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**DELIVERING WATER, SANITATION AND HYGIENE SERVICES  
IN AN UNCERTAIN ENVIRONMENT**

**Urban community-led total sanitation:  
a case study of Nakuru**

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*The urban poor are detrimentally affected by lack of access to proper sanitation facilities. Informal settlements are typically overcrowded, polluted and lack basic services such as water and sanitation. One area for assisting urban development is to enable poor people and the local public and private sector to improve urban sanitation conditions and services. The Realizing the Right to Total Sanitation (RRTS) programme in Nakuru initiated by Practical Action and Umande Trust has adopted the Community Led Total Sanitation (CLTS) approach, introducing it in informal settlements (Rhonda and Kaptembwo) in an urban setting. The process has triggered CLTS at the community level, intensified hygiene promotion, introduced participatory design development, empowered informal sector workers, enhanced strategic partnerships and facilitated sanitation financing.*

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## **Introduction**

The provision of sanitation services in low-income urban areas is one of the greatest challenges in development. Population growth in developing countries currently outpaces sanitation growth, especially in urban areas (WHO/UNICEF, 2010). Consequently, in urban areas where poor people reside, and where 'formal' sanitation services are not available, they experience serious risks such as dirty and contaminated environment associated with diseases.

Urban Community Led Total Sanitation (CLTS) is an approach used to raise awareness of the benefits of proper sanitation and good hygiene practices which are geared towards achieving and sustaining open defecation free (ODF) status and adopting more sanitary practices. It is a comprehensive and multidimensional strategy which empowers residents to demand better sanitation provision and change their own hygiene practices and behaviour (Kar and Chambers, 2008). Currently, the CLTS approach is mostly applied in rural areas.

Practical Action and Umande Trust have jointly collaborated and implemented CLTS in informal settlements within an urban town; Located 165km North West of Nairobi City. Nakuru town is the fastest urbanizing town in Africa, growing at an annual rate of 13% according to UN HABITAT rating released in 2010. At the time of the 2009 census, Nakuru had a total population of 473,200 (GoK, 2009). Approximately 60% of this population live in the low income settlements, the two largest of which are Rhonda and Kaptembwo with a combined population of approximately 190,000.

## **Access to sanitation in Kaptembwo and Rhonda areas within Nakuru Town**

Access to the sewer network in Nakuru is limited to higher-income parts of the town with only 14% of the households connected (WASREB, 2011). The rest of the town relies on on-site sanitation. In the low-income settlements, rental rooms are organised into plots with an average of 22 (Rhonda) and 17 (Kaptembwo) rooms per plot. Almost every plot (98%) has at least one toilet of some description. However, this cannot be described as 'adequate' sanitation in terms of either quantity or quality. Over a quarter of plots (28%) have a ratio of toilets to households of above 1:4 and in the worst cases 200+ people are sharing a single toilet. The vast majority of the existing toilets (95%) needed some form of improvement to reach acceptable levels. The result is that there is still some degree of open defecation and there is a great deal of faecal pollution from overflowing pits and the current practices of pit emptying, 'flying toilets', and dumping of waste nearby. Only 28% of toilets have hand washing facilities nearby.

The provision of adequate, acceptable sanitation facilities in the informal settlements have been hampered by several factors:

