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Lessons learnt in urban community-led total sanitation from Nakuru, Kenya

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Community-led total sanitation (CLTS) is a process where communities are mobilized through innovative participatory methodology to completely eliminate open defecation (OD). However, in urban areas experiences are rare. Practical Action and Umande Trust have implemented a project Realising Rights to Total Sanitation (RRTS) in Nakuru, Kenya, adapting the urban CLTS methodology to the urban context. In a participatory approach, design sessions are held with landlords, tenants, project team and technical staff of County government. This comes up with low cost toilets that meet urban public health and building regulations. It is also address wider issues of feacal sludge and solid waste management, access to clean water, and waste water management. It has worked with lending institutions to assist landlords in accessing the necessary finance to upgrade their facilities. It has also capacity build county staff to adopt CLTS approaches, replicate and scale it within Nakuru County.

Background

Kenya has a total population of 38,610,097 people, with a national growth rate of 3.19% per annum (Government of Kenya 2009). Given this annual growth rate, current population is estimated to be 40 million people. Nakuru town is the fourth largest in Kenya and it is the fastest growing town in East Africa at 13% annually (UN Habitat 2009). The population estimates show that Nakuru town has 473,288 people (Government of Kenya 2009). According to Ministry of Health (MOH), sanitation coverage in Nakuru is 59% but water borne sewerage coverage is only 21%. However, only 25% of population is served with sewer connection, while 75% relies on onsite sanitation services. The Ministry of Health (MOH) in Nakuru County is the lead County ministry in charge of sanitation and solid waste management. The Realising Rights to Total Sanitation (RRTS) in Nakuru, project, therefore, has been working closely with the MOH in the County for effective implementation and scaling up of urban CLTS approaches.

Urban community-led total sanitation (CLTS)

Community-led total sanitation (CLTS) is an innovative methodology for mobilizing communities to completely eliminate open defecation (OD). It has typically been applied in rural areas, with limited experience in urban settings. RRTS project applied a CLTS approach in an urban area and adapted the tools to suit the distinct challenges of the urban context, such as non-ownership of land by many residents, existence of sanitation facilities but in very poor condition, lack of space for adequate sanitation facilities, lack of sewerage systems and regulations governing urban construction. CLTS involves no hardware subsidy and does not prescribe latrine models. It focuses on collective hygiene behaviour change stimulated by facilitators from within or outside the community.

Community-led total sanitation (CLTS) in Nakuru

Community-led total sanitation is an innovative approach for empowering communities to completely eliminate open defecation. Towards the end of 2009, the then Ministry of Public Health and Sanitation (MOPHS) formally approved and recommended the CLTS approach for improving sanitation coverage in

the country by including it in its national strategy. The national policy includes a strategy for CLTS implementation in both rural and urban areas, however to date CLTS has largely been implemented in rural areas. This was reflected in the national government's commitment to achieve an ODF rural Kenya in 2013 and thereafter to expand ODF coverage into urban areas by 2015. However achievement of this goal has been slow with only 15% villages (9126) having been triggered and 7% (3956) having claimed ODF to date (UNICEF report, 2014). Currently there is no urban village or settlement that has managed to reach ODF status in Kenya but progress is being made in this respect.

Nakuru County has a population of 1.6 million. Out of a total of 1949 villages in Nakuru County, about 39% have claimed ODF (UNICEF, 2014) though only 16 villages (in the peri-urban and rural areas) have been ODF verified. Use of hand-washing facilities is estimated at only 7% in the county. With the county committing to become ODF in rural area in April 2015 (First National Sanitation Conference Report, Kenya), it has a huge task at hand (WSP 2014, JMP 2014). There are several factors driving the use of CLTS as the strategy for achieving total sanitation in the project area. The project works within the regulations set by the county government, thus the project closely liaises with the MOH and applies its policies for implementation. This also ensures that any lessons from practice will be taken to scale by the appropriate institution creating opportunity for sustainability and scaling up after project completion.

The approach and objectives of Practical Action/ Umande Trust Interventions

The urban CLTS process in Nakuru involves the following activities:

1. Engagement of existing county and community structure in the project

The project team works with 2 neighbourhood committees and 13 village committees in CLTS process. 13 village level committees in the two settlements within the project area have strengthened their capacity and are actively taking lead in Urban community-led total sanitation (UCLTS) processes and hygiene promotion within the project area through preparation of community action plans i.e. identification/ mapping of sanitation hotspots, support in mobilization of residents for UCLTS triggering processes & post triggering follow ups.

