# **ECOLOO**

#### Background

The problem of sanitation is not new to the world. Almost 10000 people lose their lives daily because of the diseases caused by drinking water polluted by toilet waste. A child dies of diarrhea every 15th second. The general practice is to poison the land and sea with toxic sludge from sewage treatment plants, or the sewage directly. The problem is severe in rural areas because of such reasons as lack of awareness, lack of funds etc.

To tackle this issue, Eco Loo came up with an idea of permanent, odor-free & long-term toilets for rural areas to service the needs of the underprivileged. EcoLoo Group, a company that started its operations in Sweden; develops, builds and markets unique & patented innovations and environmental solutions. The toilet proposed by Eco Loo is waterless, sewage free, energy free and maintenance free also, making it an ideal suit for underprivileged people. Not only this, it also creates organic fertilizer which is a good value proposition for farmers. The toilets can be built in areas like schools, public places, construction sites etc.

#### • Location, Date

2007, Sweden followed by more than 16 countries

#### Areas

More than 16 countries including USA, Canada, Chile, India, Indonesia, Kenya, South Korea, Malaysia, Nepal, Peru, Philippines, Uganda

# • Stage/Scale

Rural

# Objective of the assignment

Unlike the common goal of establishing a profitable business, Eco Loo looks much beyond the norms. The project envisions itself as an effective, long-term and sustainable one based on an "Inclusive Social Business Model" and sustainability in order to create job and business opportunities locally. The opportunities will be created in production, distribution, installation of the system. Eco Loo's objective is to solve world's concerns related to water, sanitation, hygiene and environment with their sustainable solutions.

# What was done

Started in 2007, EcoLoo team has conceptualized the EcoLoo toilet, prototyped it and then produced it on a mass level along with extensive research and development work. The toilets are produced in Korea and Malaysia. EcoLoo, modelling their working as an inclusive social business, sells, leases, rents and maintains the sustainable solutions and educates people through means like awareness programs, shows, and talks. Till 2016, more than 600 facilities were installed throughout various locations around the world. The team strived for creating a high capacity eco-toilet facility that would be:

• Odor and bacteria free

Saving the water used for flushing



- Producing no Sewage
- Energy efficient
- Quick to dispatch
- Easy to assemble

#### • Impact

- WASH Needs: EcoLoo was successful in addressing world's pressing water and sanitation needs as experienced by over 2 billion people who lack access to toilets.
- Water and Energy Savings: Considering that 10000 people use EcoLoo and save 8 liters water every visit, 175,000,000 liters of water will be saved annually.
- Environmental impact: Because of the advantages like water saving, lower Carbon omission and reduced

- Huge capacity
- Produce safe-to-use fertilizer for agriculture



Carbon emission and reduced pollution, the environmental impact is hugely positive.

• **Economic impact:** The inclusive business model will create employment opportunities. It will also help improve the standard of living of underprivileged people.

# • Challenges and Issues

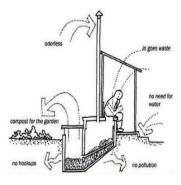
Designing a toilet system that will eliminate or minimize the use of water and still be odourless, sewage free and economical was a challenge. After all was done, convincing the target people for using EcoLoo was also a great challenge as people tend to follow the methods they are accustomed too. As the program goes on expanding, need for quick and easy assembly & transport grew and the team had to come up with appropriate solutions.

Though the project got phenomenal appreciation from various bodies, getting financial aid from companies, NGOs, development programs and banks proved challenging at the beginning.

# • Innovation

EcoLoo, though its innovation in the design of toilet addresses the low availability of water. EcoLoo uses ash and dry soil to flush, instead of using water for it. Minimal water is used for cleaning the toilet pan and lid. The faecal matter is collected in a pit where it decomposes and gets converted into compost, which can be used as fertilizer.

Besides reducing water wastage EcoLoo also eliminates contamination of local groundwater, thereby preventing the spread of diseases like diarrhoea. The system is designed for biannual maintenance, reducing the operating cost.





# **Lessons learnt**

- Proper planning before execution helped EcoLoo to develop a sound and sustainable business model while satisfying the present needs.
- Research and development was very much a critical factor for the success of the project. Replacing the conventional method by a better method required extensive research and development. R&D was required at later stages of the project also.
- EcoLoo was able to grow in a steady and timely manner. It proved to be beneficial to go this way rather than an aggressive and rapid expansion without critically evaluating the target geographies.
- Because of their excellent work in the field of health and hygiene, EcoLoo won many awards and recognition which helped them get financial aids.

#### Financials

Not available

# • Economic sustainability/Revenue Model

The inclusive business model creates employment opportunities. It will also help improve the standard of living of underprivileged people.

#### **Implementer Contact Persons**

• Imad Agi Founder & CEO, EcoLoo AB info@ecoloogroup.com

#### **Sources and References**

- Company website
- https://milaap.org/stories/ecoloo
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