**Rainwater Harvesting Solar Street Lamps**

**Problem statement:**

Rural areas often lack access to reliable sources of water and electricity.

**Proposed Solution:**

My solution addresses this problem by combining rainwater harvesting with solar power generation. Rainwater is collected in a tank and can be used for domestic purposes. Solar panels generate electricity that can be used to power street lamps. This system is sustainable and can be constructed in rural areas to improve the quality of life for residents.

SOLAR POWER PLANT-An off-grid micro solar power plant of 10kwh producing 29 to 46kwh per day with the help of 30- 35 solar panels of 415 watt and ample amount of natural sunlight available we can generate and store the energy in battery with the help of photovoltaic cell and can be used for basic need of light at night on street for general purpose also small usage as mobile charging etc.

RAINWATER HARVESTING PLANT- In rainy season storing at least 10% of rain will give us year's drinking water. Pipelines and gutter provided at the end of solar panel will act as path directing to water towards tank in between filter will remove the impurities and after storage tank the pump will pull up the water to the tap and solve the drinking water issue.

Here is a breakdown of how the system works:

Rainwater is collected in a tank at the top of the structure.The water can then be used for domestic purposes, such as drinking, cooking, and washing.

Solar panels convert sunlight into electricity.The electricity can be used to power street lamps, which will provide lighting at night.

This system is sustainable because it uses renewable resources: rainwater and sunlight. It can also help to reduce reliance on the grid, which can be unreliable in rural areas.

