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The Potential Role of Local Monitoring in Changing Sanitation Behaviour

A Case Study in Nhlamankulo Urban District, Maputo, Mozambique

*Undertaken by the Nhlamankulo Urban District Administration, Neighbourhood Secretaries,
and Block Leaders, with the support and guidance of WSP-Mozambique*

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1 Background and Summary

In Maputo, Mozambique's largest urban centre and capital of the country, at least 33% of the population, who live mostly in peri-urban areas, still rely on inadequate¹ and, in many cases, shared, sanitation facilities – in some cases serving more than 30 families. The Urban District of Nhlamankulo contains some of the city's most densely-populated (>200 persons/ha) unplanned areas, including the neighbourhoods where this work was carried out (Chamanculo D, Aeroporto B and Unidade 7)².

Despite the gravity of this situation, families have to depend on their own initiative, seeking on-site sanitation solutions based on whatever limited information and financial resources they may have at their disposal. As a result, many sanitation facilities do not meet even basic standards of hygiene and structural safety. Although environmental health campaigns have reached these areas, many families are unaware of the real risks that their latrines can pose to themselves and their neighbours. Sanitation is not seen as a priority, and it is not uncommon for well-built houses with piped water, electricity and smart furniture to lack adequate sanitation facilities.

In this pilot activity, WSP introduced a monitoring process in the three neighbourhoods, involving local community leaders, the lowest tier of the municipal administration, with the aim of collecting information to improve sanitation planning. However, instead of merely informing future interventions by the authorities, the training and monitoring carried out resulted in community leaders and householders becoming spontaneously involved in improving their own conditions.

¹ Less than the government approved minimum of an "improved latrine", basically one with a concrete slab

² The total population of the three neighbourhoods is 39,000 inhabitants



Within less than six months, the results were encouraging: in a sample of those having poor sanitation facilities at the beginning of the monitoring activity, 79% had built a new latrine, upgraded an existing one, or significantly improved the cleanliness of the latrine, halving the overall proportion of unsafe latrines from 29% to 14%. This outcome clearly suggests a potential role for community-based monitoring in changing sanitation behaviour and improving sanitation services in peri-urban areas. Description of the Initiative

1.1 Context

This initiative had its origins in a decision by the Maputo Municipal Council to develop community-based monitoring of sanitation conditions, so as to have access to up-to-date information (previously lacking) on which to base decisions on where and how to intervene to improve sanitation. Such monitoring through local government institutions also forms part of the National Water and Sanitation Sector Information System currently being developed. In this pilot activity, WSP introduced a monitoring process in three neighbourhoods, with the Block Leaders having a key role.

The Block Leaders are respected citizens appointed by the Neighbourhood Secretaries³ and constitute the lowest tier of the municipal administration, although they are unpaid. They are responsible within their block (average size, 68 houses) for, amongst other things, mobilizing residents to look after public infrastructure and cleanliness. These responsibilities require the Block Leader to monitor all homes in his or her block, including access to water, sanitation and other basic services, making periodic reports to the Neighbourhood Secretary. However, these tasks are not always carried out, due to lack of capacity, resources and incentives.

The process of training the Block Leaders⁴ for monitoring water and sanitation was based on discussions on water and sanitation services, and the characteristics of the various options in use. As there was a lack of clarity about acceptable standards for sanitation, digital photographs showing the wide range of sanitation solutions adopted by residents of each neighbourhood were displayed to them, to inform a debate about what constitutes safe sanitation and adequate service levels, incorporating the users' perceptions. However, no particular emphasis was placed on discussing the linkages between health and sanitation, awareness of which appeared to be quite high already.

