

Plastic Latrine

A Durable Option for the Remote Areas



Bangladesh has different types of geophysical location and hydrological influence & pattern also varies in different zones. The geographical structure of Bangladesh coast has made it vulnerable to recurrent cyclones and tidal surges accompanied by saline water. The affect of storm surge is penetrating deeper into the landmass and causing significant casualties and destroying all infrastructure including sanitation facilities. Being a front-line victim country to climate change, its impact has been visible in other zones including *char*, *haor* & hill. The poor & disadvantaged are becoming hard-to-reach in terms of WaSH facilities. Especially the sanitation system is collapsing while thousands of people are losing their infrastructural facilities.

NGO Forum's intervention has tried to understand the geophysical difficulties and local impacts of climate change on water, sanitation and human health as well as identify the associated risk and social vulnerability in the respective hard-to-reach zones. Better understanding on the actual needs, current coping & adaptation mechanism of the local communities is contributing in demonstrating and promoting resilient WatSan technologies for the difficult communities. This has created the scope to develop sustainable sanitation options appropriate to local physical, social and cultural context to ensure improved sanitation and hygiene & health security especially of the remote & difficult communities.

Plastic Latrine –

NGO Forum's

innovative sanitation option



NGO Forum's programme intervention is promoting the Plastic Latrine Set in a demand-responsive, context-specific and affordable manner based on the local geophysical context and the challenges of climate change. While rendering the Plastic Latrine support to the community, it is laying special emphasis on the poor victims of the respective geophysical zone and climate-vulnerable areas to raise significant sanitation coverage.

The innovation of the Plastic Latrine Set targeting the remote & difficult zones and to combat the climate change hazards and in terms of the feasibility of hard-to-reach areas' geophysical characteristics is contributing to sustain the sanitation promotion in the programme areas. The Plastic Latrine Set is cost-effective compared to its longevity. The communities themselves are easily carrying & setting the Latrine Set by themselves since the Latrine component is very light in weight, using comfortably and maintaining efficiently. The durability & user-friendliness of the Plastic Latrine has given the remote & geophysically difficult communities scope to maintain sustainable sanitation & hygiene habits.

In the hard-to-reach & difficult areas, concrete-made latrine components are less durable due to transportation problem in remote areas including hilly areas, saline-affected coastal belt, *char* lands and water-logged *haor* areas. With a view to supporting the people of hard-to-reach and difficult areas with the feasible technological options, NGO Forum has innovated & adopted an alternative latrine option namely Plastic Latrine Set in Bangladesh.


The Technical Distinctness

- Relatively cheap materials can be used for construction of containers;
- Ring, slab and pan are made of high quality plastic and are demountable;
- Easy to handle and move during construction and requires less labour for installation;
- Easy to install during disaster and emergency response periods;
- Though the latrine materials are plastic, these are not affected by salinity and corrosion;
- Reinstalling latrine components is feasible;
- Maintenance costs and requirements are low;
- Higher feasibility than RCC pit latrines in the hilly and *char* areas proven due to easier transportation and relocation capacity;
- Highly adaptive in the salinity-affected areas as damage, rusting and efflorescence due to salinity will not occur;
- Less water required for flushing.

Plastic Latrine


Made Healthy Life on the Hilltop

42-year-old Macathwai Korbori, a Marma origin lives with his family in a hilly village named Paikhyong Para, a geophysically hard-to-reach area located about at 7 km distance from Bandarban city. As many as 33 Marma families live in this village. Traditionally, the community people of this village set up their dwelling on the hilltop 500 feet up from the plain land. Since his childhood the Korbori has been observing that the sanitation and hygiene situation of his village is very poor resulting in the pitiable health situation. He along with his family members used to defecate in the open places and did not wash hands properly after defecation since there was scarcity of water and they suffered a lot from abdominal problems, excreta and water-borne diseases.



