

Providing sanitary toilets in Munrothuruth water logged areas: Saga of success

Munroe Island is one of the small Grama Panchayats in Chittumala Block of Kollam District, Kerala. The origination of island was from the delta formation of the Kallada River. Altogether there are mainly six marooned islands. A railway line is passing through the island for a length of 2.50 kilo meter by dividing the panchayat into two. After the construction of the Thenmala Dam across Kallada river, the nature of the flow ceases and the natural ecological systems of the island changes drastically.



Munroethuruth panchayat profile

Total No.of families	:	2509
BPL families	:	1505
No. of colonies	:	22
		(Lakshamveedu Colony 6, Jayanathi Colony 5, SC Colony 11)
Population	:	10013
Total No. of wards	:	13

The tsunami occurred on 2004 made the conditions in the Island worse. Now the buildings in the islands are sinking in the ground considerably and during the high tide water enters upto the floor level of the houses. This phenomenon was very minimal in the beginning. But significant changes occurred post tsunami.

A baseline survey conducted by the government in 2015 regarding the sanitation facilities revealed that 363 families were not having sanitary toilets. In houses having toilets, the outlets ended-up in the near-by stream which polluted the stream. The people are not concerned about the pollution caused by the insanitary toilets. Their concern was to have a covered cabin to defecate. Construction of two pit toilets or septic tank was not possible in the area having high-water table.

Out of the 363 families sans toilets, 142 were living in almost dry area (eastern line of railway line). Hence, they were provided with two pit toilets under the ODF scheme. **For the rest of 221 families, providing sanitary arrangements were actually a herculean challenge.** In consultation with the District Sanitation Committee and Technical Committee number of options were discussed. Bio – toilets and eco-san were no feasible. The committee finally decided to provide light weight readymade toilet cabins and advanced septic tanks.

M/s Ram Biologicals, one of the Service Providers of Suchitwa Mission was entrusted to provide the readymade toilets. The normal platform is made using solid cement blocks up to the floor level (90 cm height) and the PUF cabin of size (95 cm x 1.22 m) is fixed over the platform. The 800-litre capacity septic tank is having 1.5-meter height and 110 diameters; 90 cm of which is placed below the ground level and 60 cm above is found

as an alternative to the conventional septic tanks. The closet is connected to the inlet of the septic tank. The effluent from the outlet passes through a filter tank (soak pit) 60 cm above the ground level having inside dimensions 50 cm x 50 cm. It is filled with different layers of 20mm metal, 6 mm metal chips, sand, coconut shell, charcoal and the clear water is allowed to seep under the ground.

The unit cost for providing the above system was 57,900/- out of which 13000/- is for civil works and Rs.44,900/- for the super structure and other arrangements.

The construction of leach-pits in the area surrounded by water was really a huge challenge and digging of pits were impossible. Hence Suchitwa Mission conversed with various technical experts and agencies to find a solution. In consultation with the District Sanitation Committee and Technical Committee a number of options were discussed. Since, Bio – toilets and eco-san were no feasible due to many reasons, it was decided to provide light weight readymade toilet cabins and advanced septic tanks to tackle the situation.

