

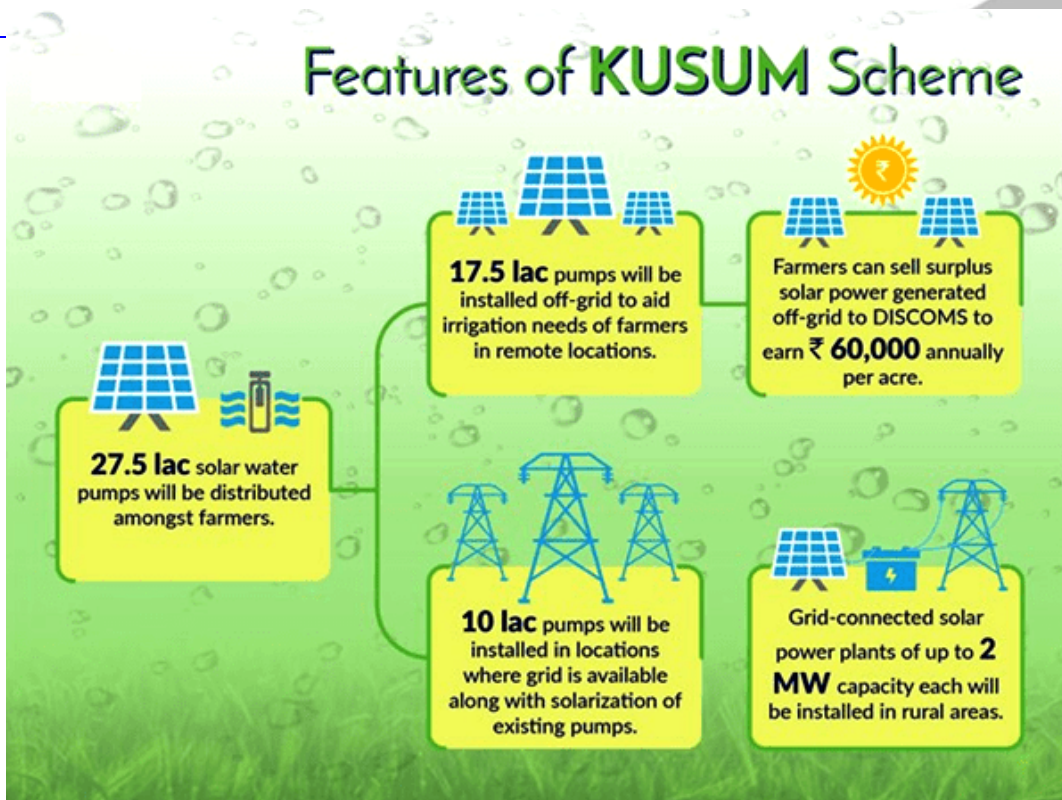


PM-KUSUM

Why in News

Recently, the first farm-based solar power plant under the [Prime Minister's Kisan Urja Suraksha Evam Utthan Mahabhiyan \(PM-KUSUM\) scheme](#) has come up in Jaipur (Rajasthan) district's Kotputli tehsil with a provision for production of 17 lakh units of electricity every year.

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Key Points

▪ About:

- The PM-KUSUM scheme was **launched by the Ministry of New and Renewable Energy (MNRE)** to support installation of off-grid solar pumps in rural areas and reduce dependence on grid, in grid-connected areas.
- The [Cabinet Committee on Economic Affairs \(CCEA\)](#) had in February 2019 approved the launch of the scheme with the **objective of providing financial and water security.**
- The government's [Budget for 2020-21](#) expanded the scope for the scheme with **20 lakh farmers** to be provided assistance to install **standalone solar pumps**; another **15 lakh farmers** to be given help to **solarise their grid-connected pump sets.**

- This will enable farmers to set up solar power generation capacity on their barren lands and to sell it to the grid.

▪ **Components of the PM-KUSUM:**

- PM-KUSUM consists of three components and aims to add a solar capacity of 30.8 GW by 2022:
 - **Component-A:** 10,000 MW of decentralised ground-mounted grid-connected renewable power plants.
 - **Component-B:** Installation of two million standalone solar-powered agriculture pumps.
 - **Component-C:** Solarisation of 1.5 million grid-connected solar-powered agriculture pumps.

▪ **Intended Benefits of the Scheme:**

◦ **Helping Discoms:**

- Supports the financial health of **electricity distribution companies (discoms)** by reducing the burden of subsidy to the agriculture sector.
- Help them meet the **RPO (Renewable Purchase Obligation) targets**.

◦ **Helping States:**

- Promotes **decentralised solar power production, and reduces transmission losses**.
- A potential way to **reduce their subsidy outlay towards irrigation**.

◦ **Helping Farmers:**

- If farmers are **able to sell surplus powers**, they will be incentivised to save power and, in turn, it will mean the reasonable and efficient use of groundwater. This will also **increase their income**.
- This may also provide **water security to farmers** through the provision of assured water sources through solar water pumps — both off-grid and grid-connected.

◦ **Helping Environment:**

- **Expansion of the irrigation** cover by providing decentralized solar-based irrigation and moving away from polluting diesel.

▪ **Concerns:**

◦ **Logistics Issue:**

- There is a matter of **domestic availability of equipment itself**. While pumps are not a challenge for domestic suppliers, **the availability of solar pumps is still an issue**.
- Further, due to the strict **DCR (Domestic Content Requirements)**, the suppliers of solar equipment have to raise the domestic cell sourcing. However, **there isn't enough domestic cell manufacturing capacity**.

◦ **Omission of Small and Marginal Farmers:**

- There has been the relative **omission of small and marginal farmers**, as the scheme focuses on pumps of 3 HP and higher capacities.
- It is due to this, solar pumps are not reaching the majority of farmers, as nearly **85% of them are small & marginal**.
- Also, the reality of low water tables, especially in North India and parts of South India, which make small-sized pumps limiting for the farmer.

◦ **Depleting Water Tables:**

- Due to power subsidies, the recurring cost of electricity is so low that farmers keep on pumping water and **the water table is going down**.
- In a solar installation, it becomes a more **difficult job to upgrade to higher**

capacity pumps in case the water table falls because one will have to add new solar panels which are expensive.

Way Forward

- Consensus between the Centre and States is the key to the success of this decentralised solar power scheme. Any reform in India's power space cannot take place unless there is **consensus between the Centre, States and stakeholders**.
- Apart from switching to solar power, **farmers should also switch over to drip irrigation mode** which saves water and power with increased crop output.
- For effective implementation and serious participation by stakeholders, **the scheme should be more attractive in terms of benchmark prices** in view of the challenges on account of higher costs of implementation and comprehensive maintenance.

[Source:TH](#)

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