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A Sustainable Future through Sustainable Farming

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Maintaining environmental health, improving soil fertility, and guaranteeing long-term food security all depend on sustainable and organic farming. These methods lessen climate change, encourage biodiversity, and lessen dependency on artificial chemicals. Through a number of programs, the Union government is aggressively promoting these strategies. The Indian government has introduced historic programs to boost organic farming, enhance the calibre of output, and fortify the resilience of agricultural systems nationwide.

Encouragement of Sustainable Farming Methods

The National Mission for Sustainable Agriculture (NMSA), a key component of the National Action Plan on Climate Change (NAPCC), is being implemented by the Indian government in order to combat climate change.

Through a number of initiatives, NMSA seeks to improve agriculture's climate resilience. The mission's initial focus was on soil health management (SHM), on-farm water management (OFWM), and rainfed area development (RAD). Later, more initiatives were launched, such as the National Bamboo Mission (NBM), Per Drop More Crop (PDMC), Mission Organic Value Chain Development in the North Eastern Region (MOVCDNER), Soil Health Card (SHC), and Parampragat Krishi Vikas Yojana (PKVY). Launched in 2015–16 with an initial investment of Rs 400 crore, the Mission Organic Value Chain Development for North Eastern Region (MOVCDNER) Scheme aims to create certified organic production clusters in Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim, and Tripura. The goal of this project is to create an all-encompassing value chain that comprises inputs, seeds, certification,

Clen Plant Program (CPP)

In August 2024, the Union Cabinet approved the Clean Plant Programme (CPP), which was proposed by the Ministry of Agriculture and Farmers Welfare. This project aims to transform India's horticulture sector and set new benchmarks with a significant investment of Rs 1,765.67 crore.

Principle Advantage of CPP: CPP's main advantages include giving farmers access to high-quality, virus-free planting material, which should increase crop yields and improve their financial prospects.

Nurseries: By providing infrastructure support and streamlining certification procedures, the program will empower nurseries to efficiently propagate clean planting material and foster sustainability and growth.

Customers: By delivering superior produce free of viruses, the initiative will enhance the nutritional value, taste, and appearance of fruits that are available to consumers.

Exports: India hopes to solidify its position as a top exporter worldwide by emphasizing fruits of superior quality and free of disease.

Nine cutting-edge facilities with sophisticated tissue culture, diagnostic, and treatment labs will be established throughout India as part of the CPCs initiative. These centers will concentrate on a range of crops, such as citrus, apples, almonds, walnuts, and temperate fruits like grapes.

Fruits, for example. For extensive propagation, they will be crucial in creating and preserving virus-free planting material.

All farmers, regardless of landholding size or socioeconomic background, will have affordable access to clean plant material thanks to the Clean Plant Program. Women farmers will be actively involved in the initiative's planning and execution stages, receiving training, resources, and chances to participate in decision-making.

Based on recommendations from soil tests, the Indian government is promoting the balanced use of fertilizer in combination with organic and biofertilizers. The "PM Programme for Mother Earth Amelioration, Awareness, Nourishment, and Restoration (PM-PRANAM)" is **PM-PRANAM: Encouraging Fertilizer Free Farming** established to encourage the use of alternative fertilizers, such as organic and bio-fertilizers, in States and Union Territories in order to enhance soil fertility and health and sustainably increase productivity. State governments will receive incentives under the program equal to 50% of fertilizer subsidies saved for the advancement of natural and organic farming practices as well as organic fertilizers.

Additionally, the government has announced Market Development Assistance for the use of liquid and fermented organic manure as organic fertilizers at a rate of Rs 1,500/MT.

Supporting Bio- Input Centers and Climate-Resilient Crops

To increase productivity, the Union government has thoroughly examined the infrastructure for agricultural research. Prime Minister Shri Narendra Modi has implemented 109 new climate-resilient and high-yielding cultivars with 32 field and farming horticulture crops.

