

# Sanitation project cycle for rural areas

This project cycle was developed by the EU-Sida-GTZ EcoSan Promotion Project (EPP) in Kenya to provide a structured procedure to communities, clients, trainers and involved institutions in order to give clear roles and responsibilities of the involved partners as well as to ensure participation and ownership. All financial issues are managed by the support agency (SA) being the relevant executing institution being the Water Services Board (WSB) who receives the funds from the Water Services Trust Fund (WSTF). Alternatively such a project cycle can also be directly implemented by NGOs and donor organisations. The community based organisation (CBO) does not handle financial issues. The CBO acts as the grass-root implementing partner responsible to establish collective ownership of the process. The detailed project cycle with all the main planning and implementation steps used in Kenya by EPP is illustrated in Table A-1 and explained in more detail below. A similar project cycle could be used for other donor-funded sanitation programs. However the lessons learnt from EPP should be integrated.

## Step 1

**Pre-selection of target areas by support agency.** In the first step the support agencies (SA), here EPP or EPP-WSTF-WSB, who offer financial and/or implementation support, have to pre-select target areas, where demand for improving sanitation is expected. Alternatively CBOs can directly request

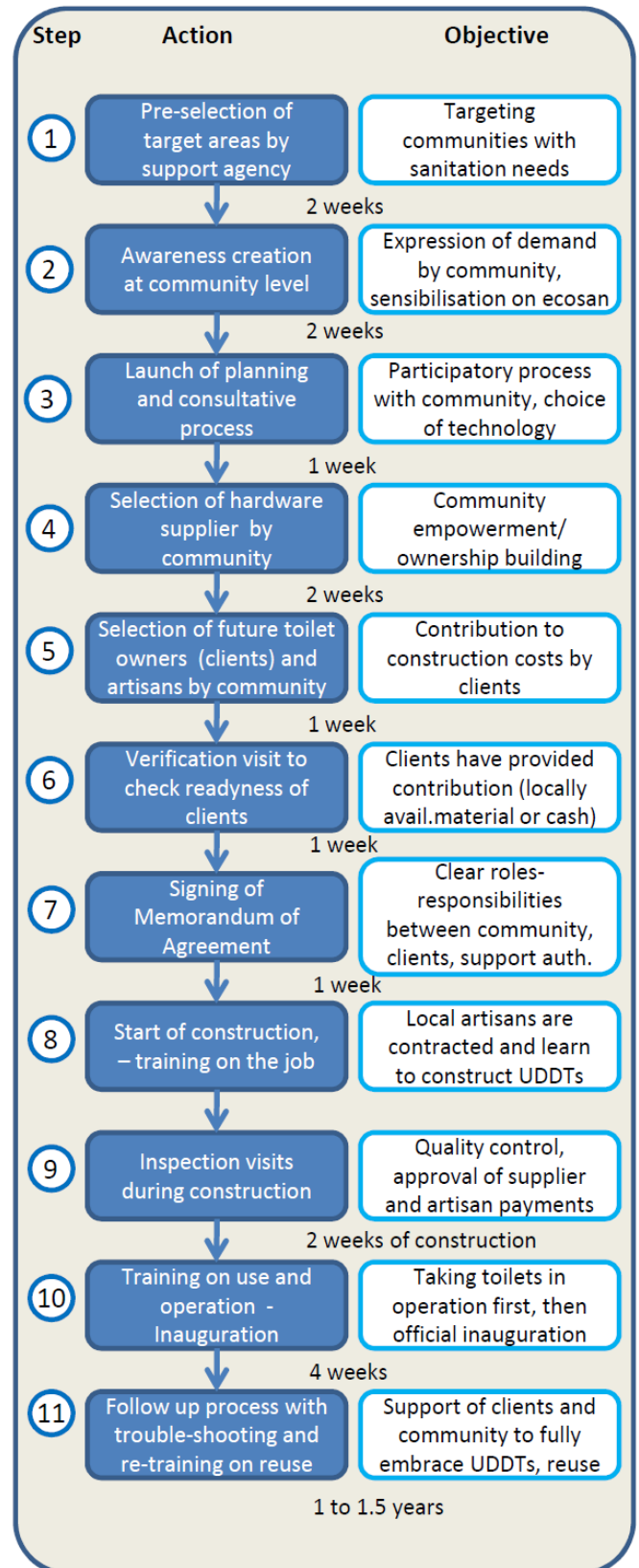
Generally communities are favourable and open-minded to change of their toilet system if they experience problems with their conventional systems like pit latrines that are not appropriate in the area due to reasons of seasonal flooding, rocky underground, collapsing soils and high groundwater tables among other things. Another driver can be poor soils in agricultural areas and lack of available or affordable fertiliser. Here farmers welcome a free fertiliser to improve their yields. Open defecation is also problematic and could also be a good reason for communities to change habits and directly adopt UDDTs or other suitable toilets.

## Step 2

**Awareness creation at community level.** The communities are contacted directly or through the relevant Water Service Boards or provincial administration and invited to an awareness creation meeting carried out by the sanitation officer of the support agencies. A convenient location within the community (such as a school or church) is used for the half day meeting. The community is taken through a problem identification process, followed by a needs assessment exercise and general awareness creation on hygiene and sanitation education.

