Case Study: One Stop Shop in Kasese, Uganda

****

Innovative business solution for improved urban sanitation

Support to sanitation and hygiene promotion is amongst the most cost effective development interventions that can contribute to improved health, living conditions, and quality of life. However, in many poor countries around the world, the major cities' informal settlements exhibit high rates of disease due to inadequate and unsanitary conditions. Metropolitan sanitation is more complex due to higher population densities, inconsistent communal structures, and lack of opportunities for accessing sustainable sanitary solutions. Plans to improve access to sanitation in towns and cities are hampered by multiple challenges, such as setting of standards around acceptable sanitation, regulations, infrastructures, skills, land issues but also the lack of interest from authorities to provide sustainable solutions to the settlements.

In 2010 Danish Red Cross (DRC) arranged the international "Safe Water Summit" in cooperation with Danida, Grundfos A/S and Bindslev A/S, which aimed to develop innovative business solutions to water and sanitation challenges in East Africa. One of the solutions proposed was a One Stop Shop (OSS) - a sanitary facility with toilets and showers for people living in informal settlements. DRC engaged in a partnership with Uganda Red Cross (URCS), Danish private sector businesses, Danish universities and Access2innovation (A2I) to create and test this new and sustainable solution and business model addressing sanitation in urban areas.

The Red Cross facilitated slums walks in Kampala for Access2innovation and various Danish Companies interested in understanding the local context in order to provide with an adequate solution. In 2012, DRC, URCS, EnviClean, a Consultant Engineering company, and A2I carried out the initial assessments to further qualify the One Stop business case. It was decided by EnviClean, A2I and the Red Cross that it would be too risky to set-up the prototype in Kampala slum before having tested it successfully. Kasese town was chosen as ideal testing site, particularly due to the strong commitment of the Kasese Municipality to support the One Stop project.

The partners agreed to share responsibilities according to their core competencies. EnviClean with support from DMS Africa was responsible for construction of the facility and the Maternal Clinic, DRC and URCS for providing with detailed descriptions of the required functions in the product/sanitation facility as well as to be responsible for hygiene promotion campaign in the communities living in close proximity to the One Stop Shop and in the nearby schools. In May 2013, EnviClean with support from A2I conducted a feasibility study on the design of a public toilet facility to assess end-user's preferences and feedback in collaboration with the Red Cross Kasese Branch officer and volunteers. Additionally several studies were carried out by students from Aalborg University and Copenhagen Business School.

The One Stop Shop project was funded by the Danish Ministry of Foreign Affairs through different funding instruments and partners own contributions.

**The OSS project has 5 outputs:**

1. Establishment of One Stop facility

Access to clean and affordable sanitation is increased.

2. Community awareness   
Community awareness on safe water chain, improved sanitation and hygiene practices increased

3. School awareness  
Awareness among schools on safe water chain, improved sanitation and hygiene practices increased.

4. Establishment of a health clinic  
Access to Maternal Child Health is increased.

5. Visibility and communication  
Visibility and communication in Kasese and Denmark is ensured.

The project has health and sanitation as the main focus, and aims at decreasing the incidence and prevalence of diarrheal diseases in Kasese Town and to reduce the risk of Mother and Child Health (MCH) complications by ensuring access to MCH outreach services at the market place.

This case aims at covering the impact of the pilot project as well as lessons learned and recommendations for future peri-urban WASH-programmes and collaboration with private sector partners and universities.

Design of the One-Stop-Shop Toilet facility and health clinic

The ‘One Stop Shop’ is a model for hygiene, sanitation and community health service provision through a partnership with private sector (companies and local entrepreneur), universities, local municipality and communities.

The 'One Stop Shop' is designed, built and run by the Danish company EnviClean who developed the business case with support from DRC and A2I. URCS and DRC were responsible for hygiene promotion campaigning as well as providing knowledge on the required functions of the facility. In particular Kasese Municipality has played an important role. The OSS staff and EnviClean have since the opening of the facility and the clinic collected data on the OSS and clinic since July 2014.

