families who were not applying enough ash and soil to completely cover the excrement. Some families have expressed a worry that the pits in a Fossa will fill too fast so they have been sparing in their application of ash/soil. That said, this is a trend we have seen in other villages until the first pit is excavated. Increased quantities of ash and soil are included once people see that the faeces and urine do in fact transform as has been the case in Maiaca. This nevertheless highlights a problem that needs to be addressed.

Improved latrines tend to not have as many flies and smells when the latrines are first built as the pits are deeper and people do include some soil and ash. Families tend to complain about flies and smell as the 3 metre pit fills. Traditional latrines are generally characterised by flies and smell.



Positive and Negative Qualities of Latrines

Family perceptions of their latrines are important. Positive aspects of these latrines included:

- 86% of families with Fossa Alternas said that they liked the smaller pits of the Fossa Alterna which meant that they do not collapse during the rains and that the latrines are a permanent sanitation solution. Few spoke of agriculture, although this may come over time as more people start using their latrines.
- 70% of the families with traditional latrines felt the biggest advantage of these latrines was that the family no longer needs to defecate in the bush
- 40% of the families with improved latrines liked the fact that they no longer defecated in the bush and that it was an improvement over a traditional latrine

None of the families with Fossa Alternas had any criticisms of the system, which was somewhat surprising. In contrast, 77% of those with traditional latrines wanted to upgrade their systems as they felt that traditional latrines are unsafe and tend to collapse during hard rains. And 40 percent of the families with improved latrines felt that the problem of smell was significant or would become significant when the pits started filling more.

Fossa Alterna – Some Specifics

EcoSan systems in general require more management than conventional pit latrines. As such, a series of additional questions were asked to see whether these latrines were being managed well.

Eight-four percent of the families visited had ash and soil in their latrines, although the data from Maúá shows that in this district the use of ash and soil is universal as compared to gaps in Mandimba and Lichinga. This is largely because the “ash/soil” message is being delivered constantly in Maúá and somewhat sporadically in the other districts.

Eleven percent of the first pits had been filled and two of these had been excavated (in Maiaca, Maúá District). Three of these 5 filled in 1 year while another took over 15 months to fill, which is positive.

Finally, families are making investments in their latrines in areas that started with almost a full subsidy as the programme started. Twenty-seven percent of families have built permanent superstructures, added more bricks and blocks to their systems, or made aesthetic improvements to their latrines. As all the latrines are being used this suggests that a high subsidy may not have been such a bad thing from a “use” perspective. Some argue that a subsidy leads to erratic use of the subsidised infrastructure but our work suggests this may not be the case.

Conclusions

It seems that the goal of ensuring that latrines are being used is happening, and that the foundations for better hygiene exist although improvements are needed.

Key gaps in the programme include:

- Handwashing and the need to evaluate whether all members of families are washing hands after defecating or cleaning a child. Evidence suggests that handwashing is more prominent in families with Fossa Alternas than the other systems but handwashing in general can be improved
- Faeces and urine on the slab/latrine hole is a sign of poor hygiene and a real source of risk. The programme could improve its hygiene work in these areas.
- Flies and smells are a problem and need to be addressed

This raises the issue that the biggest weakness of our programme is that we are driving the programme on sanitation lines with a strong but imperfect hygiene programme. In contrast, the work coming from Bangladesh shows that a stronger hygiene programme where communities drive a sanitation solution may be considerably better.

Future M&E (like the one planned for April 2003) should go smoother than this one however, and this should show how things have changed after the heaviest rains in Niassa for quite a while.