Important Plans for Sustainable Agriculture

The Paramparagat Krishi Vikas Yojana (PKVY) is a centrally sponsored initiative aimed at promoting organic farming that was introduced in 2015–16. A total of Rs 2,078.67 crore had been allocated to the scheme as of June 30, 2024.

38,043 clusters, each covering 20 hectares, have been established under PKVY; these clusters together, including the Land Area Covered (LAC), cover an area of 8.41 lakh hectares. Different states have created distinctive brands to promote their organic produce under the PKVY scheme. These consist of:

1. Mandla-made Madhya Pradesh
2. Uttarakhand: Uttarakhand that is organic
3. Organic Product of Tamil Nadu (TOP)
4. Sahi Organic, Nasik Organic, and Gadchiroli Organic Farming in Maharashtra
5. Jharkhand: Jharkhand Jaivik
6. Chhattisgarh: BhoomiGadi FPO and Bastar Naturals' Aadim brand

Natural Farming: 4.09 lakh hectares in eight states—Andhra Pradesh, Chhattisgarh, Kerala, Himachal Pradesh, Madhya Pradesh, Odisha, Tamil Nadu, and Jharkhand—will receive funding for natural farming under the PKVY.

Namami Gange Programme: A total of Rs 272.85 crore has been allotted, resulting in the establishment of 1,91 lakh hectares and 9,551 clusters. Under the Namami Gange Programme, the National Mission for Clean Ganga (NMCG) has identified industrial clusters to aid in pollution reduction and offer financial assistance to industries such as textile effluents and tanneries.

Implementing "forestry interventions" to increase the productivity and biodiversity of forests in the headwater areas of the river as well as along its banks and tributaries is a crucial component of the Ganga rejuvenation project. In order to bolster this, the Kheti-Jaivik Portal: Jaivik-Kheti is a specialized online marketplace designed to help farmers sell organic goods directly to consumers. There are currently 6.23 lakh farmers registered on the portal.

The Large Area Certification (LAC) program was started in 2020–21 with the goal of certifying sizable, conventionally organic regions free of agrochemical use and genetically modified organisms. Important accomplishments consist of:

- Andaman and Nicobar Islands: After receiving certification, 14,445 hectares of the Car Nicobar and Nancowry islands are now organic, much like Sikkim.
- Ladakh: ₹11.475 lakh has been allotted to a proposal for 5,000 hectares.
- Lakshadweep: All 2,700 hectares of cultivable land have received organic certification.
- Sikkim: 60,000 hectares can be certified under the Large Area Certification program for a total of Rs 96.39 lakh.

Kheti-Jaivik Portal: Jaivik-Kheti is a specialized online marketplace designed to help farmers sell organic goods directly to consumers. There are currently 6.23 lakh farmers registered on the portal.

Climate Resilient Agriculture National Innovations (NICRA): The program's objectives are to evaluate how agriculture—including crops, livestock, horticulture, and fisheries—is affected by climate change and to create and advance climate-resilient agricultural technologies. The Indian Council of Agricultural Research (ICAR) has released 2,593 varieties in the last ten years (2014–2024), 2,177 of which exhibit tolerance to one or more biotic or abiotic stresses.

The Integrated Development of Horticulture (MIDH) mission is to: Significant advancements have been made under MIDH between 2014–15 and 2023–24, including the establishment of 905 nurseries for high-quality planting material, the expansion of 13.79 lakh hectares of horticultural crops.

Conclusion

For long-term food security and environmental health, organic farming is crucial. By encouraging natural agricultural methods and decreasing reliance on artificial inputs, these techniques continue to support resource preservation and the farming systems' resilience. In order to achieve these objectives, improve production quality, and foster climate resilience, the Indian government's strong programs—such as PKVY, MOVCDNER, and CPP—are essential. All of these initiatives, plans, and reforms show a dedication to creating a more secure and sustainable agricultural future for India.

References

1. <https://pib.gov.in/pressReleasePage.aspx?PRID=2043922>
2. <https://www.pib.gov.in/PressReleasePage.aspx?PRID=2037656>
3. <https://sansad.in/getfile/loksabhaquestion/annex/178/AU5519.pdf?source=pqals>