

REINVENTING OFF-GRID SOLAR WITH LATEST INNOVATIONS

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Three critical areas in rural India where reliable electricity is required are:

Lighting and Mobile Phone charging



Clean drinking water supply



Adequate water for sanitation



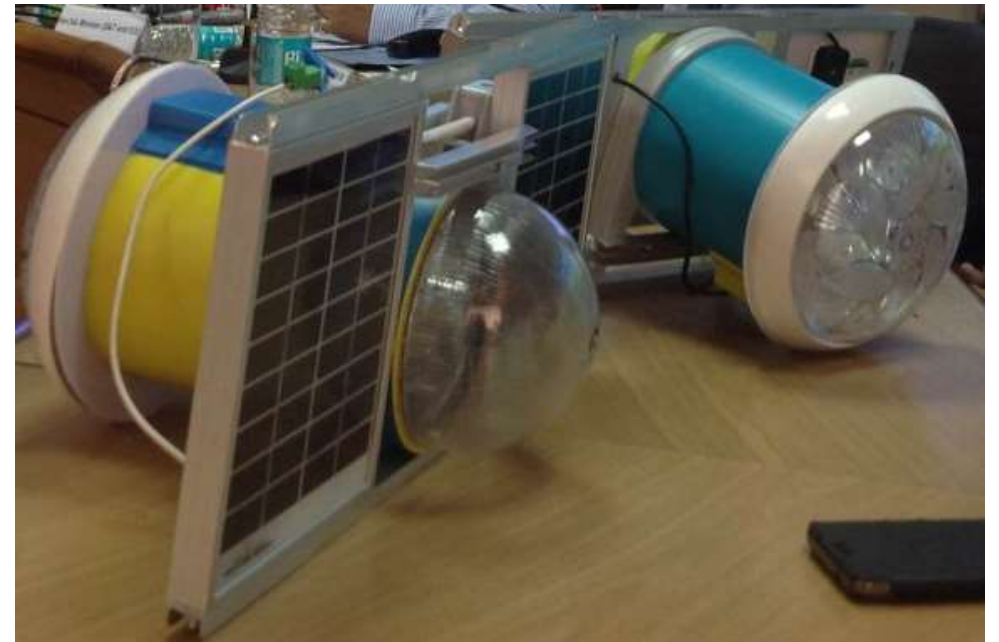
- Electricity is available in all villages of India
- Issue: Not yet reliable - Significant time and investment required to stabilise power in remote areas.

DAWN OF A NEW ENERGY AGE

- Unique solar technologies can solve such problems of remote rural areas.
- **Micro Solar Dome:** Day & night lighting affordable solar device developed by Indian scientists benefitting 50,000 people of rural India.