The existing county platform for engagement include the thematic working groups on sanitation and hygiene promotion, sanitation marketing and promotion, household water treatment and safe storage, health care and general waste management, school WASH, health care waste and general waste management and urban sanitation. These thematic groups are hosted by Inter-agency Coordinating Committees (ICC). They support with complementation and coordination of WASH activities. We also coordinate and collaborate with nation level inter coordinating committee under ministry of health for policy review and sharing of urban CLTS lessons learnt. Whilst the project has largely been successful in eliminating open defecation and other unsanitary practices that left the population exposed to feacal contamination, the villages concerned have not yet been declared open defecation free due to the challenge of achieving universal hand washing facilities next to latrines with running water and soap (a criteria for verification in Kenya) which is a key requirement for the ODF certification criteria among others. Water supply within the project area is highly rationed (twice per week) by the water company and households practice hand washing at their respective household level though water is scarce. .

2. Community health volunteers and Public Health Officers

We also work with community health volunteers (CHVs) and Public Health Officers (PHOs) within the project area to sensitize, mobilize and trigger community members during CLTS process. CHVs are key to post-triggering follow up as they are the "eyes on the ground". Immediately following the triggering exercises both the PHO and the already triggered CHVs would visit that location to follow up and make weekly visits for the first our weeks. From then on CHVs visit at least once per month to assess progress and they report back to the PHO. The CHVs maintain a household registration book and a daily activity book as part of a monitoring mechanism to record details of their visits and follow up on issues as well as to report back to the PHO on their activities. They observe both the behavior change of tenants (are toilets and the whole plot being kept clean and tidy) as well as landlords (are they living up to their commitments for upgrading).

3. Urban regulations

The by-laws on construction standards and waste disposal within urban areas which are enforced don't apply in rural areas. Not only is a simple pit not permitted, but even lined pits and VIP latrines do not comply with the official Nakuru County Public Health regulations: a septic tank is required. Furthermore, there are building regulations relating to the height and width of cubicles, and materials to be used. For example, regulations underline the need for a permanent superstructure which necessitates the usage of blocks. In terms of waste disposal, sludge should be emptied by a regulated mechanical collector and taken to a designated collection site, which in the case of Nakuru is the waste treatment plant managed by the water utility company Nakuru Water and Sanitation Services Company (NAWASSCO). Regulations also state that there should be one toilet and bathroom facility for every four households, or 20 people (based on Nakuru County Government By-laws). Following engagement of Ministry of Health charged with health and National Environmental Management Authority charged with environmental regulation, RRTS project managed to revise the Public Health Bill 2014 to incorporate the low cost feacal sludge management technologies i.e. use of manual pump referred to as gulper and also CLTS approaches. This will ensure engagement of the pit emptiers in feacal sludge management. However, the cost of approved sanitation standards developed through participatory planning with landlords, MOH staff and RRTS project staff is still high and this slows improvement of sanitation facilities. The improved toilets have pour flush and are lined or have septic tanks which ensure ease of exhausting as the are no debris/solid and also water company allow disposal of such waste in their sewer system. The water company is planning to install pre-paid water meters at plot level to reduce the cost and the distance people walk to the nearest water point. At pre-paid, it cost Ksh 1.20 for 20 litre jerican and water vendors sell water at Ksh 10 - 20 per 20 litre jerican depending on distance from water source.

Such regulations present a challenge, as landlords struggle to meet these standards based on their relatively low incomes. These regulations also present itself as an obstacle when it comes to achieving immediate results after a CLTS triggering as is often seen in rural areas where people have the flexibility to even start at the lowest rung of the sanitation ladder. An advantage of the regulations is that the threat of enforcement leads to faster action by landlords: Public Health Officers can take landlords to court if they do not comply, though under this project, it has been used as a last resort.

4. Working with landlords as well as tenants

A key innovation of an urban approach to urban CLTS (UCLTS) has been the Landlord Forums, which is essentially a form of landlord triggering. These are considered part of the pre-triggering phase in UCLTS. The Landlord Forum involves bringing together all landlords within a certain area of the settlement, irrespective of the standard or quality of their sanitation facilities. There would typically be around 50 landlords in such a meeting and it might last as long as 3 or 4 hours. Where a landlord is not available, a caretaker will attend in their place. Some caretakers are empowered to act on the landlord's behalf, and others will pass the information to the landlord.

