

The First Climate Smart Village of The Country: Dhundi using Solar Energy

(World's First Solar Power Producer Co-operative)

In the 21st climate change conference held in Paris, the capital of France in the of November-December-2015 emphasized the best use of solar energy and researching how to obtain cheap solar energy at low cost as the best way to save the environment from depletion. Dhundi, a small village near Thasra in Kheda district, Gujarat, India has become a 1st Climate Smart Village by generating electricity from natural solar energy (Renewable energy) for irrigation in agriculture fields.

In Dhundi village, 6 farmers have come together to form the world's first solar energy producing cooperative society in February-2016. This society is also known as “**Solar Pump Irrigators Co-operative Enterprise**”. This solar energy producer co-operative society has been registered in Kheda district registrar of co-operative societies, Nadiad on dated 16th Feburay, 2016 with registration number 13382.

Laxmanbhai Sajjibhai Parmar, a farmer of the village and the chairman of the society, says that..with the help of the International Water Management Institute and the technical guidance of the Gujarat Energy Research Institute, a solar energy producing cooperative society was formed in the village. International Water Management Institute (I.W.M.I) has provided 95 % support to six farmers of Dhundi village under the National Solar Power Mission scheme.

A total of nine plants were launched including three of 10.8 kilowatts, three of 8 kilowatts and three of 5 kilowatts in Dhundi village. In a day, 20 to 30 units of electricity are generated from a 5kW plant, 40 to 45 units from an 8kW plant, 50 to 55 units from a 10.8 kW plant. 20 to 30 units are used to irrigate the agricultural field (One Vigha) and the surplus electricity deposits in the co-operative society. Farmers use this solar energy to irrigate pump in agriculture fields which is generated through the solar power co-operative station. This co-operative societies have signed the agreement to Madhya Gujarat Power Company with selling Price Rs. 4.63.

Through, International Water Management Institute (I.W.M.I) Rs. 1.25/- Credit to the society as green energy bonus while Rs. 1.25/- money received from under water conservation, total Rs. 2.50/- is received which is finally aggregate with Madhya Gujarat Power electricity Rs. 4.63/- per unit and total amount is Rs. 7.13/- per unit credited to the solar power co-operative society. 5000 units to 5000 units solar power Electricity is sold to Madhya Gujarat Power Company by the co-operative society and earn an income up to Rs.42000/-.

According to the chairman of the co-operative society, farmers have to paid total Rs. 20,000 per month for irrigation as well as to fill diesel in electric pump. This electric pump creates lots of air, water, and sound pollution in the environment. Now, with the use of renewable energy (Solar power energy) this village become eco-friendly as well as farmers also saved Rs. 20,000/-. Moreover, from selling the surplus electricity the farmers will receive approximately Rs. 4500/- as additional income.

The central government annually spends approximately Rs. 17,000/- crores of subsidy for irrigation. If the farmers of the country start using solar energy for irrigation, the government might be saving their funds and using natural renewable solar energy will not cause pollution and save the environment. The Dhundi Solar Energy Producer Cooperative society was awarded as 1st Climate Smart Village by the Chief Minister Anandiben Patel on dated 9th May, 2016, in the Anand Agricultural Festival.

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