

National Mission on Natural Farming (NMNF) for a Sustainable Agriculture

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Introduction

Indian agriculture, at present is at its turning point. The Green Revolution, on one hand has provided food security but on the other hand it has also led to excessive dependence on chemical and synthetic input use. This has resulted in an increased cost of cultivation as well as reduction in soil fertility and environmental degradation. In order to address these challenges, the Government of India has focused on the National Mission on Natural Farming (NMNF) in its recent scale-up phase. Its aim is to promote a sustainable and eco-friendly agricultural farming system.

About the Scheme

Natural farming in India is embedded in its traditional practices. It depends on locally present resources and ecological balance. In the aftermath of Green Revolution, agriculture has shifted its focus towards intensive use of chemicals in agriculture. However, over the time, problems like soil health, human health, and environmental sustainability have focused towards renewed interest in various alternative approaches.

Initial efforts like Paramparagat Krishi Vikas Yojana (PKVY) has laid its foundation for the promotion of organic and natural farming. Due to which the National Mission on Natural Farming has been expanded into a mission-mode programme. The primary objective was to promote chemical-free farming throughout the country.

Objectives of the Mission

The mission's aim is to promote chemical-free agriculture and encouraging natural farming practices to minimize the use of synthetic and chemical inputs. It focuses on reducing farmers' dependency on external inputs and thereby lowering the cost of production and increasing their self-reliance. The key agenda is improving soil health and enhancing biodiversity. Which is required for long-term agricultural sustainability. The initiative also seeks to enhance farmers' income by reducing input expenditure and increasing productivity. It supports the development of climate-resilient and sustainable farming systems. Which can help to adapt varying environmental

conditions. An important function of this mission is the integration of traditional knowledge with modern agricultural practices. The motive is to ensure a balanced and holistic approach to farming.

Important Features of the Mission

The mission adopts a cluster-based approach. Wherein farmers are organized into groups to facilitate the collective adoption of natural farming practices to ensuring proper coordination and improved impact. It promotes the use of natural inputs like Jeevamrit, Beejamrit, as well as various botanical formulations. The aim is to replace chemical fertilizers and pesticides with natural ingredients. Capacity building is an important component of this mission. It focuses on training, demonstrations, and continuous field-level guidance. Its motive is to enhance farmers' skills and knowledge. Institutional support is enhanced through the active involvement of Krishi Vigyan Kendras (KVKs) and universities. To ensure credibility and market acceptance of natural farming produce, the programme promotes certification systems such as Participatory Guarantee Systems (PGS). Moreover, for effective training, dissemination of information, and advisory services, digital support is integrated through the use of Information and Communication Technology (ICT) tools.

Total Financial Outlay is ₹2,481 crore where; Central share is ₹1,584 crore and State share is ₹897 crore. Whereas, the funding pattern is 60:40 or 90:10 (Central & State share) depending on the State/UT

Eligibility Criteria under this Mission

The mission especially focuses on small and marginal farmers. Who are most likely to benefit from low-cost and sustainable agricultural practices. However, the programme is open to all the farmers. It motivates farmers to adopt natural farming methods and withdraw use of chemical-based inputs. To ensure proper understanding and effective implementation of these practices. participation in training and awareness programmes is encouraged. To promote collective learning and better outcomes farmers are also expected to adopt the approach within a cluster or group-based system. Furthermore, compliance with the use of natural inputs and adopting to sustainable farming practices are essential requirements for participation in the mission.

The initiative targeted 1 crore Farmers and land area of 7.5 lakh hectares. Total clusters formed is 15,000 (each of contiguous area covering ~50 Ha and ~125 farmers). Regarding implementation, As of Early 2026, Over 18.19 lakh farmers were enrolled. Major participation was from state of Rajasthan, Uttar Pradesh, and Andhra Pradesh. A total of 18,786 clusters were formed with 8.80

lakh hectares area under coverage. However, the area coverage has exceeded initial targets. This occurred due to the rapid scaling and state-level initiatives.

Financial Benefits and Certification

₹4,000 per acre per year output incentive for two years (up to 1 acre per farmer) to help to cover training, livestock upkeep, and bio-input preparation. It's being supported by a simplified Participatory Guarantee System (PGS) under the National Centre for Organic & Natural Farming (NCONF) in Ghaziabad.

