

## TECHNOLOGIES FOR WASTE WATER TREATMENT BY PRIYA

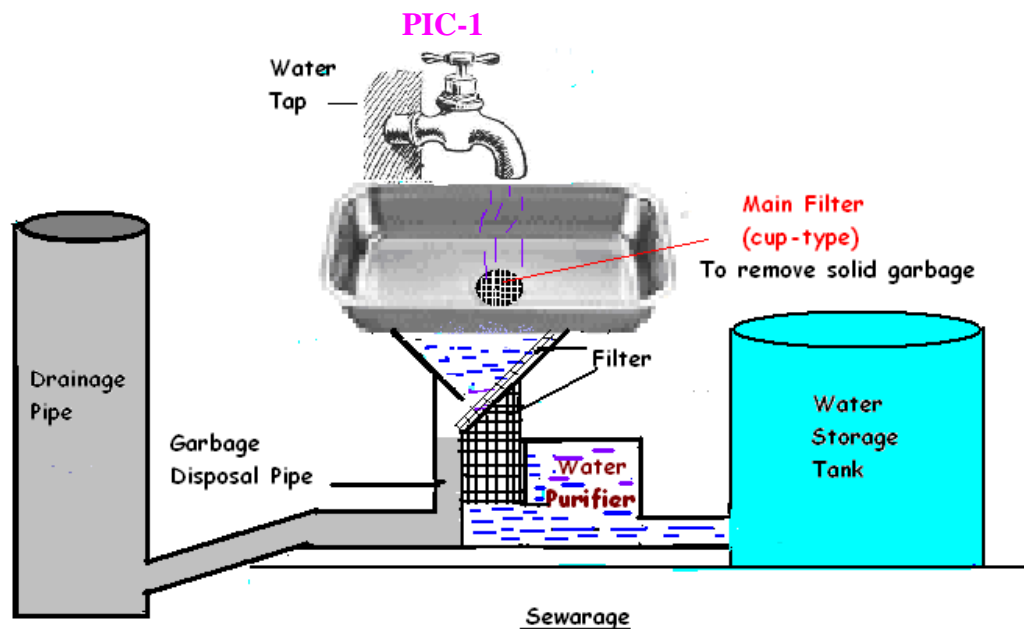
I have developed the following technologies for the treatment of waste water at homes and buildings for the conservation and preservation of water which can ease the water crisis to a large extent. With these technologies we can save 95% of water what we use in our day to day activities. This is a method of water used is water produced. It can be done in two ways:-

1. By installing Smart water sinks at homes.
2. Under ground water treatment plant by installing drain water recycling system in buildings.

### Smart Water Saving Sink

My idea is to design a smart water saving sink fitted with filters and purifiers which will recycle used/waste water of Kitchens and buildings and to store it for reuse to save water in homes and to provide efficient kitchen garbage disposal system in homes to avoid blockage of drains. This is a useful waste water treatment system at homes and buildings.

1.

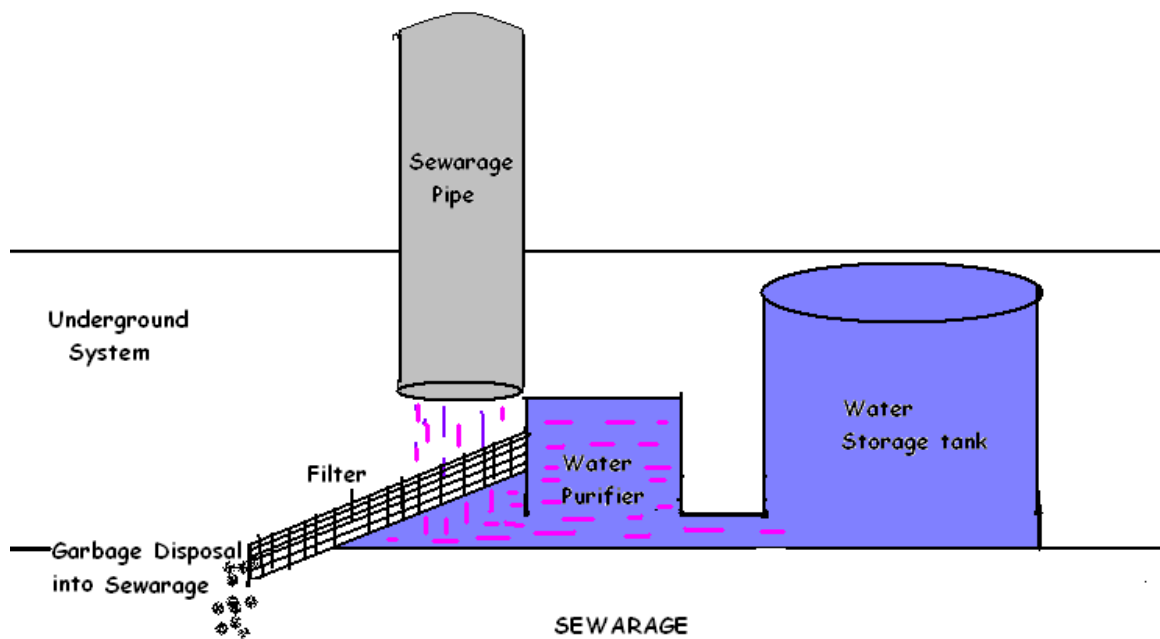


Working Model on Sink with filters & purifier  
Design by Priya

The smart sink will have three filters as shown in Pic-1 which will segregate the waste water and solid garbage and send the water to the purifier. The purifier will be a special purifier which will segregate impurities in water such as oil, detergent, chemicals, odors and other impurities of water make the water fit for use. After going through the purifier the purified water will go into the water tank for storage and further use. The cup type filters will not allow the solid garbage to enter with the water and the garbage will be collected manually from the cup filters and will be disposed in the garbage bin kept in the house/site. This technology segregates water and garbage and recycle water from the waste water of the sink and send into the tanks and garbage into the drains. So there will be no problem of choking of the sink pipe and drain pipe. This will also be an efficient method of kitchen garbage disposal.