5. School sanitation campaigns

It is widely accepted that CLTS should work through schools, and under this project the interventions in schools have been successful in both Kaptembwo and Rhonda informal settlements. School children are 'triggered' using a combination of skits, explanations and demonstrations, illustrating the importance of improved hygiene. Project staff, PHOs and CHVs have visited all the government and private primary, secondary and nursery schools in the project areas on several occasions to convey messages, not only on sanitation within the school, but also good behavior in the household, e.g. keeping the grass short to stop mosquitoes, boiling water, pouring waste water into the drain and disposing of garbage. Children are encouraged to share these messages with their families and also amongst one another at school for continued reinforcement. The project has reached 20 schools, 9,629 school children and 147 teachers.

6. Participatory Technology Development

Practical Action has considerable experience with the process of Participatory Technology Development (PTD), in this case for the development of appropriate, low cost sanitation facilities. PTD is particularly important for CLTS in urban areas as stepping onto the sanitation ladder from the lowest rung with a simple pit latrine is not appropriate given the socio-environmental, and the regulatory context. In rural areas householders can dig the most basic of pit latrines, and use a very rudimentary style of super-structure, and as long as it is fly proof, this is adequate for declaring ODF status. In urban areas, where there are tight

regulations around public health and construction standards, the officially required standard of toilet design is far beyond the financial means of a low income plot holder.

7. Sanitation financing for upgrading

Practical Action and Umande Trust work with financial institution to provide sustainable loan for sanitation improvement. Working together, the project staff and K-REP Bank have come up with a loan facility specifically tailored for sanitation improvement with a favorable interest rate of 7.5% (rates are typically around 20%). The loans have been guaranteed during the project period by Practical Action but they are not subsidizing it in any way, so the interest rate should not go up after the project has finished. Clients still have to comply with all the typical requirements of the bank for a loan, which include:

- Opening a bank account with K-REP and showing an ability to save on a monthly basis for 3 months, having a deposit of Ksh 20,000 and presenting the title deeds to their land or working as a group (of minimum 5 members) to co-guarantee one another.
- Showing how the income from their rental rooms business will be able to pay back the loan within the required 2 year period.

This strategy of working with a commercial lender to develop and offer a sustainable long term loan product is important. In the past, favorable interest rates offered under project financing have disappeared at the end of the project. This loan facility is available to anyone in Nakuru so that PHOs working in other urban areas can also promote this. As a result, through the sanitation marketing being carried out amongst the tenants and landlords\ladies a demand for the loan has been triggered. The loan will be for new, incremental and improvement of existing sanitation facilities in line with the approved designs. However, some landlords are mobilizing their own resources to construct or rehabilitate their sanitation facilities

8. Smartphone monitoring and GIS mapping

The project team and community members have been using smartphone to monitor urban CLTS progress in the project area. This is after triggering landlords for sanitation investment and tenants for better use of facilities and positive behaviour change. These are triggered separately. Tenants are triggered with innovative use of local drama youth group (skits and drama) passing key CLTS triggering messages to help hold locals together during triggering as urban people are busy and get easily mobilised and sustained in a given place using the local drama youth group. Practical Action and Umande Trust undertook GIS mapping with local residents as a mapping exercise before work began to produce visual GIS maps with baseline status and monitoring trends overtime.

Opportunities of CLTS

Using the CLTS approach in the informal settlements creates opportunities such as:

1. Through partnership, we have collaborative working on most of the areas covered by the project which include capacity building of staff on CLTS approaches, negotiating on acceptable standards for toilets and low cost sanitation technologies e.g. gulper technology.
2. CLTS facilitation methodology that works where there are tenants and landlords; it has tackled the issue of financing for sanitation facilities; it has sought an acceptable solution to informal sector pit emptying; it has worked collaboratively to develop acceptable lower cost toilet designs, making these easily available for landlords and training artisans in construction; and it has experimented with different technologies (GIS, smart phones, twitter) to assist with communication and monitoring. This provides synergies for learning and potential for scale up.
3. Linkage with strengthened community structures and networks which have channels of communication and linkages with different actors to facilitate the community's access to materials and services.
4. Strategic engagement of key actors and institutions for policy advocacy, intra-institutional collaborations and multi-stakeholder partnerships, thus creating an enabling environment conducive for CLTS process implementation and scaling up.
5. Collaborative attitude of the Ministry of Health and the genuine partnership approach fostered throughout the project has meant that the impacts are sustainable and there are good prospects for the project to be scaled up by either the Ministry of Health, or other relevant ministries or agencies.