The Implementation Strategies

The mission follows a cluster-based and farmer-centric approach. It aimed at ensuring effective implementation and wider outreach. It focuses on the development of model clusters. Which serve as demonstration sites to showcase the benefits and practical aspects of natural farming. Continuous handholding support is provided to farmers through extension services. It also enables them to adopt and sustain these practices with confidence. To maximize resource utilization and policy synergy the programme integrates with existing agricultural schemes. Emphasis is placed on farmer-to-farmer learning, encouraging knowledge sharing and peer support within communities. Additionally, to enhance the outreach, coordination, and long-term sustainability of the mission initiatives, strengthening of the local institutions is being prioritized.

Training and Infrastructure

10,000 Bio-input Resource Centres (BRCs) are targeted to supply bio-inputs like *Jeevamrit* and *Beejamrit*. Thousands of such BRCs are currently operational. Over 33,600 *Krishi Sakhis* and local trainers as **Community Resource Persons (CRPs)** are deployed for grassroots guidance. 1,100 Natural Farming Model Farms are established at Krishi Vigyan Kendras (KVKs) and Agricultural Universities.

Progress and Recent Initiatives

The mission has witnessed a significant expansion of natural farming practices across multiple states in the country. Strong initiatives have been undertaken in states such as Andhra Pradesh, Himachal Pradesh, and Gujarat. They have emerged as the key leaders in promoting natural farming. This growth has been supported by increased government funding and robust policy backing, ensuring sustained momentum. To enhance their capacity to adopt and implement natural farming techniques effectively, a large number of farmers have been trained through Krishi Vigyan

Kendras (KVKs) and extensive extension networks. To reinforce its relevance in the current environmental context, the initiative is also aligned with climate-smart agriculture and broader sustainability goals. Furthermore, for the wider dissemination of knowledge, timely access to information and advisory services, digital platforms are being increasingly utilized for farmers.

Achievements of the Mission

The mission has led to a significant reduction in the cost of cultivation. This is due to the limited use of chemical inputs, thus improving farmers' economic efficiency. It has also contributed towards improved soil health management through the enhanced use of organic matter content and increased microbial activity, vital for sustainable productivity. Farmers are experiencing more resilience towards climate variability as natural farming practices promote ecological balance as well as adaptability. Additionally, the programme has also facilitated the revival of indigenous agricultural knowledge. It has reconnected farmers with traditional and locally adapted practices. There is a growing awareness about natural farming among farmers, leading to a gradual increase in the adoption of its practices. Additionally, an evolving market demand for chemical-free produce is providing new opportunities for farmers to obtain better returns.

Adoption Challenges

The mission has faced several challenges. During the initial transition phase farmers may, experience yield fluctuations which sometimes discourage its adoption. Further, risk aversion among small and marginal farmers often restricts their willingness to shift from conventional practices to natural farming. Unawareness and restricted technical knowledge about natural farming methods also act as possible constraints to effective implementation. Additionally, the lack of regulated market linkages and premium pricing for chemical-free produce reduces the economic incentives for farmers. New or less experienced farmers often face difficulties in understanding and adopting these practices. This suggests the need for more targeted trainings and support systems.

Way Forward

It is essential to strengthen extension services and farmer training programmes. So, that farmers receive continuous guidance and practical knowledge. This would enhance the effectiveness of the mission. Further, to ensure better price realization and consumer trust in natural farming produce, it is important to developing robust market and certification systems. During this transition from conventional to natural farming, providing transitional support to farmers can help to minimize the risk and maintain their motivation. Showcasing real-life benefits and practical feasibility may also

encourage wider adoption of recommended technologies. Additionally, to institutionalize these practices and ensure their long-term sustainability and scalability, integrating natural farming into education and policy frameworks will surely be helpful.

Conclusion

The National Mission on Natural Farming represents a transition in Indian agriculture. Its expansion phase emphasizes government's commitment towards farmer welfare, sustainability and environmental conservation. The mission has enormous potential to transform Indian agriculture into a low-cost, resilient and eco-friendly system. However, challenges in adoption especially among small and new farmers remains.

References

- Rana RK. and Singh R. 2018. Restoring human and environmental health through creative natural farming practices. In, Agri-Innovators: The Torch Bearers of Brighter Agriculture, Singh R, Rana R. K, Chahal V. P. and Singh A. K. (Eds.), Ludhiana ICAR-ATARI, pp. 19-24.
- Rana RK., Sheoran P, Singh M and Singh R. 2023. Principles and Formulations for Out-Scaling Natural Farming-ABrief. ICAR-ATARI, Ludhiana: 17p.
- Singh M, Rana RK., Monga S and Singh R. 2022. Organic and Natural Farming- A Critical Review of Challenges and Prospects. Bhartiya Krishi Anusandhan Patrika, 37(4), 295-305.