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THE FUTURE OF WATER, SANITATION AND HYGIENE: INNOVATION, ADAPTATION AND ENGAGEMENT IN A CHANGING WORLD

CLTS reinvigorates water and sanitation project

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A conventional water and sanitation project in northern Mozambique was mostly focused on water provision by default as sanitation got bogged down in providing incentives, such as cement slab provision for the construction of "improved" latrines. Coverage lagged behind as adoption and the expected technology transfer did not take place. Following introduction of the participatory CLTS strategy, sanitation has become the core of the project, reinvigorating it and giving the project staff a renewed sense of purpose. Sanitation is now leading the way, coverage exceeds that of water, communities and government partners are enthused and neighbouring communities are being seen to imitate the example of this infectious strategy. Handwashing has also been added to the CLTS methodology to make it more "complete".

Introduction

Mozambique has made some progress in achieving the clean water access and access to adequate sanitation MDG goals; however rural indicators are far behind the rest of the country (water -26%; sanitation -19%; National Statistic Institute (2007)).

The CARE HAUPA (Portuguese acronym for Environmental Hygiene and Productive Use of Water) Project began in July 2004 in northern Mozambique and with funding from the Swiss Development Cooperation (SDC). In October 2006 the Embassy of the Kingdom of the Netherlands in Mozambique (EKN) provided additional funding for the period ending in December 2011.

Initial project

From the outset, the project included the provision of new and rehabilitated water points along with sanitation and hygiene promotion in three districts in Cabo Delgado province, and two districts in Nampula province, in northern Mozambique. Additional components included the productive use of water (e.g. vegetable gardens), open hand dug well improvement, and a number of innovative approaches and technologies (rope pumps on wells, savings groups) to be introduced and tested by the project.

The project also built capacity for water and sanitation project execution by local actors including national NGOs, the small-scale private sector (artisans), and district and provincial governments. The National Water Policy directives (demand principle, minimum community size) with respect to rural water supply and sanitation were to be applied. Approximately 300,000 people in the five-district area were expected to benefit from the project interventions.

Water

Firstly the project established waterpoints in communities following the "demand principle" approach of the National Water Policy (DNA, 2004) of the National Water Directorate. Interested communities would be placed on a list. Those communities who contributed, roughly \$100 (2,500 meticais), would then, subject to funding availability and vetting by the district government, benefit from a geophysical survey to determine the presence of underground water, for the purposes of drilling a tubewell. If a tubewell was successfully drilled, it was equipped with an "AFRIDEV" handpump and a gender balanced WASH committee of 12 persons (4 O&M; 4 management and 4 hygiene and sanitation) was trained and set up to manage the waterpoint and control user fees.

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Sanitation

During the years 2004 to 2007, there was virtually no effective sanitation component in the project. In 2008 sanitation was made somewhat more deliberate. The project began by promoting community sanitation through the construction of demonstration pit latrines and improved school pit latrines. Concrete slabs were furnished by the project to selected beneficiaries. The idea was that these demonstration latrines would serve as a catalyst for further adoption of improved latrines. 500 family improved pit latrines, or 100/district were constructed accompanied by the free distribution of concrete slabs. A further 108 concrete slab pit latrines were established in administrative post centres, leaders houses and public buildings like jails. 30 school latrines (in blocks of 4 stalls each) were also constructed, divided more or less equally among the 5 districts.

Redesign

When this approach failed (Subsequent autonomous or spontaneous latrine construction by adopting households did not take off), a redesign of the project was commissioned in mid 2008. Experts were brought in and one of their principal recommendations was to refocus on sanitation implementation, where progress was seen as woefully behind project targets (Narkevic, 2008). The new approach was to begin with water provision followed by 100% sanitation in targeted communities. The redesign proposal also simplified project activities, effectively eliminating rehabilitations, irrigation schemes and savings groups. The PHAST methodology, an extensive and (we thought) laborious methodology was still to be used to awaken the need for sanitation in the communities targeted. Concrete slab production, distribution and improved pit latrine implementation targets were to be ramped up drastically as can be seen from Table 1 below, with similar targets (+/- 74,000 people) for both water and sanitation.

