



Project title

Grid Connected Solar PV Based Mini Grids for Agricultural Pump Sets (Under SAP)

Result areas

Energy access and power generation

Health and well-being, food and water security

Sector

Public

Total financing, USD

USD 14 million

GCF financing, USD

USD 10 m grant

Financial instrument

Grant (SAP)

Description of specific climate change problem and how the project will address it

The proposal intends to develop a programme to provide a renewable energy source to agricultural pumps which are currently being operated by thermal power based grid supply.

Objectives

- Switch from conventional Thermal power to solar power to achieve Emission reduction
- Enhanced energy efficiency of pumps
- Switch from Subsidised electricity and from water guzzling crops to pulses/ oilseeds to achieve Water conservation
- Additional income by selling power to Discom would Increase income of farmers
- Ensuring reliable power supply for farmers

Farmers will be given DC and AC pumps and solar mini grid of capacity equal to almost three times the existing pump sets. The additional capacity will enable the farmer to sell the excess electricity to the grid and this enhance his income.

Total 800 numbers of Solar PV based Agricultural pump sets will be installed with a cumulative capacity of 16 MW.

Alignment with key country priorities and stakeholders engaged

Aligned with NDC and Solar Mission

- Increase the share of the installed electric power from Non-fossil fuel sources to 40% by 2030 as a part of NDCs
- In Solar Mission 2022 ,the ambitious target of 175 GW of installed ,Of this 100 GW has to be achieved using solar power projects.

INDIA

AE: NABARD



GREEN
CLIMATE
FUND

GLOBAL
PROGRAMMING
CONFERENCE

Project title:

Grid Connected Solar PV Based Mini Grids for Agricultural Pump Sets (Under SAP)

Activities

Project Interventions:

- Signing Power Purchase Agreement with DISCOM
- Open tendering for procurement of Solar module.
- Agreement with Operational and maintenance(O&M) provider to fix the power generation unit.
- Provide training to farmer for O&M (Cleaning and other related works).
- Letter of credit for Payment security mechanism form DISCOM to farmer through corporative society
- Training/ exposure visits for farmers for crop diversification.

Expected outcomes

- Promotion of use of renewable energy in Agriculture.
- The proposal would address the issues of indiscriminate use of water resources and promote energy efficiency in irrigation water pumping with co benefit of emission reduction.

Paradigm shift potential

- *Building an ecosystem that would promote solar energy, energy efficiency as well as efficient management of water resources, which can support scaling and replication.*