By raising awareness that common pit latrines bear the risk of disease through flooding and pollution of groundwater as well as ecosan providing fertiliser for improved food production, the community may generate the necessary desire for change. The ecosan concept can be tied to poverty reduction which means improvement of livelihood through increased agricultural production and better health through better hygiene. In order for the communities to be supported, they need to be or get registered as a CBO which is a standard procedure. Then the communities may send a letter of interest to the support agency for further action.

**Table A-1:** Project cycle for UDDT implementation in rural areas of Kenya, developed by EPP – time information indicates an approximate duration of one step.



### Step 3

#### Launch of planning and consultative process.

Once the community expresses their interest for new or improved sanitation systems (like UDDTs), the sanitation officer returns for a workshop on further awareness creation, triggering of willingness to participate, to contribute and to explain on how the planning, design and implementation stages of sanitation projects will work. It is important to provide the community with all the necessary information on the process and the available options so that they can make informed decisions.

The community analyses their situation through discussions and other means like “mapping exercise” and walks through the village, so called “transect walks”. Thereby the whole community is engaged in drawing a sketch of the village (mapping exercise) showing houses, toilets, roads, wells, rivers, pipelines and also open defecation areas, if they exist.

Subsequently a transect walk of the whole community through their village follows to support the understanding of the identified problems. This joint community activity is important to get all community members engaged and generate ownership of the process. This mapping exercise is extensively used and described by the Community Led Total Sanitation (CLTS) approach, which was developed by Kamal Kar.<sup>1</sup>

Furthermore, the sanitation officer emphasises the necessary ownership of the future toilets, which is a prerequisite for the success of a sanitation project. Ownership is built through active participation of the community during the whole project process and the contribution of each future UDDT owner (client) to the construction costs. This must be clear and accepted by the community.

It is also recommended to organise an exchange visit for members of the community to see other ecosan projects (e.g. UDDTs). This approach of “*seeing and not smelling is believing*” has worked very well so far. When they return from the exchange visit they can pass on the message much better to the community and act as opinion leaders.

### Step 4

#### Selection of hardware supplier by community.

The materials for toilet construction which are not locally available from the clients need to be provided as a direct subsidy by the support agency (SA). The materials should be sourced from local hardware supplier(s). A hardware supplier is a private company that is selling and distributing construction materials and tools. The CBO is tasked to get quotations from three different local hardware suppliers including transport costs to the future toilet owner.<sup>2</sup> Then the CBO recommends one hardware supplier and sends all the quotations and the rationale for the chosen hardware supplier to the SA. This is part of the participatory and ownership building process and it also meant to support the local economy. Thereupon the SA visits the hardware supplier to check for reliability, professionalism, costs and capacity to deliver in bulk (many materials delivered at once). Nevertheless it might happen later that a hardware supplier becomes unable to supply due to various reasons, delaying the implementation process greatly.

Therefore it is important to know if the hardware supplier has sufficient financial capacities to deliver in advance because the materials must be delivered for one toilet at once or in two batches. This makes the accounting and payment process

easy and construction fast since there won't be any delays caused by undelivered materials. It can be of advantage to award more than one supplier, especially when the suppliers are small and cannot pre-finance the materials fully. After approval of the hardware supplier by the SA and signing of the MOA (Step 7), the SA issues a local purchase order so that the hardware supplier can start delivering materials to the construction site.

### Step 5

#### Selection of toilet owners (clients) and artisans by community.

To ensure ownership, the interested communities are normally led by the sanitation officer (SA) through a visioning exercise to collectively and individually assess, identify and allocate resources required for the construction and management of the units. This would involve indication of the willingness of the intended future toilet owners to contribute locally available materials, unskilled labour and depending on the capacity of the person the direct hardware and construction costs.

The selection of future toilet owners is done by the CBO with the aim of selecting willing families and local champions as well as opinion leaders. It is up to the negotiation within the community to select the future toilet owner without causing conflict. More than one family or household may share one toilet, depending on cultural preferences. A maximum of 20 users per UDDT is proposed. The future toilet owners have to provide a contribution of at least 20% of the total costs per UDDT. The contribution of the future toilet owners can be either done through providing locally available materials like stones, sand, wood, or in-kind support of unskilled labour or cash. The contribution is indicated in a Bill of Quantity, which shows all the necessary materials and labour costs for UDDT construction, and is signed by the beneficiary and CBO.

Moreover the community is required to select several local artisans, who will be trained on the construction of UDDTs. This should foster ownership and lead to future replication of the technology.

### Step 6

#### Verification visit to check readiness of future clients.

After the community has selected the future toilet owners, artisans and hardware suppliers, the sanitation officer checks if the future toilet owners have provided their contribution of locally available construction materials. It is very important to have all materials ready before the construction starts in order to avoid delays. At this stage the future toilet owners are further informed about the coming steps and their roles and responsibilities. The SA starts to prepare the MOA according to the feedback from the future toilet owners and community from the previous steps.

