

## Faggan Majra village effectively manages its liquid waste



The 2-3-acre pond situated on the outskirts of Faggan Majra village in Patiala District of Punjab had been filthy for a long time. In the absence of desilting for an exceptionally long period, the capacity of the pond had decreased considerably, resulting in the back flow of the water onto the streets, emitting a foul smell.

Moreover, the pond was a breeding ground for mosquitoes that increased the risk of vector borne diseases amongst the community, with harmful effects on the health of children studying in the primary school situated nearby.

The condition of the village consisting of 352 households and a population of 2112 individuals had been the same for a long time.

To address the issue, the Sarpanch along with his panchayat members actively sought a solution. They coordinated with the officials of the Department of Rural Development and Panchayats, who informed them that the village pond could be renovated by availing of MNREGA and Pradhan Mantri Krishi Sinchai Yojna Schemes. They also recommended various technology options that can be adopted for the renovation of the pond.

Equipped with that information, the Village Sarpanch and his panchayat members organized a Gram Sabha during which they discussed the matter at length in the presence of the community as well as other stakeholders. The village community unanimously agreed to

the action plan proposed by the Gram Panchayat, agreeing to implement the WSP technology adopted by the Thappar Institute of Engineering and Technology (Patiala).

Thereafter, community mobilization and awareness activities were conducted in the village to make the community aware of the implementation process under which sewage water generated from all the houses is taken to the pond for treatment. The benefits of the project were explained in detail.



**What is Thapar model of technology:**

**The treatment plant consists of the following:**

- **Screening chamber:** Sewage water from all the households is collected in the screening chamber where floating materials are separated.
- **Digestion Well:** Water revolves, and solid materials settle down in the base while the liquid floats
- **Skimming tank (Well 2):** In this tank, liquids present in the water get separated
- **Stabilization tank (Well 3):** This is the third well, known as the stabilization tank and almost clean water is collected in this
- **Oxidation Pond:** Water from the Stabilization tank is then transferred to the Oxidation pond. The main function of the oxidation pond is to treat wastewater through the interaction of sunlight, bacteria, and algae. Algae grow using energy from the sun and carbon dioxide and inorganic compounds released by bacteria in the water.
- **Storage or Maturation Pond:** The water is finally transferred into the Maturation pond

The total cost of the project is Rs.18.61 lakhs and O&M cost will be 5 per cent of the estimated cost. The treated water will be used for irrigation purposes and the GP will generate revenue from it.

**Benefits to the community:**

- As the pond has been renovated under the MNREGA scheme, it has generated employment for the village community.
- The renovation of the pond has beautified the village
- The village has become neat and clean and is free from foul smell
- It will contribute to improvement of health
- After the renovation, the capacity of water in the pond has increased
- Treated water is used for irrigation purposes, reducing the dependence on bore wells.
- Visitors to the village have appreciated the efforts of the GP