

PEEPOOPLE: FROM WASTE TO VALUABLE

- **Background**

Today, more than 2.6 billion people lack access to basic sanitation. At this moment, 40% of the world's population lack access to even the simplest latrine. The lack of sanitation creates tremendous problems worldwide including environmental pollution, great social problems and unsafe surroundings, as well as greatly increasing the outbreak of lethal epidemic diseases such as cholera.

Without toilets, individuals and their environment are at risk from contamination of fresh water and ground water. That's because human faeces contain infectious and often deadly pathogens such as viruses, bacteria, worms and parasites.

Women, adolescent girls and children are the most vulnerable group suffering from lack of basic sanitation in several ways. One child dies every 15 seconds due to contaminated water from human excreta. Up to 50% of all deaths in emergency, refugee and IDP camp situations are caused by diarrhoeal diseases. More than 80% of these deaths are children under two years of age. When there is no privacy available for women to urinate or defecate in home or in shelter, they are frequent targets for sexual harassment and rape. Women are at great risk if they have to defecate in the open or use public latrines, especially at night, and their sense of dignity is also taken away. During their menstrual periods, adolescent girls are often forced to be absent from school due to the lack of privacy to take care of their hygiene

Peepoople was formed to develop, produce and distribute the Peepoo sanitation solution. The mission of Peepoople is that all people who so desire shall have access to dignified and hygienic sanitation. Peepoople was founded in Stockholm, Sweden in 2006. The Peepoople brand is since October 2016 owned by IAS (International Aid Services) which means IAS will continue the work that Peepoople has been doing since 2006 to develop the innovative Peepoo toilet as well as the supporting products and systems around it.

- **Location, Date**

Africa, Asia, USA and Kenya; 2009

- **Areas**

Urban Slums, Schools and people affected by natural calamities.

- **Stage/Scale**

The foundation is working at international level with its reach to Kenya, South Africa, South Sudan, Pakistan, Haiti, New Zealand, Syria and Philippines. Its target areas cover Urban slums, slum schools and humanitarian response.

- **Objective of the assignment**

The aim is to provide to a solution and to start at the source. Prevent disease transmission as soon as possible through rapid inactivation of pathogens directly after defecation. In high-density urban areas, a project that simply provides latrines cannot achieve sustainable toilets.

• What was done

- The United Nations has declared access to sanitation a human right. Yet, it is the most neglected and off-track UN Millennium Development Goal.
- Recognising consumer needs, Peepoo is formulated from a bottom-up perspective that puts the user's need first. Ergonomically designed to be easy and hygienic to use, simple to produce, and thus possible to be sold to groups with the weakest purchasing power, Peepoo offers a sanitation choice for both individuals and society at large.
- Peepoo is running its programmes at Urban Slums and schools programmes. Peepoo can be utilised as fertiliser and contribute to food security in schools. Crops can be planted with Peepoos following a sanitisation period of four weeks, either in bag gardens or directly in fields. Peepoos that are not utilised as fertiliser in school gardens can easily be collected and brought to a nearby Peepoo collection point.

• Impact

- Girls, who have been to school due to availability of sanitation solution, are less likely to die during childbirth. Each additional year of education is estimated to prevent two maternal deaths for every 1,000 women.
- As a sanitised fertiliser peepoo bags are creating high yields. With their use the physical environment has become cleaner and fresher and liveable.
- The unique qualities of Peepoo together with effective distribution, the Peepoo Humanitarian Response Model are designed to reach 50,000 beneficiaries within three weeks' time.



• Challenges and Issues

- Convincing people to use plastic bags instead of traditional ways to relieving proved to be a challenge.
- For its complete usage training people was another issue.
- Making people use the 'used and sanitised' bags as fertiliser as a challenge.

• Innovation

- Women who benefit the most from using Peepoo themselves are ideal salespeople and distributors. Women sell to women, and in a majority of cases, women are responsible for family, children and health issues.
- The women selected to sell Peepoos are given training on the product as well as on how to start, run and grow a small business. Training modules include: Peepoo toilet, hygiene and health promotion, business training, basic bookkeeping and know-how on home gardening with used Peepoos.
- If the used Peepoos are not utilised directly in home gardens, they are collected and managed by the Peepoo collection system.
- In schools, children and teachers receive comprehensive training in hygiene and hand-washing practices. Training varies slightly depending on the age group and often includes games and songs.

- To engage the youngest, there is also Peepoo Dubo. Dubo is a bear, an animal that children from different cultures and parts of the world can easily identify with. Dubo is the mascot of the Peepoo School Programme, and part of the training material
- Compact in size and weighing 10 grams, Peepoo is designed to provide maximum hygiene and convenience using minimum material.
- It is a slim biodegradable bag, with an inner layer that unfolds to form a wide funnel. It is easy to store, handle and use.



- Peepoo is intended to be used a single time, by one person, whenever and wherever needed.
- Peepoo does not contaminate the environment once the top of Peepoo has been tied into a knot. The urea inside Peepoo inactivates harmful pathogens (bacteria, viruses and parasites) within four weeks.
- Due to its self-sanitising attributes, Peepoo remains safe to hold and carry after use. Because scarce and valuable water resources are not required to use or dispose of Peepoo, the traditional link between water and sanitation is cut. In fact, water is only needed when the user washes his or her hands after defecating or urinating.
- Peepoo remains odour-free for at least 24 hours after use and can be stored in the immediate environment. This makes Peepoo easy to use, either day or night in a household, which increases safety – especially for woman and children. Peepoo offers a sanitation solution adapted to the needs of the user without endangering the environment.
- Peepoo is made of a bio-plastic that meets EU standard EN13432. This means the plastic not only disintegrates, the molecules break down into carbon dioxide, water and biomass.
- Combined with the hygienisation process that urea initiates and completes, Peepoo completely transforms over a short period of time into high-value fertiliser which enables collection and disposal systems to arise, informally or formally, private or public, small scale or large scale.
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- **Lessons learnt**

With growing population within urban settings but lacking the facilities such as toilets, financial sources and geographical location for construction, Re- thinking of basic facilities is needed. A solution suiting the needs and meeting the demands is necessary.

- **Financials**

During initial years the project been financed by Swedish Vinnova and Dutch Simavi funds and now self supporting.

- **Economic sustainability/Revenue Model**

Self-sustainable

- **Implementer Contact Persons**

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- **Sources and References**

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