1.2 Step 1: Ignition - Local Leaders

Interestingly, these discussions with local leaders took an unexpected turn. The Block Leaders discussed not only what was acceptable or not, but reacted strongly and questioned whether such awful sanitation conditions really existed in their neighbourhood, when certain images were presented to them. Opinions such as *"This is not on my block!"*, *"It can't be!"*, *"How can anyone even consider this latrine? I want to go and see it!"*, were frequently expressed. This feeling of disgust at the community level (in this case, the Block Leaders) is very similar to that promoted in Community-Led Total Sanitation (CLTS) triggering, and in a similar way, the group reached a tipping point, and made a spontaneous collective decision to do something to improve the situation.

³ The Neighbourhood Secretary is the lowest tier of paid municipal officials, responsible for administrative functions in a neighbourhood of around 4,000 households, equivalent to about 20,000 people

⁴ All 114 Block Leaders in the three neighbourhoods were trained, as well as the neighbourhood administration



Figure 1 – Training sessions

Source: WSP



Figure 2 – Block leader discussing sanitation conditions with a householder

Source: WSP

1.3 Step 2: Ignition - Households

The second part of the training consisted of visiting households and filling in monitoring forms. Groups of six Block Leaders entered each house to question residents and inspect the household toilet, and then presented its conclusions to the group.



Twenty-five homes were visited in each neighbourhood during the training. In general there were no problems obtaining access, although families whose toilets were in a poor state were embarrassed when asked to show them to the visiting team. In households with dirty toilets, the family representative, visibly embarrassed, apologized about the lack of cleanliness, stating that it was not the normal state of affairs and that the Block Leader would never again find the toilet in this state. Families with latrines which the Block Leaders judged inadequate often responded by saying they were saving up to build a latrine, had contacted a mason, or were looking for a latrine slab.

Just as in the discussions with the Block Leaders, focusing on the issue of sanitation, especially in the presence of community leaders, evoked in the families a feeling of shame about their sanitary conditions, making them reflect on the need to change their sanitation behaviour. It was not that they did not know what was wrong, but that they simply did not consider it important. The poor state of their sanitation was not a priority within the confines of the household, when confronting it on a daily basis. However, when made somehow public, the family was shamed, and this triggered in many cases a process of change, as described below.

1.4 Step 3: Monitoring – Local Leaders and Households

Following the training, the Block Leaders carried out surveys in their own blocks. Information on household size, source of water supply, and sanitation facilities, was collected and recorded for each household. This survey took about one month for each block, depending on its size and the availability of the Block Leader.

The Block Leaders reported that, as in the training sessions, families reacted to the survey with embarrassment. Most households promised to make changes, but many expressed difficulties with respect to: a) availability of funds, or b) lack of information about the places where they could acquire latrines, and/or masons expert in latrine construction.

The Block Leaders promised to return between two weeks and a month after the initial visit to see whether households had followed through on their promises, thus putting pressure on them to act quickly to improve their situation. Such monitoring and follow-up of families is recognized as an important factor for success in rural CLTS as well.