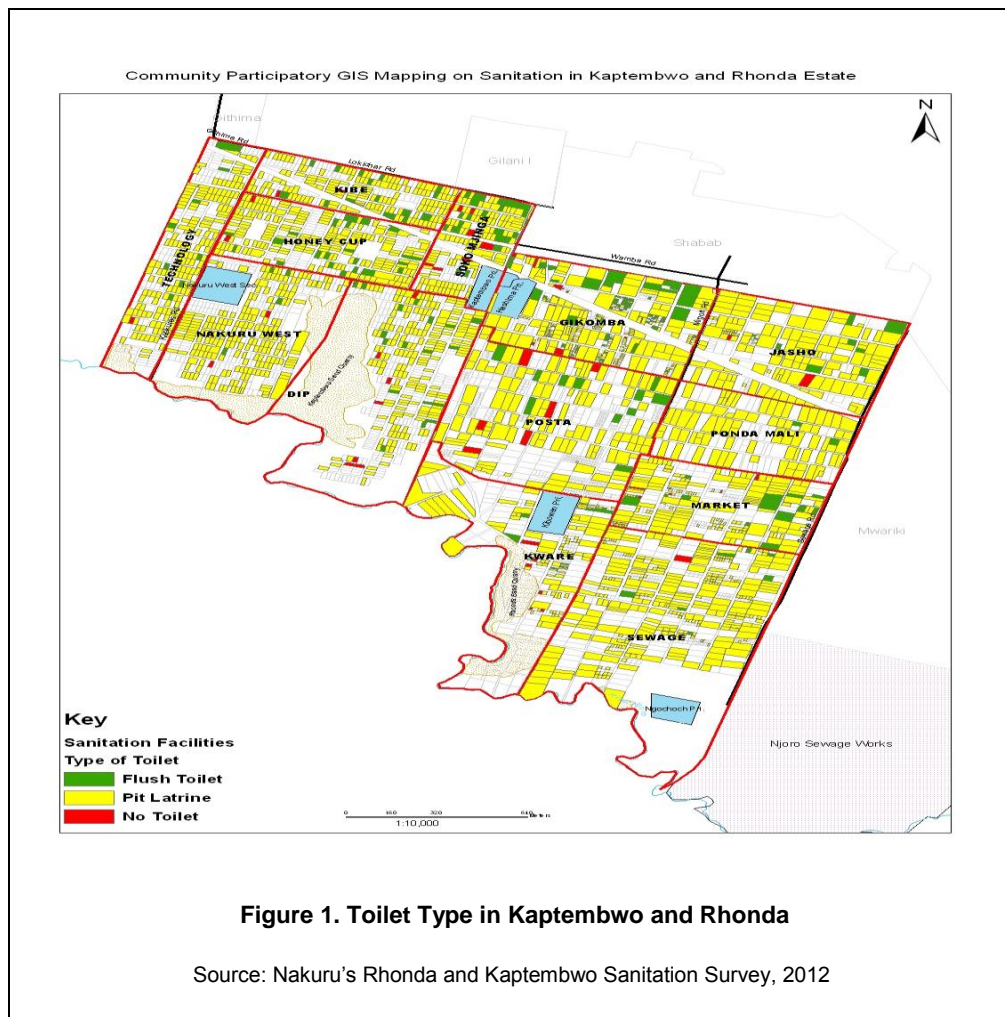
1. Poverty; the landlords/ladies find it difficult to afford the capital required in one go, for conventional construction materials and technologies.
2. The soils in Nakuru are porous and pumiceous thus allowing significant direct percolation of rainfall through the aeration zone into the saturated zones beneath causing them to collapse during construction or during emptying of the pits. This raises the need for more specific and perhaps higher cost toilets than are sometimes required in rural CLTS processes.
3. The informal settlements are located on the lower side of the town which has a steep gradient and thus greatly impacted by the surface run off during the rainy seasons, resulting to spilling out of raw human waste into the surface posing public health risks.
4. Lack of technological know-how; little knowledge on technologies that are pro-poor, sustainable and appropriate to the conditions.
5. Ineffective promotion and low public awareness on sanitation
6. Neglect of the needs of women and children especially in the designing of sanitation facilities.

### The approach and objectives of Practical Action/ Umande Trust Intervention

The urban CLTS process in Nakuru involves the following activities:

#### 1. Initiation of the project

The project team working with 25 community local resource persons carried out Participatory Geographic Information System (GIS) profiles of the current levels of sanitation facilities and their current conditions in all plots within the project sites. The GIS base maps and allied information form the basis for community led score carding processes to regularly capture the changes being brought about by the project. Figure 1 below shows the type of sanitation facilities in the two settlements.



## **2. Awareness creation on CLTS approach**

One of the key goals of CLTS is to eradicate open defecation in the project area. This encompasses creating awareness on the CLTS approach to the communities. The knowledge and skills of beneficiaries in the Urban-CLTS process have been strengthened through raising awareness of residents in the two settlements and training of 140 community mobilizers who take responsibility for around 25 plots each. To enhance CLTS triggering process, Municipal Council of Nakuru (MCN) officers and community members have had an exposure visit to Mathare's informal settlement in Nairobi where CLTS process was initiated for the first time in an urban context by Plan International, Community Centred Services (CCS) and the City Council of Nairobi (NCC) in 2010.

The CLTS demands that the community is empowered to spread sanitation marketing. Therefore, the team supported the nomination of committee members at plot level for formation of neighbourhood associations to champion Community Action Planning (CAP) in addressing sanitation challenges/ needs.