Table 1. Evolution of project coverage targets in water supply and sanitation											
Location	SDC + EKN proposals	Results 2004-2007 (a)	Estimated results 2008 (b)	Proposed results 2009-2011 (c)	Expected end of-project totals (a+b+c)						
Entire project area,	408,700 (wat)	124,000 (wat)	113,000	74,000 (wat)	311,000						
persons served	37,000 (san)	n/a (san)	6,026	74,950 (san)	80,975						
Cabo Delgado (wat)	n/a		75,500	39,500	115,000						
(san)			3,216	43,850	47,066						
Nampula (wat)	n/a		37,500	32,000	69,500						
(san)			2,810	34,884	37,694						

Narkevic, Oct 2008

Project sanitation progress following redesign

In 2009, the production of slabs began in earnest and 4,500 improved latrines (about 900 for each of the 5 districts) were planned. The initial idea was to identify vulnerable people (widows, elderly, female headed households) in each village where the project was operating and provide them with the slabs. What worked out in practice was that those who were connected to the village leadership benefited first. In most cases, these were those who already had household "traditional" latrines, so that the sanitation coverage was in effect not expanded. Early on in 2009, this drawback was recognized, so a decision was taken to cover at least 60% of a given community, in the expectation that the remaining 40% would feel the pressure to build their own latrines. This resulted in a reduction of the number of beneficiary communities as the slabs were now concentrated in fewer villages.

Drawbacks encountered to improved latrine sanitation approach, following redesign:

- There was an effective disincentive to spontaneous latrine construction, as households were now expecting a free slab distribution, so sanitation as conceived by the project became self-limiting;
- There was a misunderstanding as to what was meant by the word "latrine", even amongst government circles, it was thought that only an "improved" latrine, that is with one with a slab was a "latrine";
- There was jealousy between beneficiary and non-beneficiary communities and within communities between those who were lucky enough to receive slabs and those who were not;

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• Even amongst those who benefited from the slabs, there was a measure of reluctance to actually fit the slab and complete the latrine, possibly as it was seen as "imposed". There was a lot of motivation and "mobilization" of the slab beneficiary households to finish. Only 2,816 households or 62.5% of the total of 4,500 slabs distributed, equating to an overall community sanitation coverage of 29%, actually completed their latrines by March of 2010, nearly a year after the programme was launched. Thus a partial "success" could be said to have been achieved, but one that was clearly unsustainable, as no further "improved" latrines were spontaneously constructed in the target villages.

Transition to a CLTS-based sanitation strategy, exchange visit

What had not changed was the project goal of 100% sanitation in target communities; however how to get there seemed as elusive as ever.

In September, 2009 a visit went ahead to a project in the centre of the country (Dutch government and UNICEF funded "One Million Initiative"), which was successfully employing CLTS in a watsan programme. This exceeded all expectations in terms of again opening up the possibility of 100% sanitation coverage through the new "CLTS" method. Several sites were visited, including villages and schools that were beneficiaries of recent CLTS "ignitions" and follow up. It was apparent that latrine construction was spontaneous and throughout the village. A CLTS ignition was also witnessed.

It was striking that no PHAST methodology was used, rather shock and shame were used to dramatic effect, a direct link between lack of sanitation and diarrhoea was easily demonstrated and understood. It was also clear that local materials and the latrine design were not imposed or prescribed. Many people believe that cholera is caused by witchcraft or malign human agency, including by government health workers.

Criticisms from CLTS exchange visit:

- 1. Most latrines did not have a roof covering, this meant that rain could erode and hole the latrine;
- 2. The cover over the hole was often peremptory, a dish or piece of mat and the seal was ineffective;
- 3. Hand washing was present, but appeared also unhygienic as mostly contained in a small receptacle, in which the water may or may not be changed, also often accompanied by ash near the latrine.