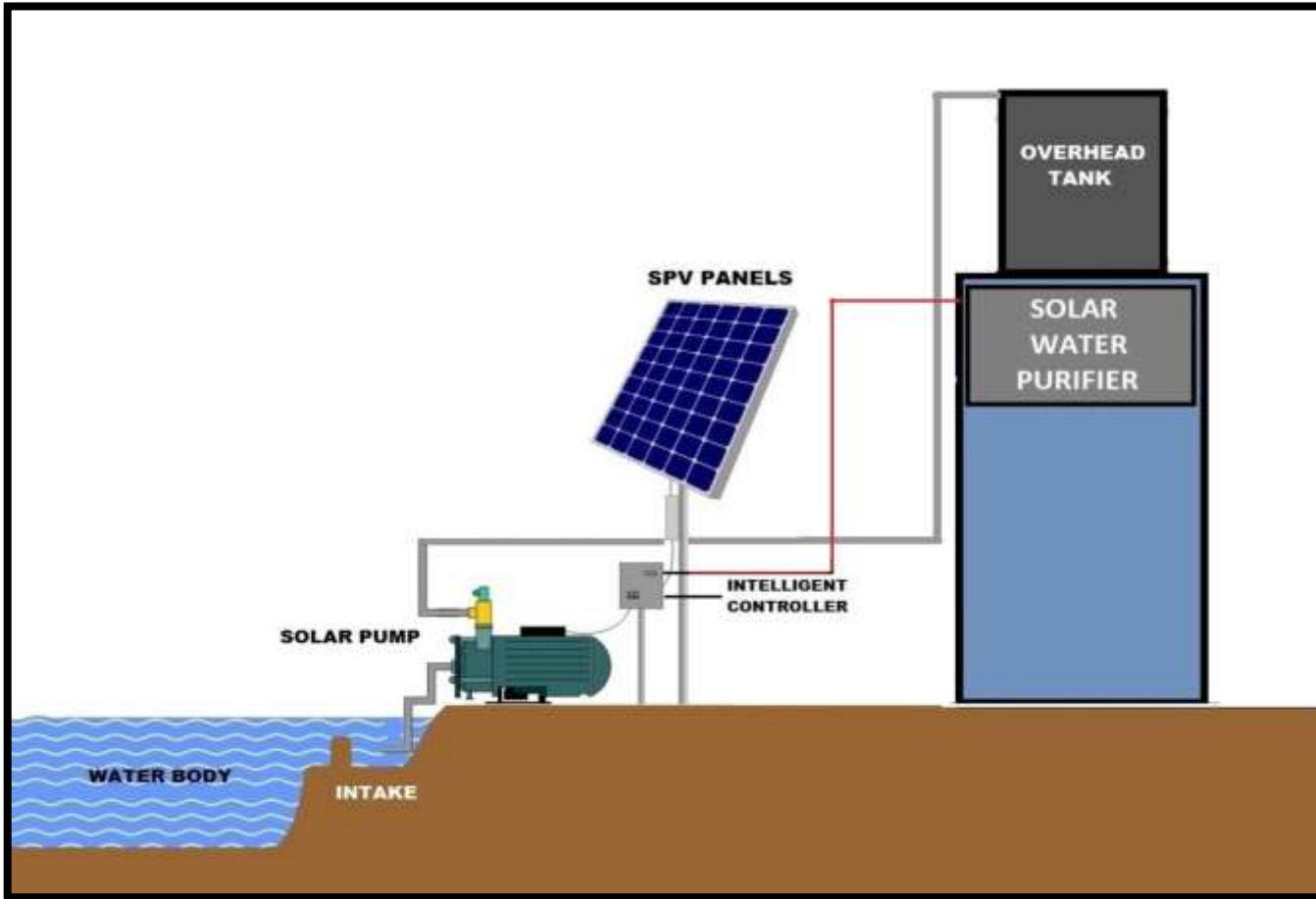


- Suitable for remote tribal villages, slums and toilets.
- Huge installation potential.



CLEAN DRINKING WATER

Solar Water Purifier: Providing clean drinking water to schools and rural communities.



Solar Water Purifier



Technological innovation under this project:

- Solar energy is stored as water
- No inverter is used
- No pollution
- Low maintenance
- No batteries are required

Usual contamination of water of rural areas which will be eliminated:

- Iron content
- Bacteria
- Suspended particles

Storage: 200 liters (for cloudy days or night time)

CHANGING LIVES OF SCHOOL KIDS



Model 1: 100 students. Cost is Rs. 50,000/- (\$720) per unit



Model 2: 200 students. Cost is Rs. 75,000/- (\$1,080) per unit

Installation Potential: 100,000 for rural schools and 30,000 for other Institutions

SOLAR RUNNING WATER SYSTEM FOR TOILETS

- **Toilets in rural India suffer from – Lack of lighting & No running water.**
- **Issues: Non availability of electricity and lack of pressurized water supply.**
- **Micro Solar Pump with Intelligent Controller can solve the problem. 10,000 school children are now getting benefits out of such innovations.**