Once representatives of NGO Forum's partner NGO Tatzindong in Bandarban visited the village. They made the villagers understand that the reason of diseases in the village is unsafe water and unhygienic latrines. They advised to use hygienic latrines using the modern and feasible technologies in the hilly places. After few days, engineers and other responsible persons selected the spots for the installation of latrines. But, it was difficult to install the latrines due to geophysical barriers i.e. rocky soil texture in ground. When the engineers and his people were going to start the work, the hilly adverse characteristics hindered the process. On the other hand, the people did not agree to carry the concrete ring slabs of latrine at the hilltop. They agreed when the alternative technology's plastic slabs were provided. But the people could not depend on the technology also because it seemed to be very slender. Engineers made them convinced by proving it feasible, unbreakable and a strong technology. At the same time relatively the availability of water raised as a problem. Finally, the installation process of latrines was completed and 13 families were provided with hygienic latrine facilities of plastic slab, feasible technology for hard-to-reach areas especially hilly areas and a Ring-well was also installed successfully to solve their water crisis.

Now, the Korbori feels good using plastic latrine. He along with his family members is free from diseases caused by unhygienic latrine in their. The health is also better and can walk harder now.



Plastic Latrine Made Healthy Life on the Hilltop

42-year-old-Masathwai Karbari, a Marma origin lives with his family in a hilly village named Paikhyong Para, a geophysically hard-to-reach area located about at 7 km distance from Bandarban city. As many as 33 Marma families live in this village. Traditionally, the community people of this village set-up their dwelling on the hilltop 500 feet up from the plain land. Since his childhood the Karbari has been observing that the sanitation and hygiene situation of his village is very poor resulting in the pitiable health situation. He along with his family members used to defecate in the open places and did not wash hands properly after defecation since there was scarcity of water and they suffered a lot from abdominal problems, excreta and water-borne diseases.

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The sanitation promotion using Plastic Latrine Set has been indirectly contributing to poverty reduction among the community people in the hilly areas. The Plastic Latrine innovated and promoted by NGO Forum has gained wide acceptance among communities across Chittagong Hill Tracts (CHT) as this is a low-cost alternative sanitation option that has been proved apt for the hilly landscape.



The light-weight: Plastic Latrine is reducing the hill-people's burden a little

Setting Latrine before Building the House



The poor farmer Abdul Gofur and his family have moved from Bramhaputra river erosion stricken char to a comparatively new char located in Houria village of Nayarhat union, Chilmari, of Kurigram. The climate refugee family has brought all portable possessions including the Plastic Latrine that they have been using for more than a year. They have installed it in a raised platform and started using it before constructing their new home. In Gofur's statement, "To us, a hygienic latrine is as important as having a residence. We have pulled the latrine, cleaned it and safely brought it here. It was not possible if it was concrete made." Like Gofur's family, Msst. Mabilia, another climate refugee taken shelter in the same village has also brought her Plastic Latrine while migrating. She says, "I cannot think of a day without using it. Many of my neighbours now know that health, hygiene and environment related problems could be reduced through use of hygienic latrine as the community people are getting aware of this attending in various promotional activities facilitated by NGO Forum's partner local MJSKS. But migrating from one char to another is a common scenario of the locality. For this reason, they are willing to buy plastic latrine as it is cheap, hygienic, easy to carry and install."

Plastic Latrine Became Reliable Part of Our House All These Years

Menyao Mro (50) along with his family of 7 members lives in the high peaks of Empu para located in Tonkabati union under Bandarban Sadar upazila of Bandarban district. Menyao Mro got a Plastic Latrine set from NGO Forum in 2010. His family members are using the Plastic Latrine as their fondness towards it has grown. Menyao describes its durability saying, "I have been using this Plastic Latrine for the last 6/7 years. It does not contain any damages yet. The Plastic Latrine is durable and does not break. Flushing occurs easily. All that needs to be done is repair the superstructure of the latrine after some years. The Latrine has become a reliable part of our house."



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