

Natural Farming and Rural Development

A New Hope for Indian Villages

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Abstract

Natural farming, rooted in India's traditional agrarian wisdom, is re-emerging as a sustainable and economically viable agricultural practice. In response to environmental degradation, climate change, and economic stress among farmers, natural farming offers a holistic approach that preserves ecological balance improves soil fertility, and reduces dependence on chemical inputs. This paper explores the principles and practices of natural farming government initiatives, success stories across Indian villages, and its impact on rural livelihoods and the

environment. The study highlights the transformative potential of natural farming in enhancing food security, generating employment, and promoting rural development, while addressing critical challenges such as market access and awareness. Through policy interventions, community participation, and scientific support, natural farming can become a catalyst for sustainable development in India's rural heartlands.

Keywords: Natural farming, Rural development, Sustainable, Economic & Agriculture.

Introduction

Natural farming, deeply rooted in India's indigenous agricultural practices, is emerging as a transformative approach to sustainable agriculture (Pretty, 2008). This method emphasizes ecological balance, soil health, and the elimination of synthetic chemicals. In the face of challenges like climate change, declining soil fertility, and economic distress among farmers,

natural farming offers a viable alternative that aligns with both environmental sustainability and rural development. The Indian government's initiatives, such as the National Mission on Natural Farming (Ensure IAS, 2024) (NMNF), aim to promote these practices across the country.

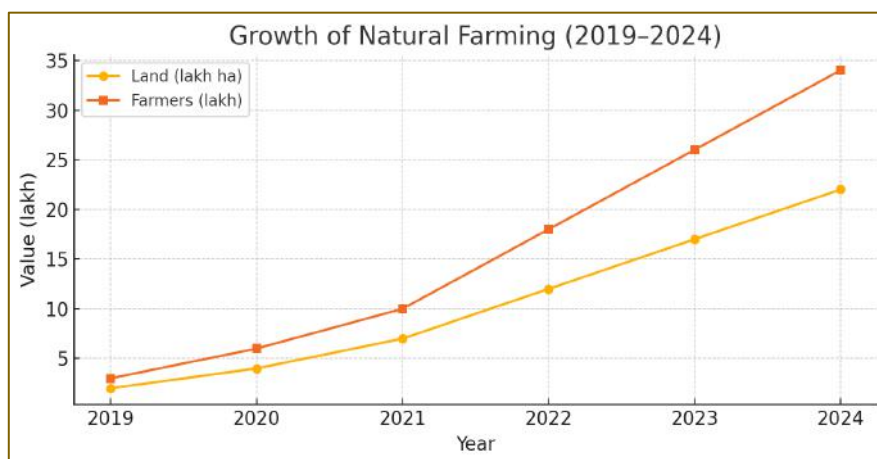


Figure 1: Growth of Natural Farming Land and Farmer Participation (2019–2024)

As of 2024, approximately 22 lakh hectares of land have been brought under natural farming, involving 34 lakh farmers. The mission plans to expand this effort significantly, targeting 7.5 lakh hectares over the next two years. Key components include the establishment of 10,000 Bio-input Resource Centres (BRCs), creation of 2,000 Model Demonstration Farms, training of 18.75 lakh farmers, and formation of 15,000 clusters involving 1 crore farmers across willing

Gram Panchayats. These initiatives aim to reduce input costs, promote sustainable agriculture, and enhance food security. However, challenges such as inconsistent supply chains for bio-inputs and the need for reliable infrastructure remain. The success of these programs will depend on addressing these issues and ensuring consistent support for farmers transitioning to natural farming practices.