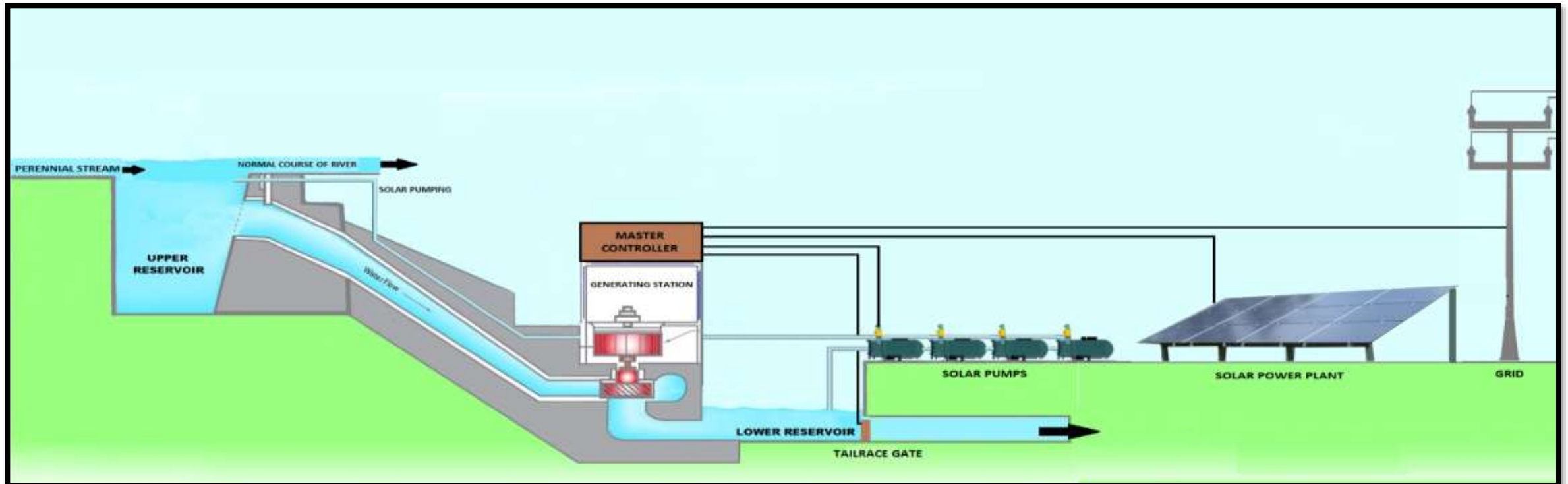


❖ Installation Potential-100,000 Nos

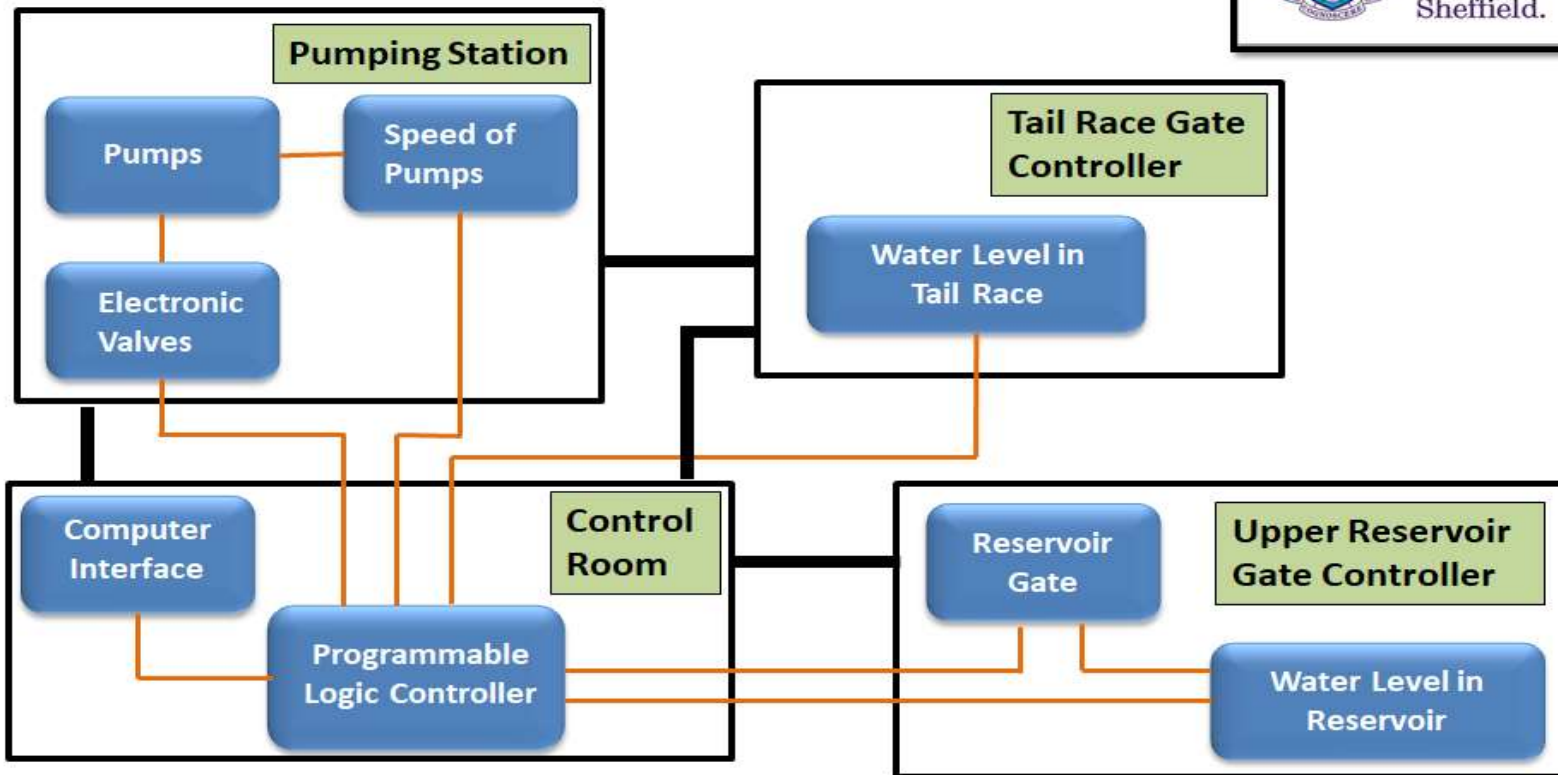
Addressing the mentioned problems will generate more than 50,000 Green Jobs.