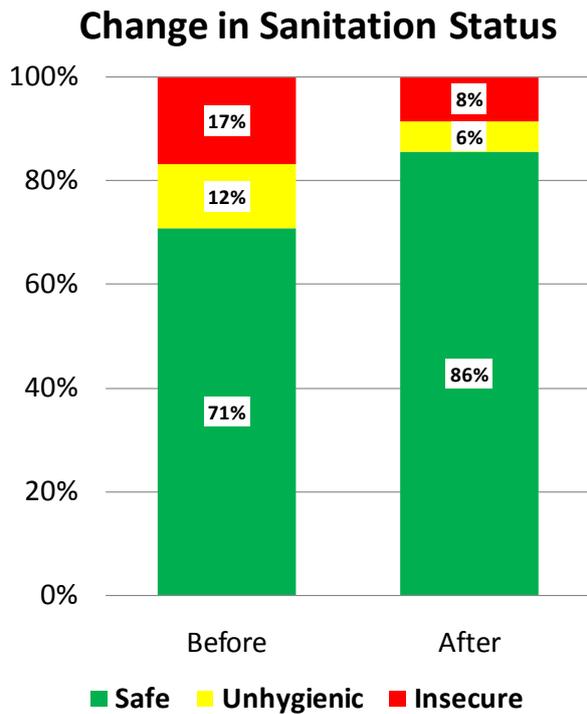
2 Results

Three months after the survey, as part of monitoring the Block Leaders' work, WSP visited four randomly selected blocks in the two neighbourhoods where the initial survey had been completed. The blocks visited comprise a total of 291 households, of which, at the time of the initial survey carried out by the Block Chiefs, 62% were using a sanitation facility below the official standard for the urban environment, i.e. less than an improved traditional latrine.

However, although it falls below the official standard, a well-managed traditional latrine provides effective sanitation from a functional point of view, whilst equally; an improved but filthy facility does not, although it would be counted as meeting the official standard. For this reason, the concept of "safe sanitation" is being introduced by the Ministry responsible for the sector, which



takes account of the adequacy of the structure, sludge management arrangements and hygienic management by the users.



On this basis, the Block Leaders classified 29% of the facilities as unsafe at the time of the initial survey. These include 17% classified as “insecure”, which include fractured latrines, with a high risk of collapse, completely filled latrines, and other practices such as the use of plastic bags or holes in the back yard. The other 12% were potentially acceptable facilities, either in an unhygienic state or which could be repaired. 73 of these unsafe facilities were visited in the follow-up assessment, and in only 15 cases had the sanitary conditions not been improved, although some which had been cleaned up could still not be classified as safe for structural reasons. Of the 15 households where no improvements were made, five were headed by widows, living on (very meagre) social security grants, and one by a widower living only with grandchildren, who had neither the financial nor physical capacity to invest in improving their sanitary

conditions.

As a result of the interventions made by the householders, the number of unsafe facilities was halved. Of the 73 unsafe facilities followed up, 20 were rebuilt, 5 rehabilitated and 2 emptied, whilst 31 were cleaned up to a hygienic state. These changes greatly impressed and motivated the Block Leaders, since although some of these households had indicated during the initial survey that they had insufficient funds to invest in sanitation, they had nevertheless made an investment. Moreover, seeing their blocks cleaner and with safer sanitation, without any outside investment, motivated the Block Leaders to continue their work.

The photographs below show the improvements made by some of the households visited, starting from a simple improvement, cleaning and rehabilitation of the superstructure in the first case; emptying the pit and rehabilitation of the superstructure, in the second; and in the third, a major investment, mobilized by the whole family, moving up from an unsafe pit latrine to a WC and septic pit. The third example was in the house of a widow living with her grandchildren, who had reported being too poor to invest in improved sanitation in the initial survey. At the time, the leaders asked about her sons and daughters and highlighted the risk to the health and safety of the grandchildren. This improvement surprised the Block Leaders and even raised applause from the community.



Before



After



Figure 3 – examples of improvements

Source: WSP

3 Major Drivers for Success

Political will and the commitment of leaders are key factors. The Municipal District Administrator was early on convinced of the utility of the exercise, and prioritised the monitoring of sanitation, encouraging the Neighbourhood Secretaries to participate actively in the process. Such political will is critical in mobilising and involving local leaders.



Technical inputs at neighbourhood level were also critical. The process benefited from the participation of the Water Officer, a new figure introduced as a regulator at the neighbourhood level, to address water and sanitation related issues and provide information to both consumers, the water company and the Neighbourhood Secretariat. The better results achieved in one of the neighbourhoods relative to the other two can be ascribed to the greater dynamism, availability and interest of the Water Officer, who accompanied the Block Leaders on their visits and provided advice when requested.

Follow-up and monitoring through regular visits by the Block Leader is important in helping households to implement and maintain their improvements, just as it is in the case of rural CLTS. The political commitment and demand for results from the District and Neighbourhood levels was an important factor in this regard. However, the Block Leaders also showed considerable self-motivation when they perceived how their actions were bringing improvements to households in their block.

