**Component-B:** Installation of 20 lakh standalone solar powered agricultural pumps

**Component-C:** Solarisation of 15 lakh existing Grid-connected Agriculture Pumps

PM-KUSUM scheme is one of largest initiatives of the world to provide clean energy to more than 35 lakhs farmers by solarising their agriculture pump under component B and C.

The scheme also has direct employment generation potential. As per available studies, around 24.50 job-years are created per MW of small capacity solar installation. Therefore, besides increasing self-employment, the scheme is likely to generate employment opportunities equivalent to 7.55 lakh job-years for skilled and unskilled workers.



## Harvesting Solar Energy

## Component - A : Decentralized Grid Connected Solar Power Plants

Small solar power plants of capacity upto 2MW can be set-up by individual farmers/ cooperatives / panchayats / Farmer Producer Organisations (FPO) on barren/ fallow/marshy/ pasture or cultivable lands. In case, cultivated fields are chosen for setting up solar power plants, Rephrased as "the solar panels are set up above a minimum height so that the farmer can continue to grow crops below solar panels."

Power generated from solar plants will be purchased by the Distribution companies (DISCOMs) at tariffs determined by the respective State Electricity Regulatory Commissions (SERCs). The plant can be installed by the farmer or he can provide his land on lease to a developer, who will

install the plant. MNRE has issued a model Power Purchase Agreement (PPA) and a Model Lease Agreement.

The scheme will open a stable and continuous source of income to the rural land owners for 25 years. It has been estimated that farmers will earn up to Rs. 25000 per acre per year if the plant is installed by a developer/ CPSU on the land leased by the farmer, and up to Rs. 65000 per acre per year if they install the plant themselves by taking loan from the banks.

The RBI has included this Component under priority sector lending and therefore Banks will provide loan at competitive rates and on soft terms. The following financing options are available to farmers:

- 1. They can take loan directly from bank and pay EMI from the revenue generated from sale of power to DISCOMs. The balance revenue will be the farmer's income.
- DISCOMs may take loans on behalf of farmers by signing a tripartite agreement between the farmer, the bank and the DISCOM. The DISCOM will directly pay EMI from revenue generated

- from sale of solar power and transfer the balance amount to the farmer's account.
- 3. Public or private solar power developer/EPC contractor may also take loans on behalf of farmers by signing quadripartite agreement between the EPC contractor, the farmer, the bank and the DISCOM. The DISCOM will directly pay EMI from revenue generated from sale of solar power and transfer the balance amount to the farmer and the EPC contractor in the agreed ratio.

After the loan is repaid, the total revenue from sale of solar power will constitute the farmer's income.

The solar power plants will be preferably installed within five km radius of the notified sub-stations in order to avoid high cost of transmission lines and losses. DISCOMs will notify sub-station wise surplus capacity upto which generation from solar power plants can be added. DISCOMs will invite applications from interested beneficiaries. The selected applicants will have to sign PPAs for 25 years with DISCOMs and install the plant as per the provisions of the scheme guidelines and

applicable rules and regulations.

The central Government will provide an incentive of 40 paise/kWh or Rs.6.60 lakhs/MW/year, whichever is lower to the DISCOMs, for buying the power produced under this Component for a period of five years from the Commercial Operation Date of the plant.

Since these power plants will be located closer to the consumers in a decentralized manner, it will ensure availability of reliable day-time power. The solar power purchased under this component will also help the DISCOMs to meet their Renewable Energy Purchase Obligation (RPO) target.

