

<b>Name of the Gram Panchayat</b>	<b>Dapada</b>
<b>UTs</b>	<b>Daman and Diu</b>
<b>Theme</b>	<b>Health and sanitation</b>

Generally, we believe that public toilet means “A dirty place” with uncomfortable odor and muddy surroundings!!! Mostly public toilets are in unhygienic condition. Usually, we came across many problems with public toilets like; “Toilets are unclean, with no water supply, no maintenance etc. We have made an effort to change this image of the public toilet. Technical and social engineers of the **Burman Industries Ltd and Development Quest Foundation** developed a modern toilet called “BIO2.”

From financial support of RGPISA, Dadra and Nagar Haveli (DNH) has launched BIO2 in 9 Panchayats on 4<sup>th</sup> June 2015 In all Panchayats two toilets were installed- men’s toilet



If we look into the salient features of the toilets, the most attractive feature is the “Toilet garden.”

We've all read about flower garden, kitchen garden but the concept of toilet garden is new to us. All the wastes coming out from these toilets have been converted into water which can be re-utilized for irrigation with drip irrigation techniques.

This is a modular toilet, a complete system that uses bio digestion process to digest the human waste, so no need of a soak pit or a septic system.

Apart from this, we also made up a number of posters showing up the proper hand wash and waste disposal techniques, which helped the people to overcome the major cleanliness challenges.

**The main features of the toilets are.**

1. This is a modular toilet, a complete system that uses bio digestion process to digest the human waste, so no need of a soak pit or a septic system. The toilet is mounted over the digester tank that saves precious floor space.
2. Digester is fabricated in Cold Rolled Carbon Steel, coated with multi-layer anti carbonation coatings. Digester top is in Stainless Steel with Stainless Steel Indian style toilet pan.
3. It is suitable for use up to 30-35 people usages per day
4. Models is adequately ventilated from all four sides on the top
5. The bio digester needs just a onetime charge of bio-culture after those bacteria will take care of all human waste and convert all solid waste into the water.
6. The culture needs just human waste for its survival
7. The toilets being a standalone modular unit has the versatility of resting on any flat surface [where rocky terrain poses difficulty to mount into a pit]. We provide a removable ladder to have access into the toilet. Where the soil is soft, we suggest the toilets mounted into a pit so just a one-step access into the toilet is available.
8. The output from the digester is clear nutrient water that is ideal for nourishing a flower bed or can be used as drip irrigation system; the other product consists mostly of methane gas with traces of other nonpolluting elements which is vented out.
9. Our models come with add-on features like an **overhead loft tank** [suitable for outdoor use]; a pump to fill water to the overhead tank; internal PVC piping and fittings for in-toilet use as well as a **hand wash basin; dustbin, solar panel with low wattage LEDs** sufficient to light the toilet and a long working cycle to keep the toilet lighted through the night. The LEDs are de activated-on sunrise and activates on sunset through photo sensors.

**From the roots....**

It is good for common public, the model is helpful and innovative and the best part is "This model has all the facility and does not produce any waste"

**Shri Shankarbhai Vaghmare,  
Dist. Panchayat President, DNH**



It is an innovative idea of BIO2. Now, women visitors will be happy to have toilet facility in the Panchayat Premises

**-Sarpanch, Dapada**



**From the District Authorities**

I am happy to launch this bio2 toilet,  
through which we support the Swachh  
Bharat Abhiyan

**Shri Ved Prakash, Chief Executive  
Officer, Dist. Panchayat, DNH**



We are happy to contribute our  
expertise for SWACHH  
BHAART

ABHIYAN

**Ms. Hetal Shah,  
Development Quest  
Foundation Mr. Sahjanand  
and Mr. Ramesh Barman  
Industries**

**Technical Team**

