WELCOME

Name Of Problem Statement :-

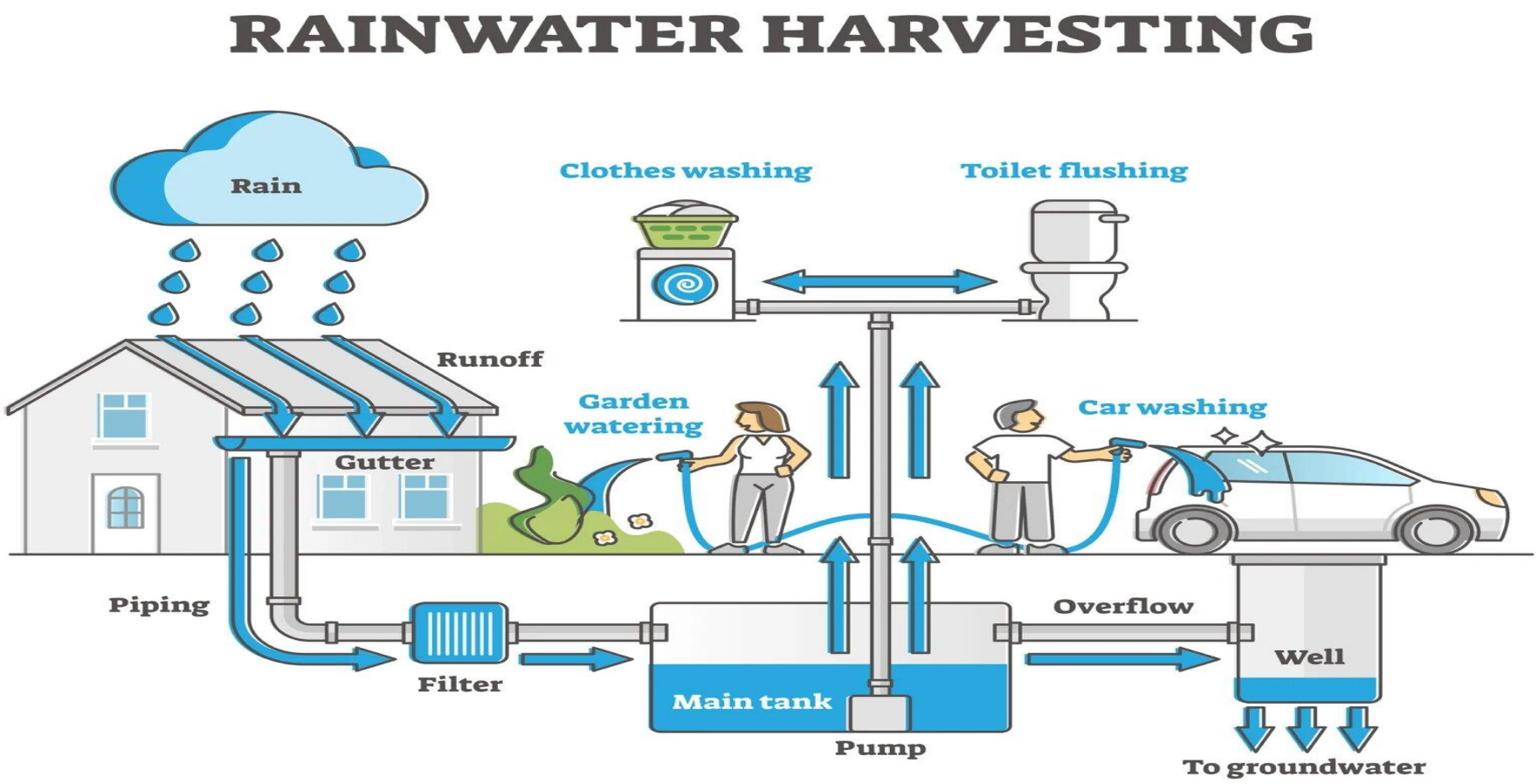
Rainwater Harvesting

The availability of clean, safe and sufficient amounts of water to the daily activities of human being is very crucial. Water playing very important role in transforming or changing the lives of people to better and healthier one. Rainwater harvesting play important role in human life.

Solution:-

we can make rainwater harvesting Working model.

Structure :-


RAINWATER HARVESTING
Rain
Clothes washing
Toilet flushing
Runoff
Garden watering
Car washing
Gutter
Piping
Filter
Overflow
Well
Main tank
Pump
To groundwater

Working of Rainwater Harvesting:-

Rainwater harvesting is a water conservation method that involves collecting and storing rainwater for later use. It works by capturing rainwater from a surface, such as a roof, and diverting it into a storage tank. The collected water can then be used for a variety of purposes, including watering plants, washing clothes, and flushing toilets.

Here are some key components of a rainwater harvesting system:

- **Collection area:-** This is where the rainwater is captured, and can be a rooftop, paved road, or other surface.
- **Storage tank:-** The collected water is stored in a tank that is designed to meet the water requirements of the area. Tanks can be above or below ground, and come in a variety of sizes.
- **Filtration system:-** A filtration system is used to remove impurities from the water before it is stored.
- **Overflow system:-** The tank should have a system to divert excess water.
- Rainwater harvesting can be an effective way to manage water and reduce the risk of flooding and soil erosion. It can also help to reduce water pollution and provide a reliable source of clean water.

Components Used :-

1)Catchment :- The surface that collects rainwater, such as the roof, terrace, lawn, open ground.

2)Conveyance :- The system that Moves rainwater from catchment to storage, such as gutters, downspouts or pipes.

3)First flush diverter :- A device that captures and diverts the most contaminated water that wishes into the pipes during the first rain.

4)Storage :- The tank which stores the connected rainwater.

5)Purification :- The system that purifies the collected rainwater for drinking.

6)Distribution :- The system that delivers the rainwater, such as the small pump and pressure tank.

Advantages:-

1)Water conservation :- Rainwater harvesting can reduce the amount of water that needs to be treated and pumped by municipalities.

2)Environmental Benefits :- Rainwater harvesting can reduce storm water runoff, which can help reduce surface water contamination.

3)Economic benefits :- Rainwater harvesting can reduce water service costs for municipalities.

4)Potable water supply :- Rainwater harvesting can provide an independent water source in areas where other water sources are unavailable.

5)Flood protection :- Rainwater harvesting can help relieve strain on local sewer systems and prevent property damage.

6)Groundwater quality :- Rainwater harvesting can improve the quality of groundwater by diluting salinity.

7)Reduces soil erosion :- Rainwater harvesting can reduce soil erosion.

Thank You