New CLTS based sanitation strategy implemented

It was decided to take into account all the experience gleaned from the visit and together with the project implementing partners, a new sanitation strategy for the project was elaborated. The following key changes to the sanitation approach were implemented:

- Shock and shame were used to maximum effect, reaction was provoked in receptive communities as they were shaken out of their lingering tolerance of unhygienic sanitation practices;
- 5-6 sanitation agents in receptive villages were elected by the communities following ignition, they then became part of the transition to ODF, these village agents were the basis of the soon to be formed WASHCOs, once a borehole was drilled;
- Handwashing was promoted through the tippy tap. This is one of the few incentives offered to participants, who received a 5litre plastic container and which they were shown how to install and use; it was felt that CLTS did not pay sufficient or explicit enough attention to the value of handwashing as a disease reducing measure;
- Water supply now followed sanitation, an inversion of the previous approach, CLTS was only ignited in a community prior to clean water provision, with the objective that 100% sanitation would be achieved prior to any drilling;
- Although there would be no prescription on latrine construction, general principles were laid out as a guide (roof, hole cover, handwashing) and more emphasis would thus be placed on durability and quality, communities were given guidance during construction through trained village promoters who were monitored by CARE staff;
- Care was taken to avoid selecting communities that had previously received latrine subsidies in the form of concrete slabs, later on in 2011, however previously subsidised communities will also be introduced to CLTS;
- Schools were involved in the CLTS process at the same time as the community, and in the case of schools slabs were provided to each school in accordance with the number of latrines that the participatory plan determined;
- The new strategy, with CLTS at its core was implemented in two phases; the first phase ran from February to May, as a pilot phase with 2 3 ODF communities planned per district, the second phase

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targeted every community that was a selected beneficiary of a tubewell (81 for 2010). A total of 93 ODF communities were planned for 2010.

CLTS implementation progress, results

Improved latrine coverage was 29% of households in targeted communities, CLTS coverage was 100% (HAUPA M&E database, 2011).

The tippy-tap handwashing device has also been eagerly adopted, with households still using the devices months after introduction and neighbouring communities have also been observed adopting the device.

Table 2. Improved latrine intervention conducted in 2009; CLTS initiative results measured end of 2010

District	# Improved latrink communities	# CLTS Communities reaching ODF status	# Improved latrines	# CLTS latrines	# People covered by improved sanitation	# People covered by CLTS sanitation	# Improved school latrines	# CLTS school latrines	Est. * improved school latrines students	Est. ** CLTS school latrines students		
Balama	7	14	548	2,298	2,907	9,881	0	11	0	2,100		
Montepuez	9	11	632	2,795	3,332	12,019	3	10	1,200	2,000		
Namuno	4	12	351	3,585	2,197	15,416	2	12	800	2,350		
Erati	12	10	697	1,752	3,711	7,534	4	3	1,600	500		
Mecuburi	14	9	588	1,072	2,825	4,610	3	0	1,200	0		
Meconta	0	2	0	378	0	1,625	0	2	0	300		
Total	46	58	2,816	11,880	14,972	51,085	12	38	4,800	7,250		

* 400 students / school, latrines with 4 stalls; **150-200 students / school, latrines with 4-10 stalls each Source: HAUPA M&E (2011)

Conclusion

The CLTS experience has proven to be a learning experience both in a particular sense for sanitation and also generally for development. In Mozambique we have been spinning our wheels on sanitation for years. The human cost in sickness and death has been well documented as well as the lag of sanitation behind clean water provision. Serious civil unrest has invariably followed cholera outbreaks and rioters have been shot by police. CLTS has been proven in the Mozambican context to have its place in unlocking households potential to act in concert within the community and provide their own sanitation, without the necessity for hand-outs and top down strategies. We often overlook the power of community participation and that as development professionals we should only act as facilitators and catalysts and tap into the well of energy that exists for change in all communities. As a result of the impact of this field experience, CARE Mozambique has adopted CLTS to its integrated watsan programme approach.

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