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Title of Invention: - Modified stabilization tank for the treatment of grey water from rural area

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Abstract: Wastewater treatment is a burgeoning issue for all the developing countries including India. The wastewater management scenario in rural areas is still further pathetic. As per the CPCB statistics, hardly 30% wastewater is getting treated (average national figure). Non availability of power, skilled manpower availability are the major hurdles in rural areas in India.

Current research is an attempt to treat the grey water from a rural area in a modified pattern in a stabilisation tank. The special flow pattern as well as positions of interconnections helps for efficient removal of solids and in turn BOD & COD get removed in a very efficient manner. The peculiarity of the system is that it does not require a single unit of energy, thus making it most sustainable system. Further, it's possible to deploy pisciculture in these modified stabilisation ponds which will help for providing additional income source to the villagers.

## Outcomes:

- 1. Reduced dependency on fresh water. The treated waste water can very well be used for non consumptive use such as gardening, flushing, and floor washing or even for agriculture purpose.
- 2. The system does not require any mechanised parts / chemicals / skilled manpower etc. Hence it's most ideal for rural areas.
- 3. Additional feature of possibility of pisciculture will help for social upliftment of the rural population, thus making the employment opportunity available within their village itself.