

## Clean Plant Programme

### Why in news?

The Union Cabinet recently has approved the Clean Plant Programme (CPP) under Mission for Integrated Development of Horticulture.

### What is Clean Plant Program?

- **Clean Plant Program (CPP)** - It is a program to address critical issues in horticulture by providing access to high-quality, virus free planting material.
- **Launch** - It was first announced in Union Finance interim Budget speech in February 2023.
- **Aim** - It aims to *increase the yield and productivity of horticulture* crops in India and to enhance the quality of fruit crops across the nation.

*Horticulture* consist of fruits, vegetables, and flowers, spices mushroom, medicinal and aromatic plants. India is the **2nd** largest producer of fruits and vegetables in the world after China.

- **Nodal Ministry** - Union Ministry of Agriculture and Farmers Welfare.
- **Finances** - Budget allocation under Mission for Integrated Development of Horticulture (MIDH) and loan from the Asian Development Bank (ADB).
- **Integration with MIDH** - The CPP complements with the ongoing Mission for Integrated Development of Horticulture (MIDH).
- **Implementation** - It will be implemented by the *National Horticulture Board* in collaboration with the Indian Council of Agricultural Research (ICAR).
- **Core components**
  - Development of nine Clean Plant Centers (CPCs)
  - Enhancement of infrastructure
  - Creation of regulatory and certification process

### Clean Plant Centers

- Provide disease diagnostics and therapeutics
- Create mother plants to be sent to nurseries
- Quarantine all domestic and imported planting materials intended for commercial propagation and distribution

### Enhancement of infrastructure

- Development of large-scale nurseries to facilitate the efficient multiplication of clean planting material
- The mother plants obtained from the CPCs will be multiplied in nurseries and distributed to farmers

### Creation of regulatory and certification process

- It is to ensure thorough accountability and traceability in the production and sale of planting material, that will be implemented under the Seeds Act of 1966.

### Clean Plant Centers

- The CPCs will be established in collaboration with the Indian Council of Agricultural Research (ICAR) for specific horticulture crops.
- Each CPC will be linked to a different ICAR institute.

CPC Location	Crop	Linked ICAR Institute
Pune, Maharashtra	Grapes	National Research Center for Grapes, Pune,
Bikaner, Rajasthan	Citrus fruits	Central Institute of Arid Horticulture, Bikaner.
Nagpur , Maharashtra	Citrus fruits	Central Citrus Research Institute, Nagpur.
Solapur, Maharashtra	Pomegranate	National Research Center on Pomegranate - Solapur.
Bengaluru, Karnataka	Mango, Guava, Dragon Fruit and Avocado	Indian Institute of Horticultural Research, Bengaluru.
Srinagar , Jammu and Kashmir	Temperate Fruits - Apple, Almond, Walnuts, etc.	Central Institute of Temperate Horticulture (CITH), Srinagar
Mukteshwar, Uttarkhand	Temperate Fruits - Apple, Almond, Walnuts, etc.	Regional Station of CITH, Mukteshwar.
East India	Tropical and Subtropical Plants	East India Horticulture center in West Bengal and Jharkhand.
Lucknow	Mango, Guava, Litchi	Central Institute for Subtropical Horticulture , Lucknow.

## What are the benefits of CPP?

### Benefits of CPP

<b>Farmers</b>	<ul style="list-style-type: none"> <li>• <b>Increased Crop Yields</b> - By providing virus-free, superior planting material, it aims to boost crop yields.</li> <li>• <b>Enhanced Income Opportunities</b> - Higher quality produce will lead to better market prices and income for farmers</li> </ul>
<b>Nurseries</b>	<ul style="list-style-type: none"> <li>• <b>Propagation</b> - Streamlined certification processes and infrastructure support will help nurseries in efficiently producing clean planting material.</li> <li>• <b>Sustainability</b> - Improved facilities will foster growth and sustainability in the nursery sector</li> </ul>
<b>Consumers</b>	<ul style="list-style-type: none"> <li>• <b>Superior Produce</b> - It ensures that consumers receive virus-free fruits but also enhanced in taste, appearance, and nutritional value.</li> <li>• <b>Affordable Cost</b> - It will significantly reduce the cost of fruits by increasing the production.</li> </ul>
<b>Exports</b>	<ul style="list-style-type: none"> <li>• <b>Global Market Strengthening</b> - With higher-quality, disease-free fruits, India will enhance its position as a leading global exporter.</li> <li>• Thereby expanding market opportunities and increasing its share in the international fruit trade.</li> </ul>
<b>Inclusion</b>	<ul style="list-style-type: none"> <li>• <b>Farmers</b> - It aims to provide affordable access to clean plant material for all farmers, regardless of their landholding size or socioeconomic status.</li> <li>• <b>Women Farmers</b> - The programme will also actively engage women farmers, ensuring their participation in planning, resource access, training, and decision-making processes.</li> <li>• <b>Regional growth</b> - CPP will address the diverse agro-climatic conditions across India by developing region-specific clean plant varieties and technologies.</li> </ul>
<b>Alignment with Broader Initiatives</b>	<ul style="list-style-type: none"> <li>• It aligns with broader initiatives such as Mission LiFE (Lifestyle for Environment) and the One Health approach.</li> </ul>

## What are its significances?

- **Reduce Fruit Import** - India is a major importer and exporter of fresh fruits.
- In the financial year 2023-24, India exported fresh fruits worth \$1.15 billion, while it imported fruits worth \$2.73 billion.
- **Reduce import of plant materials** - With the rising consumption of foreign and exotics fruits such as avocado and blueberry, demand has specifically increased for their planting materials.
- **Address import bottlenecks** - At present, imported plants have to be kept in quarantine for two years.
- The CPCs will cut this period down to six months.
- Thus CPP can bolster India's position in the global fruit market.

## Quick Facts

**Mission for Integrated Development of Horticulture (MIDH)**

- It is a Centrally Sponsored Scheme.
- **Launched in** - 2014-15.
- **Aim** - For holistic growth of the horticulture sector covering fruits, vegetables, root & tuber crops, mushrooms, spices, flowers, aromatic plants, coconut, cashew, cocoa and bamboo.
- **Key Features**
  - **Plantation Infrastructure Development** - Establishing nurseries and tissue culture units to produce quality seed and planting material.
  - **Area Expansion** - Creating new orchards and gardens for various crops, with or without integration (e.g., drip irrigation).
  - **Rejuvenation** - Revitalizing old, unproductive orchards.
  - **Protected Cultivation** - Setting up poly-houses, greenhouses, shade net houses, and walk-in tunnels, along with micro irrigation facilities.
  - **Promotion of Organic Farming** - Encouraging organic practices, certification, and establishing vermi compost units.
  - **Creation of Water Resources** - Developing community tanks, on-farm ponds, and water harvesting systems.
  - **Pollination Support through Beekeeping** - Producing bee colonies, honey bee hives, and related equipment.
  - **Horticulture Mechanization** - Providing power tillers, tractors, and plant protection equipment.
  - **Human Resource Development** - Conducting awareness programs, farmer training, exposure visits, and study tours.
  - **Post-Harvest Management (PHM) Infrastructure** - Setting up cold storage, pack houses, ripening chambers, reefer vehicles, processing units, and food processing facilities in North Eastern States.
  - **Marketing Infrastructure** - Developing static and mobile vending carts, retail outlets, rural markets, wholesale markets, and direct market platforms.

## References

1. [Indian Express | Centre's Clean Plant Program](#)
2. [PIB | Transforming Horticulture with CPP](#)