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News: Floriculture

- The Jujumara region in Odisha's Sambalpur district is home to one of the first Farmer Producer Organizations (FPO) in the state dedicated exclusively to floriculture, transitioning from traditional paddy farming.

Floriculture

- Floriculture involves the cultivation of flowering and ornamental plants for various purposes, such as direct sale, cosmetics, perfume, and pharmaceutical industries.
- It includes seed and plant material production through techniques like cutting, grafting, and budding.
- The Agricultural and Processed Food Products Export Development Authority (APEDA), the nodal organisation for promotion of agri-exports including flowers.
- **Market of Floriculture in India:** The government of India has identified floriculture as a “sunrise industry”.
- About 297 thousand hectares of the area were under Cultivation for floriculture in 2023-24 (2nd Advance Estimate).

- India exported around 20,000 metric tonnes of floriculture products worth Rs 717.83 crores in 2023-24, with major importers including the United States of America (USA), the Netherlands, the United Arab Emirates, the United Kingdom, Canada, and Malaysia.
- Due to the exceptional performance of the sector, it is expected to grow to USD 5.9 billion by 2030 with a Compounded Annual Growth Rate (CAGR) of 7.4% (2021-2030).
- **Varieties:** India's floriculture industry covers cut flowers, pot plants, bulbs, tubers, and dried flowers.
- The important floricultural crops in the international cut flower trade are Rose, Carnation, Chrysanthemum, Gargera, Gladiolus, Gypsophila, Liatris, Nerine, Orchids, Archilea, Anthurium, Tulip, and Lilies.
- Floriculture crops like Gerberas, Carnation, etc. are grown in greenhouses. The open field crops are Chrysanthemum, Roses, Gaillardia, Lily Marigold, Aster, Tuberose, etc.
- Greenhouses are inflated structures covered with transparent material, where crops are grown under controlled environmental conditions.

- **Leading Floriculture Regions:** Karnataka, Tamil Nadu, Madhya Pradesh, West Bengal, Chhattisgarh, Andhra Pradesh, Gujarat, Uttar Pradesh, Assam and Maharashtra have emerged as major floriculture centres.

News: PM Surya Ghar: Muft Bijli Yojana

- Union Ministry of New and Renewable Energy has notified Scheme Guidelines for implementation of innovative projects under PM-Surya Ghar: Muft Bijli Yojana.
- Under the scheme component Innovative Projects, five hundred crore rupees has been earmarked to encourage advancements in rooftop solar technologies, business models, and integration techniques.
- The component seeks to identify and support startups, institutions, and industries in piloting new concepts, with a focus on emerging solutions like rooftop solar integrated with electric vehicles and battery storage.
- National Institute of Solar Energy will serve as the Scheme Implementation Agency for the Innovative Projects Component.
- The selected projects will receive financial assistance of up to 60 per cent of the project cost or 30 crore rupees, whichever is lower.

PM-Surya Ghar Muft Bijli Yojna (Prime Minister's Rooftop Solar: Free Electricity Scheme)

- PM-Surya Ghar Muft Bijli Yojna (Prime Minister's Rooftop Solar: Free Electricity Scheme) was recently launched by the **Ministry of New and Renewable Energy (MNRE)** aiming to provide free electricity up to 300 units to households in India.
- Under the scheme, households will be provided with a subsidy to install solar panelson their roofs.
- The subsidy will cover up 60% of system cost to 2kW systems and 40% of system cost of systems between 2 & 3 kW of solar panels.
- The CFA will be capped at 3 kW. At current benchmark prices, this will mean Rs 30,000 subsidy for 1 kW system, Rs 60,000 for 2 kW systems, and Rs 78,000 for 3 kW systems or higher.
- The scheme is expected to benefit 1 crore households across India.
- It is estimated that the scheme will save the government Rs. 75,000 crore per year in electricity costs.
- The scheme has an outlay of Rs 75,021 crore and is to be implemented till FY 2026-27.

Eligibility

- The household must be an Indian citizen.
- The household must own a house with a roof that is suitable for installing solar panels.
- The household must have a valid electricity connection.
- The household must not have availed any other subsidy for solar panels.
- The households will apply for subsidy through the National Portal and will be able to select a suitable vendor for installing rooftop solar.
- The National Portal will assist the households in their decision-making process by providing relevant information such as appropriate system sizes, benefits calculators, vendor ratings, etc.
- Under the scheme, DISCOMs are designated as State Implementation Agencies (SIAs) responsible for facilitating various measures, including net meter availability, timely inspection, and commissioning of installations.
- DISCOMs will receive incentives based on their achievement in the installation of additional grid-connected rooftop solar capacity beyond a baseline level.
- The total financial outlay for the 'Incentives to DISCOMs' component is Rs 4,950 crore.

Impact

- Through PM-Surya Ghar Muft Bijli Yojana, the households will be able to save electricity bills as well as earn additional income through the sale of surplus power to DISCOMs.
- A 3-kW system will be able to generate more than 300 units a month on average for a household.
- The proposed scheme will result in the addition of 30 GW of solar capacity through rooftop solar in the residential sector, generating 1000 BUs of electricity and resulting in a reduction of 720 million tonnes of CO₂ equivalent emissions over the 25-year lifetime of rooftop systems.
- It is estimated that the scheme will create around 17 lakh direct jobs in manufacturing, logistics, supply chain, sales, installation, O&M, and other services.

Guidelines

- Recently, the Ministry of New and Renewable Energy has come up with draft guidelines for the central financial assistance and payment security mechanism for the PM Surya Ghar—Muft Bijli Yojana.

Key Highlights of the Draft guidelines published

- **Models:** The draft guidelines have been issued under the renewable energy services company (RESCO) model and utility led asset (ULA) model of the rooftop solar scheme—‘PM Surya Ghar—Muft Bijli Yojana’.
- **Renewable Energy Services Company (RESCO) Model:** RESCO develops and owns the rooftop solar system installed on the consumer’s rooftop for at least five years.
- The RESCO also makes all the operational expenditures required for the maintenance of the plant, as needed.
- Customers pay the RESCO for the electricity generated and receive net metering benefits on their electricity bill.
- The RESCO may enter into an arrangement with a distribution company (discom) for the sale of generated power to the grid under a power purchase agreement.
- **Utility led Asset (ULA) Model:** Under it, a state discom owns the rooftop solar systems for the project period of at least of five years, after which the ownership is transferred to the household.

Eligibility for Central Financial Assistance (CFA)

- Grid-connected rooftop solar systems on residential properties, including roofs, terraces, balconies, and elevated structures.

- Installations under metering mechanisms such as group net metering and virtual net metering.
- **Exclusions:** Households with pre-existing rooftop solar systems are not eligible under the RESCO and ULA models for the PM Surya Ghar scheme.
- **Payment Security Mechanism:** An Rs 100 crore corpus will be established to ensure payment security, managed by a national program implementation agency.
- The creation of a payment security corpus ensures financial stability and security for the solar projects.