Confrontation with the ugly reality of poor sanitation, whether by way of photographs during the Block Leader training, or during their subsequent household visits, was the key triggering mechanism. It is not clear to what extent notions of the negative health impact of poor sanitation was a factor; the reaction was spontaneous and based on their pre-existing knowledge and perceptions. However, there have been a number of sanitation campaigns in these areas over the last 30 years, which must presumably have had some effect.

4 Resources

The resources used for this work were relatively modest, but might nevertheless be difficult to scale up.

Physical resources used were a digital camera and a digital projector, and monitoring forms distributed to the Block Leaders and Neighbourhood Secretaries. Refreshments were provided at the training sessions, which were held in the Neighbourhood Secretariat offices. Transport was provided for WSP staff and the facilitator.

Key human resource inputs included the following:

A skilled facilitator for the Block Leader training. As with CLTS, trainers need to be carefully selected and well coached. In a city-wide program there will be a need for many facilitators and a good facilitator training program, obviously not included in this learning-by-doing pilot.

The Water Officers. These are new neighbourhood-level personnel whose principal function is to assist the regulation of water and sanitation services at grass roots level, and who were also being piloted in a complementary piece of work by the national Water Regulatory Council (CRA). They receive minimal remuneration, well below the minimum wage, for part-time inputs. They should be respected citizens with secondary education.



Support for the Block Leaders. Many Block Leaders are senior community members, who may be wise and respected, but not necessarily highly literate and numerate. Some of them required assistance in filling monitoring forms and compiling the results for their block. This was given by other family members or the Water Officer.

WSP staff. The work was designed and managed by WSP staff. Once a system has been established and tested, they will no longer be needed, but program management of a fairly high technical calibre (graduate level) will still be required, especially to deal with data consolidation and analysis.

5 Lessons Learned

5.1 Elements of the Process

The effectiveness of a process initially designed to stimulate a debate on sanitation standards amongst Block Leaders, and to train them in categorizing the sanitation solutions adopted by households living in their respective blocks, but which resulted in sanitation improvements by householders, can be attributed to:

The exposure of local leaders to the various sanitation solutions adopted by families living in their neighbourhoods brought home to them the conditions in which their community lives. Although probably having heard about or even seen such conditions, having them displayed, in the presence of their colleagues, created a feeling of disgust, and the leaders were not prepared to accept them as typical of the area, nor that there was inadequate sanitation in their block.

The debate on safe sanitation stimulated a review of the standards previously considered acceptable. As they discussed the concept of safe sanitation, the leaders were forced to reconsider not only the aspects that they were used to inspecting, but also to consider for the first time others which had previously passed unnoticed. With this training and information, the boundary between the acceptable and the unacceptable was moved, triggering the leaders, and resulting in their taking on the monitoring process and mobilization of the families as part of their duties.

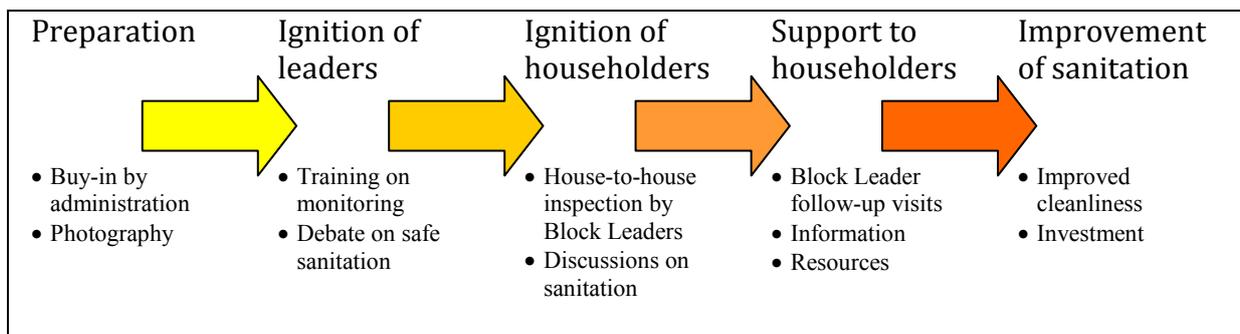
The presence of the Block Leader, specifically in the household toilet, triggers a critical analysis not previously undertaken by the family. How does the toilet look to the eyes of a person outside the family circle, the eyes of the leader? This analysis led the householders to notice the dirt to which they had become accustomed, the broken structure which they had forgotten about, and other aspects previously known only to themselves, but which were now exposed to the leader and probably to the community at large.

