Rainbow Drive is a 36-acre neighborhood with 430 plots located in south east Bangalore. The sloped land posed a challenge for the residents due to excessive flooding during monsoon. Also, due to lack of connectivity to the municipal water supply, the residents depended on ground water from borewells for their daily consumption. As a result of the scarcity and flooding, they opted to conserve, reuse and recycle water through rainwater harvesting, recharge wells and a Phytoremediation sewage treatment plant. This was done by creating a layout association that worked collaboratively.

1. **Rainwater Harvesting**
   - More than 300 recharge wells, on average 3 feet in diameter and of depth 20 feet, have been created.
   - This effectively means zero discharge has been achieved for rainwater for the entire layout.

2. **Community Borewell**
   - Ban of digging private borewells.
   - Dependent on 6 common borewells
   - Improved aquifer capacity

   Ground water table has risen to around 250ft and hence benefitting the surrounding communities.

3. **Water Tariff**
   - Water meters are installed at overhead tanks and at household levels, which monitored the inflow and outflow of water supply and usage respectively. This in-turn helped in tabulating a new water tariff for the layout.
   - Water pricing: Water consumption

4. **Phytoremediation Sewage Treatment Plant**
   - Vegetation system
   - Decomposition
   - Nutrient uptake
   - Adsorption
   - Phytoremediation
   - Bacterial action

5. **Water Works - The Bengaluru Story**
   - Conventional: Poor Water Quality
   - Phytore: Better Water Quality

   THE WATER DISTRIBUTION CYCLE
   - After the end of the distribution cycle, there’s a surplus of 80K daily, thus making it a self-sufficient neighborhood.

   The Water Distribution Cycle
   - Maintenance cost at Rs55,000/month
   - Environment friendly