



Profile of the organization

Ideal Sanitation is one of the players in the portable toilet industry in Kenya. Ideal sanitation is an indigenous Kenyan company that specializes in the provision of portable toilets solution. It began its operation in July 2014. We have toilets that have been designed and manufactured by renowned international groups such as Polyjon International and Ecoloo group a leading Swedish based green technology organization that designs and manufactures sustainable sanitation solutions and other green innovations. Ideal sanitation toilet technology is affordable.

Vision

To improve sanitation, enhance lives, improve human dignity, eliminate sanitation challenges, eradicate water borne diseases by ensuring people have access to proper sanitation by providing eco-friendly toilets.

Mission

The mission of Ideal Sanitation is to provide companies with the highest level of Customer service and address the sanitation gap. They exist to attract and maintain customers.

Goal

To ensure that people have access to a decent toilet and totally eliminate the use of pit latrines and other unclosed methods of managing human waste.

Objectives

- To develop a sustainable business model.
- To be a service-based company whose number one value is exceeding customer's expectations.
- To create mutually beneficial commercial partnerships, that will in turn drive the business to greater heights.
- Create awareness on the gaps in Sanitation in Schools and seek partners in the sector to deliver a sustainable toilet model.



OVERVIEW

This is an existing product that has been developed to meet the needs of the School sector where we have established a gap in Sanitation. School children make up a significant proportion of the national population in Kenya (MoPHS/MoE, 2009). This makes Schools the largest and the most widespread of all the social services approximately ten times the size of the health services (AMREF, 2007).

The heavy investment in the Education sector accelerated reforms such as the launch of the Free Primary Education in 2003. This occasioned an increase in the enrolment of learners in public Schools leading to an influx of over 1.3 million learners in the Education system (UNICEF, 2011). The rapid increase strained the physical facilities in Schools since there was no equivalent investment especially in Sanitation related facilities to manage the increase in the number of pupils.

This increase in enrolment strained Sanitation in Schools that incidentally led to low standards of Sanitation and hygiene in many Primary Schools all over the country (MOEST, 2006).

Quite a number of studies have been commissioned in this sector to establish the extent of Sanitation in Schools and the direct impact it has on School attendance and the general well-being, but we could not identify a product developed specifically to mitigate against the challenges therein.

Due to insufficient resources provided by the Government and low investment by other bodies towards the sector Sanitation facilities in Schools has been greatly affected which creates the need of providing cost effective and sustainable solutions to meet this need.



We have visited 40 schools in Vihiga County and came out with a number of findings.

- Most schools have the need for more toilets but just don't have the resources to invest in this undertaking.
- Cracked and chipped floors that are difficult to clean.
- Poor lighting that leads to users messing up of the toilets affecting subsequent users of the facilities.
- Strong pungent smell due to poor ventilation and presence of flies that discourages users.
- Broken or missing doors and no door locks affecting privacy.
- Insufficient toilets according to the Ministry of Education requirements.
- No hand washing facilities leading to poor hygiene and spread of diseases and absenteeism.
- Collapsing pit latrines.
- Filled up pit latrines with the only solution being excavation for new pit latrines leading to poor use of space.
- Lack of sufficient water to manage flush toilets where available.
- Instances where Primary Schools and Secondary Schools share the same facilities.



SPECIFICATIONS OF THE ECO BIO TOILET.

This is a low cost permanent solution as an alternative to pit latrines and other high cost sanitation solutions in the absence of a sewer system. The system works as an aerobic digester system where separation of solid waste and urine occurs, the base is made up of a special starter bed and bacteria is introduced in the system to breakdown the solid waste in a short period of time. It consists of an aerobic digester system where shallow digging of about 1 meter depth is involved and a 1,000 ltr reinforced tank is introduced. The upper structure is made from environmental friendly boards. The toilet is odor free. This is a solution that would be perfect for remote areas with lack of water and no possibility for sewer line its perfect as an alternative to pit latrines as it does not fill up.

Benefits

- The reinforced tank eliminates any possibility of the toilet sinking.
- The continuous aerobic reaction significantly reduces the volume of the waste and therefore eliminates possibility of the toilet filling up.
- The toilet does not require water for flushing other than for general cleaning.
- The toilet has a plastic finish on the floor making it easy to clean.
- The toilet is fitted with a ventilator pipe and a fan that eliminates smell and it also dries the waste faster.
- The structure is reinforced with a steel frame.
- Foot operated squatting plate that ensures the toilet is covered when not in use.
- Maximizes space as it eliminates the need of building many stand-alone toilets.
- Provision of a 60 ltr hand wash station with the investment in a pair of the double unit.



- Our aim is also through the teachers to improve basic hygiene and to some extent change behavior towards the effective use of these facilities.

COMPONENTS OF THE ECO-BIO TOILET

UPPER STRUCTURE

The upper structure is made up from Laminated Eko Boards, which are locally manufactured. The Eko boards are made from recycled waste paper.

The Eko boards are heat resistant, water resistant and termite resistant as well.

The upper structure is then reinforced with a fabricated steel frame that is soldered to the waste tank to ensure we have a sturdy permanent structure.

The super structure allows the toilet to be modified for disabled users at an extra cost. Since the size of the unit has to be increased as well as extra materials to provide support and also introduce a toilet seat.

THE WASTE TANK.

The waste tank is made up of 1,000 ltr reinforced with metal frame. The reinforced tank eliminates any possibility of the toilet sinking and also ensures we have a sturdy structure in place.

Inside the tank a manual filtration system is introduced where we have a starter bed made up organic material where the bacteria is introduced to process the solid and liquid waste. At the bottom of the tank fine and rough gravel is introduced to refine the liquid further.

The bacteria is acquired from a third party and has been certified as safe for the environment and is purely made from organic material. For the first six months we handle the cost of treating the toilet with subsequent maintenance cost being borne by the consumer. The cost will be kshs 500 per toilet payable quarterly for a site visit to treat the toilet and general maintenance.



OTHER COMPONENTS

Include the fan that ensure the toilets dry faster and eliminates smell.

We also provide a hand wash unit for every two units procured. We also encourage and assist the schools where possible to procure sanitary bins at cost to manage the non-biodegradable sanitary pads.

AFTER-SALE SERVICE & MAINTENANCE

On completion of each project we prepare an information bulletin both in English and Kiswahili on the effective use of the toilet, this information is pinned inside each toilet. We also train the teachers and where possible the pupils. We also plan our visits initially on a monthly basis for the first six months after which the visits are quarterly. The initial visits are basically to confirm understanding on the use of the toilets.



PICTURES OF FINISHED UNITS





HANDWASH UNITS