The challenges of CLTS

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

1. A perennial challenge to urban CLTS, which has also been noted and may influence other urban and rural areas, is the existence of subsidy-based sanitation programmes in other parts of Nakuru town. Partial re-payments of costs invested and incentives in the form of hardware are being offered to individuals under two different programmes in Nakuru town.
2. Guidance, training and resources tailored to supporting CLTS in urban areas are lacking. In order to progress with scaling up of CLTS in urban areas at a national level it will be important to draw on the lessons and experiences from RRTS, as well as other examples of urban CLTS, to develop specific resources and trainings and thus provide a strong incentive for appropriate action.
3. Sanitation financing uptake is slow as some community members cannot be able to contribute the required 20% of the loan to be borrowed from the bank. This is due to their financial instabilities and prevailing economic hardships. The project team is exploring opportunity of group lending to reach more community members.
4. Also, social dynamics influence how people perceive sanitation and hygiene, and the potential for long-lasting behaviour change. They affect how to design technology. In parts of Eastern Africa, myths hold that men do not defecate, and that in-laws should not use the same site for defecation.

Lessons learnt

The programme has helped the project team learn some lessons;

1. Through participatory approach, there is buy in by the County government to incorporation of low cost sanitation technologies which address the needs of the vulnerable groups.
2. Inclusive approach where all stakeholders are engaged ensures ownership of project by community and its sustainability. The community structures like steering committees and associations are strengthened and community health volunteers and public health officers empowered to support in CLTS approach.
3. The criteria for verification of ODF status require hand washing facility to be in place right outside the sanitation facility. Various factors such as theft of water containers and soap, as well as the cost of collective water provision are a barrier to achieving this in urban areas. As a result of the CLTS triggering, most residents are aware of the need to wash hands and claim that they are washing them using a bowl within their personal rooms (which are usually just a few meters away from the toilets). However, this is not ideal, as there can be faecal transmission and sources of contamination between the toilet and the home, and there is a higher likelihood of forgetting.
4. Building good relationships with multiple actors and facilitating intra institutional linkages for coordination and collaboration has been key to addressing some of the major challenges of the urban context in this project and ensuring an enabling environment for successful CLTS and wider sanitation impacts. The table below provides manifestation of CLTS in rural and urban context in Nakuru.

Table 1. Manifestation of CLTS in rural and urban context: Case study of Nakuru

	Rural	Urban
1	Low toilet coverage and strong preference for or habit of OD	High toilet coverage but they are highly unsanitary. OD is out of necessity rather than preference or habit.
2	Majority of households own land on which they can build their toilets	Most households are tenants and have to rely on landlords to provide sanitary toilets. However, it is tenants' role to maintain them well.
3	A single triggering aims to reach whole population	Two types of triggering exercises are needed: one for landlords and one for tenants
4	The triggering methodology is principally based on eliciting feelings of shame and disgust to motivate behaviour change.	The triggering methodology with landlords is based more around obligation and threat of legislation. Eliciting disgust is still a motivating factor in triggering with tenants.
5	The key challenge is triggering behaviour change to break the long held habit of open defecation.	The key challenge is ensuring adequate provision and maintenance of facilities. Open defecation is no longer a habit but an outcome of poor facilities.

6	Once a toilet is full, there is usually space to build more within the household compound.	Space is limited and density of population is high resulting in the need to dispose of feacal sludge outside the plot once toilets fill up.
7	Households can build very basic low cost toilets, starting and the lowest rung of the sanitation ladder if they choose.	There are often regulations about the standard of toilets substructure and the superstructure. Negotiation with authorities can be an important aspect of intervention.
8	Households can usually finance low cost toilet building without external finance.	Landlords often require external finance in order to be able to adequately upgrade sanitation facilities. This may require negotiating a loan facility, whether through banks or a community fund.
9	There are few stakeholders external to the community who have an influence on sanitation provision	There are several stakeholders involved, such as tenants, landlords, planning department, public health officials, water and sewerage companies.
10	As there are few stakeholders involved, the intervention process can be relatively fast.	Due to the regulatory environment and the number of stakeholders involved the intervention process, even before any triggering takes place, can take quite long.
11	Natural leaders and community consultants are key players in driving and scaling up CLTS	In this particular urban context natural leaders and community consultants were not developed as Community Health Volunteers already existed.

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