



PM-KUSUM and Rooftop Solar Programme Phase-II

Why in News

Recently, the **Ministry of New and Renewable (MNRE)** has conducted a review of implementation of [Prime Minister's Kisan Urja Suraksha Evam Utthan Mahabhiyan \(PM-KUSUM\) scheme](#) and [Rooftop Solar Programme Phase-II](#) and suggested measures for expansion of the schemes.

Key Points

▪ About PM-KUSUM:

- The PM-KUSUM scheme was launched by the MNRE in 2019, **to support installation of off-grid solar pumps in rural areas** and reduce dependence on grid, in grid-connected areas.
- The objective of the scheme is to **enable farmers to set up solar power generation capacity on their barren lands and to sell it to the grid.**
- 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.

▪ Intended Benefits of the PM- KUSUM Scheme:

◦ Helping Farmers:

- It **ensures water-security** to farmers by providing a day-time reliable source of power for irrigation activities.
- It also incentivises the farmers **to sell surplus solar energy to the states**, which in turn will augment their income.

◦ Helping Environment:

- If farmers are able to sell surplus power, they will be incentivised to save power and, in turn, it will mean the **reasonable and efficient use of groundwater.**
- Also, expansion of the irrigation cover by providing decentralized solar-based irrigation and **moving away from polluting diesel.**

◦ Helping Discoms:

- As farmers will be less dependent on subsidized electricity, the PM KUSUM scheme will support 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.

▪ About Rooftop Solar Programme Phase II:

- The **aim** is to achieve **a cumulative capacity of 40,000 MW from Rooftop Solar Projects by the year 2022.**
- In a grid-connected rooftop or small Solar Voltaic Panel system, the DC power generated

from the Solar Voltaic panel is converted to AC power using the power conditioning unit and is fed to the grid.

- This scheme is being **implemented in the states by distribution companies (DISCOMs)**.
- The **MNRE is providing a 40% subsidy** for the first 3 kW and 20% subsidy beyond 3 kW and upto 10 kW of solar panel capacity.

▪ **Objectives of the Rooftop Solar Programme:**

- To promote the **grid-connected SPV rooftop** and small SPV power generating plants among the residential, community, institutional, industrial and commercial establishments.
- To mitigate the **dependence on fossil fuel** based electricity generation and encourage environment-friendly Solar electricity generation.
- To create **an enabling environment for investment in the solar energy sector** by the private sector, state government and the individuals.
- To create an enabling environment for the **supply of solar power from rooftop and small plants to the grid.**

- Therefore, the installation of rooftop solar will **bring down the electricity consumption** of the households and **save electricity expenditure.**

Other Schemes for Promoting Solar Energy

- **Scheme for Development of Ultra Mega Renewable Energy Power Parks:** It is a scheme to develop Ultra Mega Renewable Energy Power Parks (UMREPPs) under the existing Solar Park Scheme.
- **National Wind-Solar Hybrid Policy 2018:** The main objective of the Policy is to provide a framework for promotion of large grid connected wind-solar PV hybrid systems for optimal and efficient utilization of wind and solar resources, transmission infrastructure and land.
- **Atal Jyoti Yojana:** The AJAY scheme was launched in September 2016 for the installation of solar street lighting (SSL) systems in states with less than 50% households covered with grid power (as per Census 2011).
- **International Solar Alliance (ISA):** The ISA, is an Indian initiative that was launched by the Prime Minister of India and the President of France on 30th November 2015 in Paris, France on the side-lines of the Conference of the Parties (COP-21), with 121 solar resource rich countries lying fully or partially between the tropic of Cancer and tropic of Capricorn as prospective members.
- **One Sun, One World, One Grid (OSOWOG):** It focuses on a framework for facilitating global cooperation, building a global ecosystem of interconnected renewable energy resources (mainly solar energy) that can be seamlessly shared.
- **National Solar Mission:** It is a part of the **National Action Plan on Climate Change.**
- **Suryamitra Skill Development Programme:** To provide skill training to rural youth in handling solar installations.

Source: PIB