GARV TOILETS

INDIA

PRESENCE: Bhutan, Ghana, India.

GARV toilets endeavours to be the leading sustainable WASH solutions provider to the underserved communities in the developing world, leveraging the latest technologies for improving community health and providing a rich user experience through Internet of Things (IoT) enabled smart sanitation hubs. It aims to cater one million users globally by 2022.

GARV is looking for:
- Investments (USD 2.5 million in equity and convertible debt) to increase production capacity, engage in research and development, and expand the sales and operations teams.
- Partnerships with multilateral agencies for the provision of safe toilet facilities in refugee relief operations, the promotion of school sanitation, and research for introducing new toilet models and predictive health technologies.

CHALLENGE

Globally, 2.4 billion people lack access to basic sanitation services, and about 1.4 million children die every year due to unsafe sanitation and lack of drinking water facilities. In India alone, 774 million individuals lack access to adequate sanitation, and 76 million lack access to safe drinking water. India needs one public toilet for every 1,000 people, but some cities do not reach the ratio of one toilet every 15,000 individuals. The existing facilities can be easily vandalised, and there is a lack of proper fittings, maintenance, and water supply.

SOLUTION

GARV addresses all the pain points of public toilet infrastructure with its Smart steel toilets that are portable, durable and maintained through automation. GARV Smart toilets are adequately equipped with all basic facilities such as solar powered LED lights and fans, sanitary pad vending machines, bio-digesters and auto flush clean technology, making it self-sustainable in terms of energy consumption and waste disposal. The attached bio-digester technology ensures that the problem of faecal sludge management is efficiently tackled in areas that lack sewage lines. Furthermore, the individual cabins can be placed adjacent to each other to form a toilet block. These GARV Sanitation Centres provide an overall WASH management solution, while being portable and more affordable to low-income population than existing competitors. With GARV, users can use a toilet by paying USD 0.07, take a shower by paying USD 0.14, and buy 20 litres of clean drinking water for USD 0.14. Six models have been developed for addressing the needs of every user segment, such as ‘Toilets for Her’ and ‘specially-abled persons’.

“The company is a convincing case for mission-driven impact and contribution to the SDGs. There is opportunity to scale.”
– Lynda Mansson, Director, MAVA Foundation

GARV forges long-term service contracts with local government bodies who provide the sites for installation and the revenue generation rights from the Hub for the period of the service contract. Apart from the service model, GARV also generate revenues from the sales of treated waste. Furthermore, the usage of toilets is aided through a community-led entrepreneurial business model, which involves young community members who assist the users to buy and avail multiple products and services through a Sani-Kiosk. The revenues streams from the Kiosk and other complementary services (water vending points, mobile/DTH recharges), allow GARV to recover the operational costs and provid employment to several micro entrepreneurs.

IMPACT

Since inception in 2015, the company has achieved:
- More than 1,800 toilets used by 230,000 people daily in low-income communities across India.
- 140,000 adolescent girls and women are able to access safe, well-maintained toilet facilities.
• 30,000+ children use GARV toilets every day at school facilities, improving school attendance and hygiene habits.
• More than 60,000 litres of water recycled every day.
• 850 kilograms of CO₂ emissions saved per day by the solar-powered toilets.
• 94.78% of the tracked users in an industrial area of Faridabad have stopped open defecation.

WOMEN EMPOWERMENT

60% of women in C-suite positions.

GARV serves about 140,000 adolescent girls and women of all ages who never had access to safe, well-maintained toilet facilities and menstrual hygiene products. Low availability of toilet facilities for women in remote regions raises health and safety issues, as well as loss of economic opportunities for women. Similarly, the adolescent girls are unable to attend their schools if they are hit by any illness or due to the unsafe management of menstruation cycles. Hence, GARV is serving their needs by installing Smart ‘Toilets for Her’ with sanitary napkin vending machines and incinerators, and building Sanitation Centres in the remotest toilet-deprived regions.

SCALABILITY

The Toilet Board Coalition estimates that, in India, the sanitation economy - which was valued USD 32 billion per year in 2017 - is set to double to an estimated USD 62 billion by 2021. This sanitation economy consists of a toilet economy, circular sanitation economy and smart sanitation economy. Similarly, the value of the circular sanitation and smart sanitation economy will increase from USD 14 billion and USD 4 billion, to USD 25 billion and USD 6 billion respectively by 2021. In the next 24-48 months, GARV intends to grow its user base to 1 million daily users. GARV’s scaling and marketing strategy is based on direct partnerships with government bodies, NGOs, INGOs, and corporate social responsibility projects.

FINANCIALS

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<tr>
<th>Annual Revenue (USD)</th>
<th>EBITDA (USD)</th>
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<tbody>
<tr>
<td>546,000 (2021)</td>
<td>322,140 (2021)</td>
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<tr>
<td>252,953 (2020)</td>
<td>139,124 (2020)</td>
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<tr>
<td>500,000 (2019)</td>
<td>260,000 (2019)</td>
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INVESTMENTS

GARV has received USD 71,700 in institutional funding from the Indian Institute of Technology-Kanpur, Villgro and DFID, and a total of USD 1,20,800 in form of grants from multiple awards. Currently GARV plans to raise USD 2-2.5 million in equity and convertible debt to increase production capacity, invest in research and development for introducing new toilet models and predictive health technologies, and increasing team size for efficient sales and operations.

PARTNERSHIPS

GARV currently works with the directorate of the Clean India Campaign led by the Government of India, as an approved vendor for the provision of public, community and smart toilet facilities in India. GARV has also partnered with the Toilet Board Coalition as a member of the cohort council that drives strategic partnerships and promotes entrepreneurship in the sanitation sector.

AWARDS

GARV’s Internet of Things (IoT) sensors collect data on usage, toilet functioning and user hygiene behaviour; they also activate auto flushing and floor cleaning depending on usage or malodour percentage. IoT and Radio-frequency Identification (RFID) sensors provide real-time data that feed on backend servers, where aggregated data on toilet maintenance and user hygiene are visualized on a dashboard. The system is able to raise alarms for malfunctions in toilet systems, such as total up-time of toilets, door malfunction, flush malfunctions and water shortage.

FOUNDER

Mayank Midha is the Co-Founder of GARV Toilets. He is an electronics’ and communications engineer and holds an MBA from the Institute of Rural Management Aanad (IRMA).

MORE INFORMATION

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