Community mobilizers were trained to trigger the CLTS process in the two low income settlements. These were divided into 13 administrative 'villages' grouped into 6 implementation zones. In Kenya, most informal settlements have been divided into smaller administrative areas called villages, each with a name. These do not operate under a similar system as the rural villages but are administered by the local government, that is, Municipal Council of Nakuru. Visual toolkits were developed for them to use during the triggering processes which has since made their work easier to engage the residents. The key visual tools that were used include: Three Pile Sorting, the Sanitation Ladder and the Faecal Oral Contamination Route. The sanitation financing model, participatory design sessions and hygiene education have also played a major role in triggering and creating demand for quality sanitation.

## **3. Hygiene promotion**

RRTS responds to the fact that total sanitation cannot be realized by just constructing sanitation facilities, but by creating awareness on hygiene issues. This includes proper hand washing with soap, proper use of the sanitation facilities and good hygiene practices at the household level. To achieve this, the RRTS programme planned and developed visual hygiene promotional tools (in form of stickers and posters), fabricated hand washing facilities and training manuals that were/are being used in the hygiene promotion campaigns in the project.

## **4. Sanitation design development**

Through a participatory approach, appropriate low cost sanitation designs and technologies have been developed involving the target communities in close consultation with the Municipal Council of Nakuru, a process that culminated in the approval of the designs for use across the entire Nakuru Municipality. The baseline survey indicated that on average, 63% of the residents use pit latrines which are not acceptable in an urban setting, 31% use VIP latrines and 6% use other types of facilities. The results of this participatory process were 3 different designs; the Ventilated Improved Pit (VIP) toilets with Asian Squatting WC pan, the pour flush toilets and the conventional VIP toilets which will be made more permanent by lining the pit with open jointed brickwork or other porous lining. This adaptation will reduce chances of the toilets collapsing due to the loose soils. The adoption of these sanitation designs is expected to produce sanitation facilities that are low cost, meet users' sanitation needs (including the vulnerable groups) and are easy to operate and maintain. The incorporation of participatory sanitation design development in the RRTS program is an important addition to more traditional forms of rural CLTS for the urban context as it gives the community an opportunity to keenly look into the sanitation challenges and how to solve them. This process also complements sanitation marketing so that the community is not only aware of the sanitation status but how to improve the same.

## **5. Empowerment of informal sector workers**

Empowerment of informal sector workers is key in Urban CLTS if total sanitation is to be realized in these informal settlements owing to the major services they provide to the residents. In the project area, the programme has reached out to 37 pit emptiers and 109 artisans, to change the relationship with power holders so that their work is regulated and appreciated as a service to the community and as an income generating activity. This has also provided the informal sector workers with an opportunity to form an association that promotes a saving culture amongst them in addition to playing the advocacy role, giving them a voice.

## **6. Enhancing strategic partnerships**

To enhance strategic partnership and buy in of the CLTS approach, the Municipal Council of Nakuru, Ministry of Public Health and Sanitation and the Nakuru Water and Sanitation Services Company staff have been

trained on the CLTS approach. As a result of the involvement and training of other sector stakeholders we envision that the stakeholders will be actively engaged in the project and develop capacity in CLTS. The MCN is expected to initiate CLTS in other slums and Umande Trust will have the capacity to support them independently of the project.

## **7. Sustainable sanitation financing**

Where potential consumers of sanitation products (e.g. latrines, bathrooms) are tenants of low-quality rented houses, landlords have little interest or incentive to invest in sanitation. About 46% of the landlords live on the same plots where they are also renting out rooms and some of them are quite poor, often elderly and with the rental money as their only source of income.

Access to credit to finance sanitation projects is also very limited and restrictive where available. At the start of the project, there was a total absence of friendly products specifically tailored to meet sanitation challenges amongst the financial institutions in Kenya in comparison to the crowded field on commercial products.

A major impediment to access credit amongst the landlords\ladies is the collateral demanded by the financial institutions. To close the gap, through RRTS, Practical Action/Umande Trust has provided a guarantee fund in an arrangement with K-rep Bank which will manage the fund. This has provided a cushion against possible defaulters, thus enabling the bank to tailor make a friendly negotiated sanitation product for the targeted areas.

As a result, through the sanitation marketing being carried out amongst the tenants and landlords\ladies a demand for the loan has been triggered with 270 having expressed interest and profiled. The loan will be for new, incremental and improvement of existing sanitation facilities in line with the approved designs. This will run alongside a Sanitation Development Fund where landlords have the opportunity to save and then borrow at even lower interest rates (based on Umande Trust's sanitation financing model).

