

# **SOLAR AGRICULTURAL PUMPING SYSTEM**

## **SYNOPSIS**

Energy plays an important role in the material, social and cultural life of man kind. The energy needs are increasing day by day. This is the result of population growth and increase in the standard of living which is directly proportional to energy consumption.

The lifting of water for drinking or irrigation purposes is of great importance in widely distributed villages with little or no rural electrification and where under ground water is available. Solar energy is converted to mechanical energy to drive small water pumps it would be of great help to the rural inhibitions.

In our project we use solar photo voltaic cells for pumping water. The photo voltaic modules convert sunlight direct to electricity which is used to run a dc motor pump for bailing of water. It consists of solar photo voltaic modules, power conditioner to protect storage batteries from over charging during non-sun shine and a dc water pump.

### **INTRODUCTION**

Energy plays an important role in the material, social and cultural life of man kind. The energy needs are increasing

day by day. This is the result of population growth and increase in the standard of living which is directly proportional to energy consumption.

As we know that man kind will be never lacking in energy. Today, it is liquid fuel, tomorrow it may be uranium with an element of risk. Risk exists where ever there is human activity and production of energy. Just as the supply of fossil fuel is finite thus there will be the supply of uranium. Perhaps, uranium would be exhausted quickly if it is used on a large scale.

It is therefore, harnessing the gigantic inexhaustible solar energy source reduces the dependence on fossil fuels. For the environmental concerned, the solar energy harnessing system offers advantages in that, it emits no pollutants in to the atmosphere as they are with the combustion of fossil fuels. Thus, as a long term option solar energy system can be considered as an alternate to all the finite fuel system. Therefore, there is no energy shortage today nor will there be in the near future?

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