24X 7 Electricity in Off Grid areas through Solar Pumped storage Scheme:

- Storing of Solar energy in a battery is a conventional technology. However, Battery life is limited and needs maintenance.
- Storing of Solar energy in water through a Pumped Storage mode may ensure 24 X 7 electricity in off grid areas. Such storage is cheap and long lasting.



Block Diagram of Planned implementation



The plant consists of the followings:

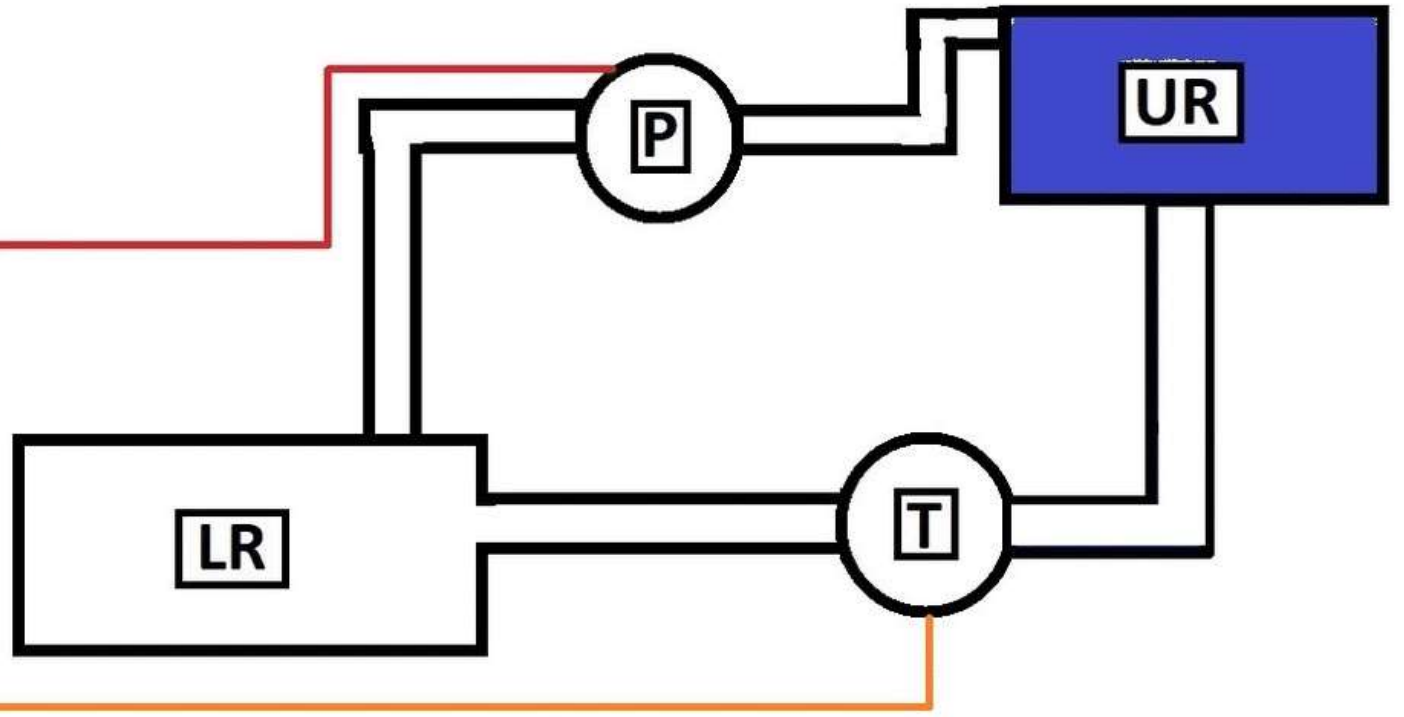
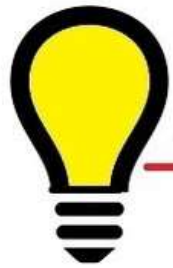
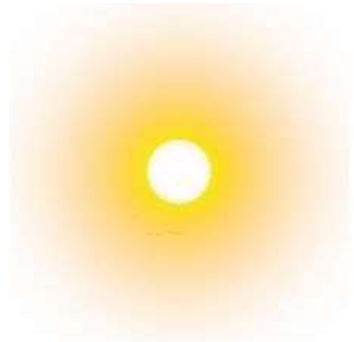
- a) Upper and Lower Reservoir.
- b) Water Turbine.
- c) Solar Power operated Pumping Unit.
- d) Rain water Harvesting and collection of the water in the upper reservoir.

The Power plant will work in close loop mode:

Line Communication will be employed between all stations to ensure security

A pilot project of 15 KW is being setup in India for the First Time in the Globe.







Thank
you!