Our research and previous experience suggests that landlords will be in a position to make loan repayments based on increased rental income. This will come in some cases from marginal increases in rents (we have found that the sanitation situation is not the major factor controlling the level at which rents can be set), and in others from landlords enjoying a more stable set of tenants with fewer vacant rooms. Some small reductions in the money households would have spent on accessing pay-per-use sanitation and bathrooms outside the plot can also help them pay for any marginal rent increases.

## **Reflections on the process of introducing urban CLTS**

The project teams have learned a great deal as they have implemented the project so far.

### **Opportunities of CLTS**

Using the CLTS approach in the informal settlements creates many opportunities:

1. It has a great potential for contributing towards meeting the Millennium Development goals, both directly on water and sanitation (Goal 7) and indirectly through the knock-on impacts of improved sanitation on combating major diseases, particularly diarrhoea (Goal 6), improving maternal health (Goal 5) and reducing child mortality (Goal 4). Evidence suggests that over time, it increases household incomes because of improved health (so less spending on healthcare and less time away from businesses and other work) (Hutton, 2012).
2. It is creating a culture of good sanitation community ownership; this has fostered greater collaboration among members of the community. This is particularly desirable in areas where ethnicity is rife and poses great danger. Such is the case for the two informal settlements in Nakuru.
3. The programme will help improve the working conditions of the informal sector workers like the pit emptiers and the artisans.
4. The program will improve the relationship between the power holders and the informal settlements' residents and also with the water, sanitation and health (wash) service providers at the local level.
5. It is an effective point for other livelihoods activities through mobilizing community members towards collective action and empowers them to take further action in the future. CLTS outcomes illustrate what communities can achieve by undertaking further initiatives for their own development.

### **The challenges of CLTS**

The CLTS process is not however, without challenges some of which are:

#### ***Economic constraints***

It is difficult to have full participation of the community members in this programme especially in areas where they are supposed to contribute some money, due to their financial instabilities and prevailing economic hardships.

***Technical quality and sustainability***

Another challenge arises due to the constant deterioration of the existing stock of toilets. For example, how do toilet owners respond to ecological shocks and stresses, such as floods, droughts and collapsible soils: do they rebuild and improve structures, or are they abandoned? Moreover, what are the potential ecological risks involved in a CLTS scheme? For example, will all of the toilets built, adequately protect against groundwater contamination for the community? There is, therefore, a need to understand more in-depth, the resilience and sustainability of CLTS over time and the technical requirements imposed by working in an urban location

***Cultural barriers***

Beyond their individual differences, the community has particular ways of thinking and behaving and will react to situations in similar ways. Social dynamics therefore, influence how people perceive sanitation and hygiene, and the potential for long-lasting behaviour change. They affect how to design technology. For instance, people do not want to share toilets with those living with HIV/AIDS for fear of contracting the disease. Most women also believe that children's faeces are not harmful. Constant building of meaning for CLTS involves repetition- the incorporation of new elements that add to or replace what has been acquired. Because of these processes of repetition and renewal, societal attitudes are not unchangeable and communities can choose to give up harmful practices, though there is a need to accept that this process may take some time.

***Responding fast, and reaching the last mile***

It has sometimes been challenging to ensure that once triggering has taken place, all the facilities are in place to respond quickly to growing demand. It has sometimes taken too long for credit arrangements to be made and artisans to be ready. At the other end of the spectrum, we know that the last 10-20% of landlords may be hard to reach and we need to look for innovative ways of bringing them on board.

**Lessons learnt**

The programme has helped the project team learn some lessons;

1. Despite the fact that almost every plot in Nakuru has at least one toilet, sanitation provision remains far from adequate and there are still many cases of open defecation. In urban areas, key metrics are around the ratio of toilets to people/ households, the quality and usage of those toilets.
2. There is demand for a sustainable sanitation development fund but its effectiveness will highly dependent on the prevailing economic conditions of the interested landlords.
3. The size of community determines the level of support and technical backstopping required. In the two settlements, the role of Community Health Workers (CHWs) is crucial. Working with all stakeholders is also of paramount importance.
4. Participatory approaches are very effective in ensuring the empowerment of the community to enable them own concepts, technologies, behaviour changes or projects. The success and sustainability of the RRTS programme is highly dependent on the ownership of the project by the community.
5. Triggering CLTS in large communities is not straightforward as envisaged in the CLTS approach- even in cases where community is heterogeneous. Effort to apply CLTS principles should go hand in hand with an intensive effort to change behaviour and improve facilities. Behaviour change is a process that takes time (compared to spontaneous triggering at community level in small rural communities)

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