

Darewadi

19°18'15.0"N 73°44'22.7"E
Junnar Tehsil
Pune District

40 Households. 220 Population.
Date of Commissioning 4th July 2012
Solar Microgrid



Case

Darewadi is a small hamlet which has formed over the years by communities who required to be more close to their farms. People belong to the Mahadev Koli tribe. Due to its remote location, there was no access to energy to provide the households with 24x7 electricity. People relied on kerosene lamps for lighting and lived disconnected from the rest of the world. Access to drinking water was a huge problem for then people of Darewadi.

Technical Specifications
Solar Capacity -9.36 kWp
Solar Modules - Bosch, 240 Wp Monocrystalline (39nos.)
Battery Bank - Amaron, 600 Ah, 48V VRLA
Inverter - SMA, 5 kW Sunny Island, 10 kW Sunny Mini Central
Grid - 1.5 km, 230 V, 50 Hz (17 RSJ poles)



Solution

Darewadi currently has access to a 24/7 reliable supply to electricity via a solar microgrid. Apart from every household getting a metered connection; public spaces are also now well lit, promoting greater human interaction and comfort. The microgrid has been independently managed and maintained by the village energy committee formed at the time of installation. The villagers, along with access to 24x7 electricity now operates 14+ TV sets, grinders, sound systems, 1 water pump and 1 flour mill for their personal as well as commercial use.

Monthly payments from electricity usage has further ensured that the battery can now be replaced after successful 5.5 years of usage.

Project Completed by Gram Oorja Solutions
Project Supported by Bosch solar energy AG





Approach During Hot Months



Inauguration of solar microgrid



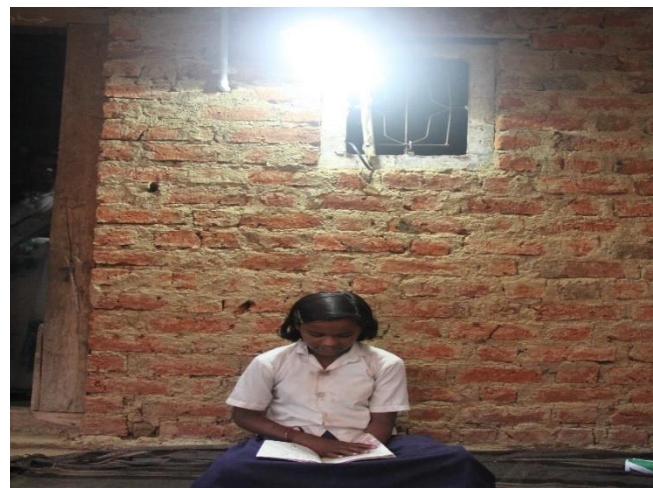
Monsoon season



High quality products



Water Pump, working on microgrid



Reliability and access to children

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