SolarInnovate Energy Solutions

Nauru promotes solar water pump irrigation

Overview

Can solar energy be used for water pumping?

The electricity deficit and higher fuel costs affect the water supply to irrigation requirements. Solar energy for water pumping is a promising alternative to conventional electricity and diesel-based pumping systems. The photo- voltaic (PV) technology used for solar water pumping is to solar energy into electrical energy.

How a solar PV irrigation system works?

The pump will be operated with the power supply from the solar panel. The converter is used between the solar panel and water pump. The converter also used to charge the battery . Battery is used to supply energy to the pump during spraying of water at night time. The simple layout of solar PV irrigation system is shown in Fig. 1.

What is solar water pumping system?

Among all renewable energy sources, Solar energy is the best source of free, available, and clean energy for the environment. Water pumping in developing countries is generally dependent on conventional electricity or diesel generated electricity. Solar water pumping system is to reduces the usage of diesel fuel or coal-based electricity.

What are the benefits of solar water pumping system?

Environment friendly solar pumping systems require less maintenance cost with no fuel cost . Keeping in view the shortage of electricity in rural villages, PV pumping is one of the most promising applications of solar energy. This technology is similar to any other conventional water pumping system except that the power source is solar energy.

Can solar irrigation technology empower women farmers in Nepal?

Solar irrigation technology has the potential to empower more than 12 million

women farmers across Nepal who constitute the backbone of the country’s farming system. The post Empowering female farmers through improved access to water technologies first appeared on International Water Management Institute (IWMI). [more.].

Can solar pumps help horticulture in Rajasthan?

In Rajasthan, the Department of Horticulture made it mandatory for beneficiaries of the 2011 solar pumps scheme to install drip irrigation and create a diggi, a water storage mechanism. This was facilitated by a 90% subsidy on drip-irrigation systems and 50% subsidy or INR 2 lakh for constructing a diggi (Kishore et al., 2014).

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