The 'One Stop Shop' is set up in the Kisanga market area to reach local vendors and people visiting the market. The facility is designed for 600 users per day, but as the market place do not have this flow of people, it has not run up to its full capacity. There are approximately 55 visits on a normal day and 250 on market days. Data shows the OSS facility saw an increase of 33% of customers during the period where the Red Cross ran its Hygiene Promotions campaigns and community awareness activities.

Services available at the ‘One Stop Shop’ include toilets, bathing facilities, availability of sanitary items as well as mobile phone recharge for purchase and a water kiosk. The hygiene facilities are supplemented with a maternal health clinic connected to the water and electricity system of the One Stop Shop, providing antenatal and immunization services.

The One Stop payment system (Pay-E-Safe System) is based on the use of cards instead of cash payment. The costumer price is 300 Ugandan shillings (equal to 8 euro cent). When the electronic card is used, the costumer receives a 100 Ugandan shillings discount equaling 1 point which can be used to purchase sanitary items such as jerry cans, brushes, soap, toilet paper and diapers. Today, EnviClean mainly operate with cash as this is preferred payment method by the costumers.

The project has used the Red Cross PHAST/PHASE methodology which was tested for the first time in an urban context, mobilizing town residents and school teachers.

Project impact

**Overall impact** According the local authorities, the town has not experienced any cholera outbreaks since the pilot project was launched. The partners are not in a position to asses if a reduction of the prevalence of diarrheal diseases has been realised as official health data from the health department was not shared with the partners. It is only possible to know through anecdotal evidence and discussions with the health officers and municipality staff who reported that they had noticed a decrease in cholera cases in the town and that much more households were constructing latrines than the year before the project. It would be highly relevant to pursue evidence for the possible impact on the improved health status among people living in Kasese.

The Red Cross activities has directly reached approximately 10.163 people in Kasese with awareness campaigns on safe water chains, improved sanitation and hygiene practices in the communities and schools. Indirectly, 15.022 people has been reached through the PHAST groups who have further disseminated messages to other community members. Also the entire Kasese district has been reached through radio spots and talk shows disseminating health messages to around 750.000 inhabitants.

The health officers and municipality staff reported that they had noticed a decrease in cholera cases in the town and that much more households were constructing latrines than the year before the project. The One Stop facility seems to have had a positive impact at the market where open defecation has decreased considerably, according to the vendors and the municipality. Above all, the cleanliness of the facility was mentioned as a highlight for many of the respondents:



“*I started using it one year ago. It is a good development that we have a clean facility now. Before we had to use the public toilet but the hygiene was really bad. I got infections when I used it, so sometimes I defecated in a corridor. After we got the One Stop not so many people defecate in the corridors*. *And I know who do not use the One Stop! It is not that they do not have the money to pay for using the toilet*. *I would never buy anything from them!*” - Mrs. Juliet Rujumba

The project has had a positive impact on the general cleanliness status of the market and its surroundings as well as in the wards where the awareness campaigns were carried out. The team observed several "tippy taps" in the visited communities and in the schools, suggesting that the project efforts on focusing, especially on hand washing.

In terms of gender, women and girls have been actively involved in the sanitation facilities through the participation in the PHAST groups. Many of the women attending the MCH services expressed their gratitude to have these health services closer to their business place. According to the midwives, they are able to reach out to more vulnerable women that normally come much later for check-ups.5.500times children have attended an immunization session, 650antenatal care visits have been carried out and 600 family planning sessions were conducted.

The improvement of the cleanliness of the school latrines as well as the increased focus on hand washing facilities and personal hygiene has significantly Contributed to improve the sanitary conditions at the school compound. The children have been empowered to ask for better hygiene in their own homes.

Innovation

**Innovative elements in the OSS project**

* The OSS was developed in a cross-sectorial partnership.
* Urban sanitation as a business - a private, but communal facility can be a sustainable solution to public sanitation as well as to improved health.
* The business model in itself; including retail sales, the Pay-E-Safe System and the combination of self-sustaining process units.
* Combining sanitation facilities with mobile maternal health clinic.
* Features in the facility such as; a cleanable design, pneumatic push-system to flush and a rain water harvesting mechanism.
* The use of PHAST and PHASE methodologies in an urban context.

