Sustained Efforts Result in an Underground Drainage System

After 23 years of sustained efforts, Velivennu Gram Panchayat (GP) now has a total coverage of an underground drainage system (UGD) in order for successful liquid waste management. Velivennu GP used the local body of funds in order to cover the 9.866 kms of the GP, meaning that even the narrowest streets in the village have complete coverage of the system.

As a result, the village has received recognitions for its successful UGD both in India and internationally. These include Chief Minister Mr. Chandrababu Naidu, Dept. of PR and RWS as well as many other officials and organizations.

To learn more about Velivennu GP watch the video documentary at: https://www.youtube.com/watch?v=oxqEwzkJMR0

How it happened?

In 1968-69, Sri. Korukonda Lakshmipathi Rao (Executive Officer of the GP) through inspiration of the UDG in Happa, he initiated the construction of a UDG system in order to address many of the water borne diseases that were rampant in the GP.

In the late 60s, Velivennu was suffering from stagnation of rain water and liquid and solid waste trapped on the sides of roads due to inadequate and open drains.

Meetings were held with villagers to discuss the situation and problems associated with the open drains. A few years later, Sri. Burugupey Sesha Rao and the Sarpanch of the time revived the project yet lack of funds was a problem. Therefore, the GP decided to execute the UDG in a phased manner, year to year as funds were available.
The Process

To begin, the GP conducted a survey for the entire village. Helped by RWS&S engineers a village map was prepared indicating major & minor streets, major outlets for drains in and around the village (such as schools, Anganwadi buildings, OHSRs, Temples and other public places).

Based on the survey and map the entire village was divided in three parts. The quantity of wastewater to be discharged by the UDG pipes from the house-holds and house sites in that street was estimated. The gradients and directions of the underground drainage pipes was also worked out.

Then, based on a priority basis the UGD system in the streets and roads of the village was constructed!

Advantages of RCC Underground Drainage System over Open Drains

Direct Advantages:
- More economical
- Construction is possible in narrow streets
- Provides hygienic conditions in the village & as a result protects health of the public and improves village economy
- Streets look neat and clean
- Solid & liquid waste can be managed with ease

Indirect Advantages:
- Reduced maintenance costs
- No personnel required for liquid waste management

The underground drainage system of Velivenu is worth exploring and replicating. Velivenu took up a step by step process over 23 years to achieve 100% underground drainage in the GP.