The Block Leader's statement that he or she will return puts pressure on the household, forcing it to seek and identify solutions within the agreed period. In general, this begins with the easiest action, which is to improve cleanliness, whilst looking for information on the costs, material and manpower needed for their proposed improvements, and mobilizing funds. The persistent presence of community leaders can be critical to the sustainability of such changes, and serve as a driving force.



The financial and physical capacity of households is an important determinant of their engagement with upgrading their sanitation conditions. In many cases, families headed by widows or elderly persons were unable to make improvements, even such as cleaning or minor repairs to their latrines. These cases may require outside help from their family, from NGOs and charities, or possibly the government. However, some of the households that initially expressed unwillingness or lack of capacity to pay, did make investments as a result of triggering and motivation by the Block Leaders.

The availability of information and options suited to various levels of financial capacity is also important. Some families reported that, although they were willing to make an investment, they did not know where to turn for technical advice or materials. Many families ended up hiring a non-specialist mason, sometimes without experience in latrine construction, resulting in structures which were not stable or very durable, in order to alleviate their immediate situation.



5.2 The Way Forward

In summary, this pilot shows the possibility of triggering very similar to that achieved by CLTS in rural areas. However, beyond creating the demand for improved sanitation services, it is also essential to address the provision of information, services and products to meet this demand. In addition, monitoring is essential to maintain and strengthen the will of the target group to maintain the improvements made and ensure the sustainability of the interventions. To have an appreciable impact at city level, all this has to be achieved at scale.

Thus, in the next phase of this work it would be useful to consider at least the following questions:

How to systematize the training of facilitators and Water Officers? A factor identified as critical in rural CLTS is the quality of triggering facilitators. In this urban case, the work also involves creating a collection of photographs of sanitation in the neighbourhood, as well as facilitating the discussion between the Block Leaders, and their practical training.

How to provide information, services and products to meet the demand for improved sanitation?

The availability of good quality latrine construction and emptying services at reasonable prices is fundamental to the success of interventions like this, based on promotion, so that householders can easily find the information and services they need to help them implement the improvements they intend to make. Possible partners in this include the Water Officers, masons working in the neighbourhood, building material suppliers, and FM radio stations. To better define the options, it



would be useful to conduct research on the knowledge, attitudes and practices of the target population to understand exactly what they lack, and the best way to make it available. It would also be useful to consider options for dealing with the very poorest households who might not be able to afford to make substantial investments.

How to ensure effective sludge management? This is a specialized service, the absence or limited availability of which may discourage investment in improved latrines and septic tanks, and currently causes serious urban environmental pollution. Trying to improve sanitation without addressing the issue of sludge management would be illogical.

How to establish and consolidate a sustainable system for monitoring and follow-up? The process of monitoring has already presented some challenges in terms of the literacy of the Block Leaders and municipal capacity to manage and process the information collected, so ways to simplify these activities must be identified. Over the longer term, political will and a demand for results by municipal leaders will be essential, so they will also have to be “triggered”. Competition and the public identification of laggards may also be useful - as is done for example in India, through regular publication of a “filthiest cities” index. Similar comparisons could be made between districts and neighbourhoods within a city.

6 Further Information

6.1 Contacts

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