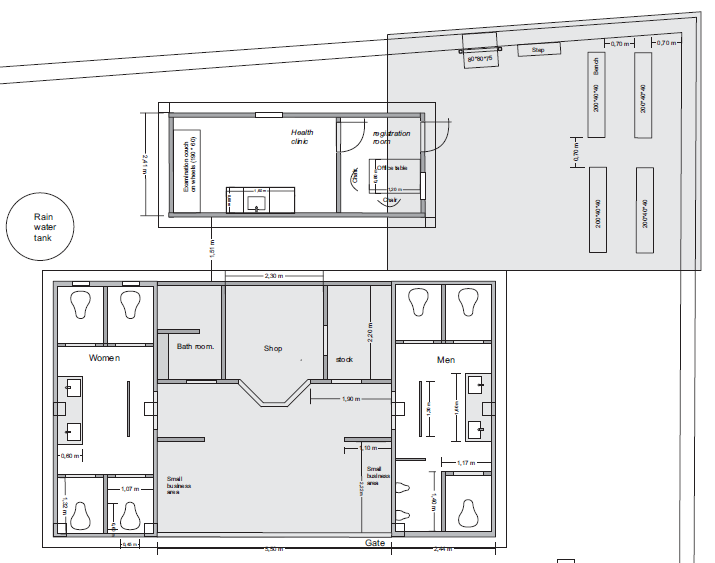
**Urban sanitation as a business** – the pilot confirms that operation and maintenance of communal latrines is indeed a key element, both for local authorities and users, but also that a facility with permanent and trained staff is attractive to the users in spite of the fact that they have to pay for the service. Communal latrines are necessary as private latrines are often not a possibility in urban areas. As public latrines are not well-kept or sanitary, they are most often not used. Therefore a private, but communal facility can be a sustainable solution to public sanitation as well as to improved health. The fact that the toilet facility is run as a private business - paying attention on being hygienic, cost-effective and locally adapted - is key for sustainability. There is potential for local jobs creation.

The OSS model is a **complex business case** composed of several smaller businesses. The ownership of local authorities and communities definitely has been a key element to develop and test a sustainable model. The pilot project has delivered a proof of concept on how to ensure business sustainability by dividing the overall business model of self-sustaining process units and to have a step-by-step trial of the individual (business) unit processes (for example waste management, biogas, selling products, water outlet, baths). The OSS business is running with minor losses covered by EnviClean which is considered acceptable since the toilet facility has given proof of concept in areas such as building design, willingness of payment from users, testing of payment system and training of staff.

The partners knew from the outset that the Kisanga market would not a vast flow of people passing by on normal days, and that sale of toilet visits alone would not make a sustainable business which was why the partners opted for inclusion of retail sales of hygiene products and mobile recharge. For the partners, the testing of the prototype and harvesting of key learnings were considered a necessary step before the model could be scaled up and implemented in more populated urban areas such as in informal settlements in Kampala. The partners agree that the decision not to pilot in Kampala was indeed appropriate and necessary in order to test the effectiveness of methodologies and approaches applied. The OSS project has showcased how to create and test a sustainable sanitation solution to address health risks in an urban area while at the same time trying to run the facility as a business.

**Combining** **sanitation facilities combined with maternal health clinic**. Women living in the proximity to the market now have easier access to antenatal care which hopefully will ensure that their children follow the scheduled immunization programmes. This is relevant as many business women will not go far away from the market to health clinics as they will possibly lose income.

**Sustainable and sanitary solution:** The building is a turnkey facility designed to last at least 25 years.

****

Several innovative features are:

* **Cleanable design** with tiles on the floor, tiles on the wall (up to 10 cm along the floor), depression of the squat toilet (not pit latrine), smooth walls, internal (hidden) piping and the booths are without open spaces below and above to ensure privacy of the user. After leaving the toilet and washing room, the user will leave without touching anything since there are no doors, but instead walls, which is to prevent contamination in case a user does not wash hands after the toilet visit.
* **Pneumatic "push" system*,*** so toilets are flushed by pressing a button, either with the hand or elbow. Not using a string to flush leave the users less exposed to contamination from other users, especially if they use the elbow.