2.

PIC-2



### Drain Water Recycling System in buildings

Design by Priya

This is an underground waste water treatment system and very useful in the houses and buildings to save water. In this method the water coming from drain pipe is passed through double water filter as showed in Pic-2 where the garbage and water is segregated the waste water goes in to the purifier and the garbage goes directly into the sewerage from filters. The water purifier will purify the

water and send the purified water into the tanks. The purifier will be a special purifier which will segregate detergent, chemicals, oil, color, odor and other impurities of waste water and send the purified water into the storage tanks to reuse. This technique avoid wastage of water going directly into the sewerages without any use. This is a green solution of waste water treatment efficiently and treats waste water anywhere on site. The drain water technology will be more effective if all the drains of the buildings are connected with one main drain pipe of the building where the waste water treatment purifier/ filters are installed which will be cost effective and useful.

#### Advantages of these technologies:-

The water is collected and recycled time and again by this process saves a lot of water going waste in the sewerage. This idea is very useful for houses and commercial purposes where we use a lot of water and that goes into the sewerage without any use. This technology will save 95% of the water we use in domestic and commercial purpose. Except drinking, this water can be stored and can be used to wash utensils, washing of clothes, use in toilets, flush systems, gardening, washing of cars and machines and other domestic and commercial usage.

Separate taps should be installed to use this recycled water in wash basins and other places for use.

This concept promotes the idea of eco-buildings concept.

Smart sink technology is useful on hotels, restaurants and buildings and public washrooms where a large quantity of water is used for washing hands and utensils. This recycled water is a better option towards saving water and reuse the water time and again without any difficulty with the help of filters and water purifiers installed to segregate the waste, chemical and detergents and garbage from waste water and transport the purified/ recycled water in to the water tanks and can be the best solution to the water problems/shortages in cities and for the instant disposal of solid garbage instantly and at sewerage.

This system can be used with one purifier connected with the joint pipe of all sink pipe of the houses or the main sewerage pipe of the building to provide water. This system is useful to municipalities and cooperation and it will lessen their load for water during summer season.

This system will reduce the water bills of the individuals, consumers and the organizations to a large extent.

Recycled water can be used for all other purpose except drinking. This system will send the solid waste/ garbage to the drains/sewerage from where it can be cleared by the municipality easily at disposal points for disposal of garbage to avoid choking of drains. Recycled water is useful for gardening in building and top of the roofs to grow plants, flowers, vegetables and fruits to make the eco-building concept successful and to produce fresh air.

This system is cost-effective, durable, simple and can be used in all building, house and commercial organizations by individuals and organizations once installed it will be useful for number of years.

It should be made compulsory in all the buildings to install water saver sinks / smart sinks by the government /local authorities. It is a step towards eco-building. This system will reduce dependability on water on local/authorities/water bodies. This system will be useful to avoid water wastage in homes and establishments. The recycle of water will give us 100% utilization. Government /organization should adopt this technology and provide efficient sinks, and tubs and cost effective water sinks, filters purifiers/equipments with latest technology so that it may be available easily in the market to buyers save precious water by recycling and segregation of the water from garbage/waste in houses/buildings. This system will be useful to adopt and every individual can save water by installing such smart sinks/purifiers and water tanks to meet their water demand. This will also maintain adequate storage of water in tanks all the times in the houses, buildings to meet the water requirements of all users.

This is cost effective and useful method of waste water treatment in buildings. This technique will cost one time and useful for number of years.

The water filters and the purifier will be of advanced technology. The purifier will segregate the impurities of waste water instantly and make it fit for use.

It reduces water wastage.

Smart sink is a useful system of instant disposal of garbage in to the Garbage disposal bins at homes and solve the problem of choking of drains.

This is a durable and regular method of water recycling.

Due to Installation of cup type water filters in the sink garbage remains in the sink can be collected in the sink and can be easily disposed of in the garbage bin in kitchens.

In smart sinks solid garbage does not enter in to the pipes thus does not create the problem of choking of drains.

Various types of water purifier/ purification technologies are available in the market for the waste water treatments such filters, purifiers and water treatment systems of advanced technology can be used to make this method popular and more useful.

If my invention is used in all houses / buildings it will bring a revolution in the history of waste water treatment by all.

In drain system multiple drain pipes can be connected with one large water treatment / purifier system to purify the waste water of the building which is cost effective and efficient system.

In sink system multiple pipes of the entire sink system can be connected to one filter/ purifier system/ centralized system of the house which is again cost effective and efficient system of waste water management.

This system requires proper cleaning of the filters and purifiers as and when required to operate the system successfully to avoid blockage from garbage and waste etc.

This technology saves 95% of the water used in houses and buildings if properly implemented.

This technology is also useful to conserve and preserve rain water during the rainy season if connected with the drain pipes of the roofs and is a useful method of water storage.

**The drain water technology will be more effective if all the drains of the buildings are connected with one main drain pipe of the building where the waste water treatment purifier/ filters are installed.**

**Drain water management technology is useful in new buildings and is a eco-building concept and eco friendly.**

**I am ready to tie-up with companies and business organizations for the productions of smart sinks and implementation of these technologies at homes and buildings to save precious water.**



**Copyright with Priya**

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**Note:**

**This invention is registered with National Innovation Foundation of India, INDIA**