### Step 7

#### Signing of Memorandum of Agreement (MOA).

This document clearly indicates all the roles and responsibilities between the CBO - as a representative of the community - and the support agency as well as other involved partners. It lists all the future toilet owners, their individual contributions, the amount of subsidies per toilet, the names of the selected artisans and the costs for the hardware for each toilet (from the selected hardware supplier). In order for the entire process to be transparent and effective, enough checks and balances need to be included in the MOA. The payment process of the artisans and hardware suppliers needs to be very clear and transparent for everybody (see Step 8). Finally

<sup>1</sup> <http://www.communityledtotalsanitation.org/>

<sup>2</sup> Requirement according to EU regulations

the MOA is jointly signed during a formal meeting (a standardised MOA was used; see Section 13 of case study).

### **Step 8**

**Start of construction; training on-the-job.** Before construction starts, the hardware supplier must deliver the materials for each toilet, either all at once or in two batches. This is verified by a signature from the sanitation officer and toilet owner on a delivery note. The toilet owner is responsible for the security of the materials. The supplier issues an invoice for each toilet, which is sent together with the delivery note to the support agency for payment. The invoices are compared with the agreed Bills of Quantities as per the MOA and if identical a cheque is issued accordingly. The payments should be done quickly to enable the suppliers to purchase more materials in times.

In preparation for the construction the selected artisans are first jointly trained on the construction of one toilet. Technical drawings, the Bills of Quantities (BoQs) and manuals are distributed. The artisans learn the skills of construction and also the background of ecosan. Later each artisan will construct a certain number of toilets alone as agreed in the MOA. Ideally the artisans should gain the ability to build UDDTs on their own as a business venture. The construction is closely supervised by the sanitation officer, CBOs and the future toilet owner who is usually contributing unskilled labor (Step 9).

### **Step 9**

**Inspection visits during construction.** The supervision of the construction is jointly executed by the CBO, sanitation officer (support agency) and the future toilet owner (client). There are two stages of construction. First the artisan constructs up to the floor slab level which takes approximately 5-7 days as per experience and allowing for necessary curing time. The artisan then receives the first payment in cash from the sanitation officer (SA) after the signature of the half-completion certificate by the sanitation officer, CBO and client whereby confirming the quality of the structure.

After approximately another 7 days the toilets should be finished and ready for use. Now a completion certificate is signed and the remaining payment handed over to the artisan by the sanitation officer. However the construction was often delayed due to delayed delivery of materials. That is why it is very important that the hardware supplier is providing the materials on time and also that the client have all their materials (contribution) ready prior to start of construction. All payments to the artisan are done directly through the support agency to ensure transparency and avoid money disputes at community level.

### **Step 10**

#### **Training on use and operation; inauguration.**

After completion of construction, the sanitation officer should immediately provide an individual training session for the users of each toilet. This takes approximately one hour and includes all the main issues on use, maintenance and reuse. It is recommended to directly start using the toilets after completion and individual training. An official inauguration or a joint community training should only come after all constructed toilets are in full operation.

The official inauguration of all new UDDTs in one community is carried out with the CBO, local administration like public health officers, politicians and other stakeholders and only takes place once all toilets are in use (this should be stated in the MOA). This official inauguration is useful to build the

confidence and ownership among the toilet owners who must understand that they fully own their toilets. The support of the official stakeholders is very crucial to gain support, instil pride and promote the ecosan approach in the region (even though some politicians may tend to misuse the occasion to elaborate on politics).

### **Step 11**

**Follow up process with trouble shooting and re-training on reuse.** After approximately 1-2 weeks of operation the sanitation officer shall visit each toilet owner again to ensure proper use of the facility and safe reuse practice of the urine as well as to provide support and confidence to the toilet owner.

This visit entails individual re-training on certain issues and assistance for trouble shooting. It is crucial to provide such a timely follow-up support since during the first days and weeks of operation the users might experience problems and adjustment difficulties. The proper use of urine is an important issue. They are advised to use all urine on their plot; infiltration of urine should not be encouraged unless only limited agricultural area is available. A documentation of the follow-up should be done for future reference. Ideally the follow-up process should be continued for about 1.5 years in order to complete the full ecosan cycle of filling the faeces vault (6 months), storage in vault (6 months), application in soil and first harvest (3-6 months).

Hence the second visit should be done after approx. 6 months to ensure the toilet owners change the vault in time and to address any other arising issue. The next visit should be done after approx. one year at the time of the application of the dried faeces to the soil. This is a crucial step that can only be demonstrated on the ground. A few months afterwards the toilet owners can witness the positive effects on the crop production. Once they understand the benefits of the fertiliser and a clean, odourless toilet they will fully appreciate UDDTs as a source of fertiliser, good health and comfort. Therefore the sanitation officer should agree on a follow up schedule with the CBO for regular visits. The costs for follow up should be provided by the support agency.

Further reading: Please refer to case study "UDDTs implemented via CBOs and Water Services Trust Fund, Nyanza, Western and other provinces, Kenya" <http://www.susana.org/lang-en/case-studies?view=ccbctypeitem&type=2&id=129>