NATIONAL MISSION ON NATURAL FARMING - ECONOMY

The Union Cabinet approved the National Mission on Natural Farming (NMNF) in November 2024 as a standalone Centrally Sponsored Scheme under the Ministry of Agriculture & Farmers' Welfare.

Natural Farming (NF)

Natural Farming is a chemical-free agricultural method that integrates livestock (preferably indigenous cow breeds) with diversified cropping systems. It is rooted in Indian traditional knowledge and emphasizes self-sustaining farm ecosystems without dependence on synthetic fertilizers and pesticides.

Background & Philosophy

Introduced globally by Masanobu Fukuoka in his book *The One-Straw Revolution (1975)*, which advocated minimal human intervention in farming. In India, Natural Farming is promoted as Bhartiya Prakritik Krishi Paddhati Programme (BPKP) under Paramparagat Krishi Vikas Yojana (PKVY).

Paramparagat Krishi Vikas Yojana (PKVY)

Launch Year

2015.

Scheme Type

Extended component of Soil Health Management (SHM) under the National Mission on Sustainable Agriculture (NMSA).

Objective

Promote organic and natural farming practices among farmers.

Goals

- 1. Improve soil fertility and soil organic matter.
- 2. Restore ecosystem balance.
- 3. Reduce input costs for farmers.
- 4. Enhance resilience of agriculture to climate change.

Approach

Treats farming as an ecosystem where soil, water, microbes, plants, animals, climate, and human needs are interconnected.

Core Components of Natural Farming

Beejamrutham

Seeds are treated with a microbial mix made from cow dung, cow urine, and other natural ingredients to improve germination and protect from soil-borne diseases.

Jeevamrutham

A fermented solution made with cow dung, cow urine, jaggery, pulse flour, soil, and water; used to enrich soil microbial activity.

Mulching

Applying organic residues (crop remains, leaves, biomass) on soil surface to improve humus content, conserve moisture, and suppress weeds.

Waaphasa

Maintaining a balance of soil moisture and aeration to create a microclimate favorable for root growth and microbes.

Natural Pest Management

Use of kashayams (herbal decoctions) prepared from cow dung, cow urine, neem, green chilies, and other plants to control pests safely.

National Mission on Natural Farming (NMNF)

Type

Centrally Sponsored Scheme under Ministry of Agriculture & Farmers' Welfare.

Financial Outlay

₹2,481 crore (till 2025–26, i.e., end of 15th Finance Commission)

Coverage

7.5 lakh hectares across 15,000 Natural Farming clusters.

Aim

Strengthen sustainable agriculture and promote a chemical-free farming model for food security and climate resilience.

Objectives of NMNF

Sustainable Farming

Reduce farmers' dependence on costly external chemical inputs by using on-farm bio-inputs.

Soil & Sustainability

Improve soil organic content, fertility, and long-term productivity.

Livestock Integration

Promote livestock-based models, particularly using indigenous cow breeds, to integrate farming with animal husbandry.

Research & Extension

Support ICAR, KVKs, and Agricultural Universities to develop and disseminate location-specific NF practices.

Knowledge Integration

Blend traditional farmer experience with scientific research.

Standards & Certification

Establish farmer-friendly certification systems for chemical-free produce.

National Branding

Create a single national brand to promote naturally grown produce in domestic and international markets.

Components of NMNF

Natural Farming Clusters

Each cluster covers 50 ha and 125 farmers.

Bio-input Resource Centres (BRCs)

10,000 centers to be established to supply ready-to-use natural inputs.

Community Support

Deployment of 2 Krishi Sakhis/Community Resource Persons (CRPs) per cluster to train farmers and raise awareness.

Training & Demonstrations

Conducted through KVKs, Agricultural Universities, local NF institutions, and model demonstration farms.

Incentives

Farmers to receive ₹4,000 per acre per year for up to 1 acre, for 2 years.

Certification

Managed by the National Centre for Organic & Natural Farming (NCONF) under Participatory Guarantee System (PGS-India).

Monitoring

Real-time geo-tagged monitoring through the NMNF Portal.

Role of Krishi Vigyan Kendras (KVKs)

Conceptualized by Prof. M.S. Swaminathan (Father of Indian Green Revolution research). Act as knowledge & resource centres linking National Agricultural Research System (NARS) with extension and farmers. Provide training, demonstration, and capacity building to farmers for Natural Farming adoption.

Need for Natural Farming

Resource Pressure

High population pressure on limited land and water, leading to soil degradation, falling water tables, and loss of biodiversity.

Post-Green Revolution Issues

Overuse of chemicals has harmed soil health and environment. NF offers a climate-resilient, sustainable alternative.

Mass Movement

Requires scientific support, farmer participation, and extension networks including SHGs, PACS, FPOs, and NGOs.

Challenges in Natural Farming

Initial Yield Decline

Transition from chemical farming to NF often reduces yields temporarily.

Climate Sensitivity

NF depends heavily on rainfall and favorable climate. IPCC warns climate change increases unpredictability.

Input Preparation

Farmers need time, labor, and resources to prepare inputs like Jeevamrut and Beejamrut.

Sri Lanka's Lesson

Rapid shift to 100% organic farming (2021) led to sharp yield declines, food insecurity, inflation, and political unrest.

Global Adoption of Natural/Sustainable Farming

International Initiatives

At COP26 (Glasgow, 2021)45 governments pledged to promote sustainable agriculture and soil health. More than \$4 billion public investment pledged.

European Union's Farm to Fork Strategy (2020)

Launched as part of the European Green Deal.

Targets by 2030

- 1. 50% reduction in chemical pesticide use and risks.
- 2. Strict limits on hazardous pesticides.

Sri Lanka's Experience (2021)

Banned chemical fertilizers and agrochemical imports overnight.

Resulted in

- 1. Sharp fall in rice and tea yields.
- 2. Rising food inflation (8.3% overall; 11.7% food).
- 3. Contributed to economic and political crisis.

Source: https://timesofindia.indiatimes.com/business/india-business/natural-farming-push-pm-modi-to-launch-rs-2481-crore-national-mission-on-august-23-aims-to-boost-income-of-10-million-farmers/articleshow/123298139.cms

