Rainwater Harvesting & Subsurface Management

Gradual fall channels in the spiral shell direct the path of rainfall to the lower basin and then to subsurface tanks. Below the surface of the tanks, Iranian Qanat model with gentle slope tunnels and modern sponge materials filters and stores water.

Sponge City Principle: After sedimentary filtration and soil stratification, water is fed from natural recirculation to prevent re-evaporation of moisture.

Salinity Prevention: The design of salt barrier layers (Geotextile Membrane) prevents salty groundwater from entering the storage source.

Results:

Providing drinking water and irrigation to 67 households in the village

Creating a comfortable microclimate and controlled temperature

Preserving freshwater resources against salinity intrusion





