

A Women-led Sanitation Enterprise in Kathmandu

Aerosan 📍 Kathmandu Valley, Nepal GE2 – Significant Consideration for Gender Equality

Innovation Description

There are not enough public toilet facilities to meet the needs of the urban population in Nepal. Existing toilets are poorly maintained and often unusable, especially for women due to concerns around privacy and safety. To address this gap, [Aerosan Hubs](#) offers public pay-per-use toilet blocks that incorporate women-focused design and the provision of sanitary and menstrual hygiene management facilities. Aerosan’s facilities offer a safe and sanitary user experience for adults, children and individuals with disabilities. Through on-site anaerobic waste treatment, each Aerosan Hub prevents 40 tons of human waste from being dumped into the region’s fresh rivers and lakes every year. Originally funded by Grand Challenges Canada’s [Stars in Global Health](#) seed program, this Transition to Scale social business model is delivered in partnership with Kathmandu Valley municipalities, Rapti Renewables, Temple University, and Guthi (a local NGO).

Central to this innovation is the sanitation workers cooperative through which women from the marginalized Dalit community gain access to stable and dignified employment operating and managing Aerosan’s public toilet facilities. Aerosan works to increase the demand of public toilet facilities for both men and women, increase maintenance incentives for sanitation workers, and decrease the environmental impact of human waste. Aerosan ensures that women have equal access to their facilities by proactively engaging them in each step of the design, operations, and evaluation processes.

Integrating a Gender and Intersectional Lens

Aerosan undertook a comprehensive [gender equality analysis](#), and with technical gender support provided by GCC, developed and implemented a gender equality strategy taking gender and intersectional considerations into account.

Gender Considerations	Intersectional Considerations
<ul style="list-style-type: none"> Public toilets that are unsanitary and lack amenities for menstrual hygiene management lead to drastic differences in public toilet usage between women and men. During Aerosan’s pilot study in 2018, only 1 in 7 users were women. Poor conditions limit women’s participation in public life and the workforce, which is exacerbated by existing cultural taboos around menstruation. Four major concerns affecting public toilet affinity and usage for women include affordability, cleanliness, privacy and safety². 	<ul style="list-style-type: none"> In Nepal, toilet operators and/or cleaners often belong to certain social classes that face caste discrimination, with Dalits (“untouchables”) at the lowest level of the caste system¹. Very few members of the sanitation working class have ownership of sanitation companies or agencies. Women in these communities are especially vulnerable to facing gender and social discrimination. Hardly any public toilets in operation in Kathmandu are accessible for persons with disabilities.

¹ A caste system is a traditional system of social stratification determined by birth

² The four major factors were derived from a regression analysis of surveys as noted in [The Design Lab](#) report.

Gender Equality Priorities

Following their gender analysis, the team identified three priorities to guide their gender equality strategy:

- Incorporate the voices of local women in the design of Aerosan's sanitation services, infrastructure, and site selection processes.
- Enhance leadership abilities of The Independent Sanitation Workers Group (ISWG) through 1) registration of the group as a cooperative, establishing the cooperative as a Job Placement Agency with contracts other than Aerosan HUBs; and 2) enhance training and resources available to members.
- Address gender-specific barriers among women sanitation workers such as education and training, workplace safety, caregiving duties, and menstruation management and/or needs.

Progress on Gender Equality Outcomes



Increases in Women's Public Toilet Usage

- Aerosan used a comprehensive participatory approach in the re-design of the women's toilet facilities by conducting qualitative and quantitative market research.
- Gender analysis of the quantitative data was conducted in collaboration with The Decision Lab to inform gender-specific priorities for public toilets and create long-lasting scalable behavior change.
- Gender-inclusive renovations included increasing space in women's units, adding ventilation, lighting, new tiles, hand washing facilities, and sanitary napkin provision and disposal bins
- Aerosan also works with local NGOs in Nepal to promote menstrual hygiene awareness and handwashing practices

There was a **46%** increase in the proportion of women users at the Aerosan Hub pilot facility following the gender-inclusive renovations.

Frequency of hand washing among women users increased by more than **43%**.

Hiring Women Sanitation Workers from Marginalized Communities

- In Nepal, individuals who typically work in sanitation-related jobs are subject to poor working conditions without training, benefits, or opportunities for upward mobility.
- Aerosan's goal is to improve the working conditions and financial wellbeing of sanitation workers.
- To date, **ten** women from the marginalized Dalit community have gained access to a stable income operating and managing the existing three Aerosan Hub public toilet facilities.



Members of the sanitation cooperative at a leadership training session.

Establishing a Women-led Sanitation Workers Cooperative

- The Independent Sanitation Workers Group (ISWG) was formed as a result of engaging members of the sanitation community in Nepal to be part of the long-term solution.
- Many of the members are women from the Dalit community who have taken leadership positions in the committee.
- Functioning as a worker's cooperative, members are trained to operate and manage the toilets, Members have a direct stake in the success of the model, as revenue-share partners with Aerosan.

500

registered members
led by an elected
committee of women

Women are provided with skills, literacy, and numeracy training that enables them to effectively manage the operations and finances of facilities, while maintaining a high standard of service and hygiene that is expected to attract more users.

This empowers Dalit women to be decision makers who will shape future policy in sanitation and business for women in Nepal.

Lessons Learned

- Applying an intersectional and gender lens has allowed the Aerosan team to design facilities that integrate the unique needs of different user groups, including women, girls, marginalized castes, and individuals with disabilities.
- Access to space was a challenge to meeting gender-specific sanitation needs. The team had to push through several design iterations to negotiate an increase in space for women cubicles in Aerosan's toilet facilities. As a result of strong relationships with local government and designers, the team established a ratio of 2:1 for women's and men's space in order to accommodate for wider booths, sanitary and menstrual hygiene management facilities and baby changing tables.
- There remains a need for local infrastructure or market-ready technology to effectively manage menstrual hygiene waste.

Next Steps

The Aerosan team plans on taking additional measures to enhance their gender equality efforts including:

- Experimenting with a locally manufactured incinerator for sanitary pad disposal on site.
- Increasing educational workshops provided by a local women's group focused on menstrual hygiene management and cultural taboos.
- Developing a Job Placement Agency through the Sanitation Workers Co-op. Aerosan will provide training to women in business and contract acquisition.

Overall, analyzing and prioritizing a gender-based approach has increased the social impact of the innovation and will play a critical role in progressing gender equality during the funding period and beyond.

Learn More

To learn more about Aerosan's work in Nepal, you can refer to website [here](#) and follow their social media for updates.