Key lessons learned

**Importance of realistic ambitions and the right partners:**

* The ambition emanating from the “Safe Water Summit” to create an One Stop Shop in an informal settlement together with the Danish private sector within one year after the summit proved to be **too ambitious**. In this case, it took five years to come from the initial idea to the final joint evaluation phase. It was **not easy to find the right partners** who were willing to invest time and resources in a pilot project which in itself had many challenges to overcome. Piloting a project in a slum area, involving a fixed asset such as building infrastructure, required partners who were willing to take risks and invest own resources to partner up with DRC. In the beginning, DRC and the Confederation of Danish Industry (DI) tried to engage with selected bigger Danish companies. It turned out that it was easier to find mutual interests with Danish small and medium-sized companies experienced with working in Africa.
* **Partner continuity** as well as **trust and personal engagement** very important and a key factor in driving an innovative project forward.
* **It is not business as usual in complex partnerships** Partners should be realistic regarding how much time and resources they need to invest in explorative and innovative projects while at the same time entering into new partnership arena. It is not business as usual, and takes much time and efforts to make non-traditional projects fly. The partners must be patient with one another and spent enough time in the beginning to create a robust and trustful partnership that can overcome the challenges and problems that will eventual arise in any type of project. Partners must ensure to have dedicated staff attached to innovative projects.
* **Partners should be sure to have some own funding** **and resources available** for innovative projects. If donor funding is a pre-condition, conditions and requirements also follow, and this can make it difficult to experiment and test new ideas and approaches, especially if it has to be implemented within a tight timeframe.
* The **partnership with Kasese Municipality** in terms of interest and political has definitely been key for success for the pilot project. Without the support, it would simply not have been possible to test the feasibility of a privately run toilet facility and to show case that sanitation is worth investing in for local authorities. Overall, and at all levels, the appreciation of A2I, EnviClean and Red Cross as a trusted and reliable partner to the municipality has been overwhelming.

**Importance of understanding local context and engaging service users:**

* The main challenges in developing the OSS business lie mainly in understanding the local market, language/culture and local networks, customer's payment options and will to pay, legislation, access to skilled labour, exploring existing solutions and local preferences for services and products.
* The OSS promoted the use of cards instead of cash payment, but as the OSS is situated near a market, the customers prefer to use cash. The payment system Pay-E-Safe has worked perfectly without any breakdowns, the staff knows how to operate it but as more and more customers use cash, the cards have become less used.
* **User Experience is a must.** The partners found out through focus group discussions that the OSS must be built as a modular solution where the customer segment and size determine the shape.
* **Design matters.** The choice of materials should not have a "mobile expression" but instead be solid. The exterior design must be a smart and in bright colors (white is associated with cleanliness and hygiene), the sanitary unit should appear solid and steady, the walls should sound and feel solid, there should be light in the toilet room and the building should be ventilated and smell-free. In regard to the interior design, it should be easy to clean with low water consumption, the floor must be slip-resistant and have the same color as the ground (red-brown) which impedes a dirty image; the staff is allowed to wear a uniform, and they should be capable of ensuring proper cleaning and high customer satisfaction.
* Children rarely use the toilet facility, unless they are escorted by an adult. They are often afraid of the big "silver plate" (the squat toilet) which suggests that another type of solution is needed to make smaller children more comfortable in using the toilet.
* The case confirms, not surprisingly, that **operation and maintenance** of communal latrines is indeed a key element, both for local authorities and users, but also confirms that a facility with permanent and trained staff is attractive to the users even though they have to pay for the service.
* If the OSS project is to be scaled up, the construction costs must be brought down to a lower level, and it should also be implemented in an area where more people, thus potential customers, are passing through, if the business is to generate a surplus in its first year of running.