Understanding Natural Farming

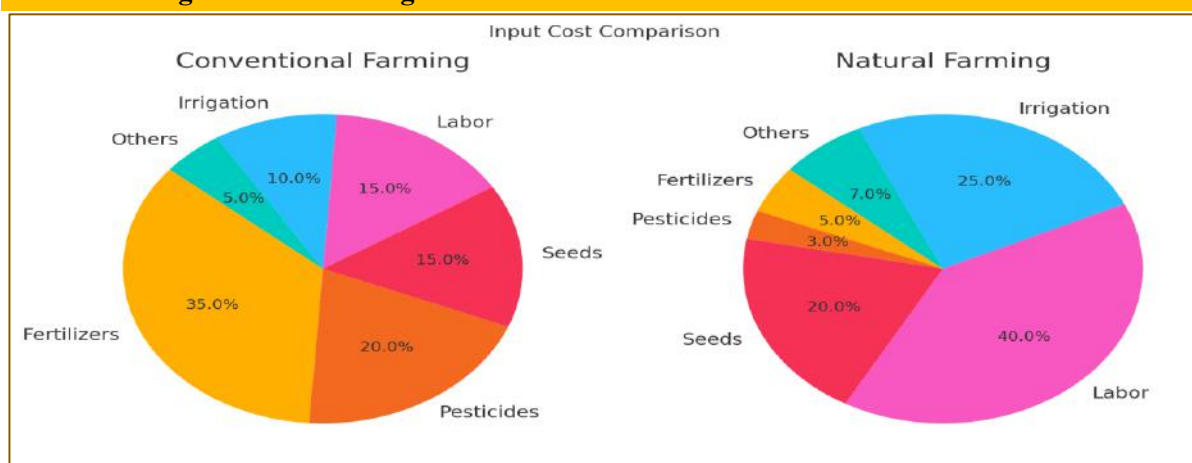


Figure 2: Input Cost Comparison – Conventional vs. Natural Farming

Natural farming is an agricultural methodology that eliminates the use of synthetic chemicals, relying instead on organic inputs like compost, cow dung, and indigenous microorganisms. It emphasizes soil health, water conservation, and biodiversity, aligning with India's traditional farming ethos.

Key Principles:

- **Chemical-Free Cultivation:** Avoids synthetic pesticides and fertilizers.
- **Soil Health Management:** Utilizes organic matter to enhance soil fertility.
- **Water Conservation:** Employs techniques like rainwater harvesting and efficient irrigation.
- **Biodiversity Promotion:** Encourages diverse cropping systems and agroforestry.

Government Initiatives Promoting Natural Farming

1. National Mission on Natural Farming (NMNF)

Launched by the Government of India, the NMNF aims to promote natural farming across the country. As of 2024, approximately 22 lakh hectares of land have been brought under natural farming, involving 34 lakh farmers. The mission plans to expand this effort significantly, targeting 7.5 lakh hectares over the next two years. Key components include:

Establishment of 10,000 Bio-input Resource Centres (BRCs): To provide easy access to natural farming inputs.

- **Creation of 2,000 Model Demonstration Farms:** To train farmers in natural farming practices.
- **Training of 18.75 lakh farmers:** Through workshops and demonstrations.
- **Formation of 15,000 clusters:** Involving 1 crore farmers across willing Gram Panchayats.

These initiatives are designed to reduce input costs, promote sustainable agriculture, and enhance food security. However, challenges such as inconsistent supply chains for bio-inputs and the need for reliable infrastructure remain. The success of these programs will depend on

addressing these issues and ensuring consistent support for farmers transitioning to natural farming practices.

Success Stories from Indian Villages

- I. **Ralegan Siddhi (Wikipedia, 2023a), Maharashtra:** Under the leadership of social activist Anna Hazare, Ralegan Siddhi transformed from a drought-prone village to a model of sustainable development. The community implemented water conservation techniques, afforestation, and organic farming, leading to improved agricultural productivity and rural prosperity.
- II. **Enabavi (Wikipedia, 2023b), Telangana:** Enabavi became Telangana's first organic village in 2006, thanks to the efforts of local farmers and organizations like the Centre for

Sustainable Agriculture. The village adopted non-pesticidal management practices, leading to healthier crops and increased income for farmers.

- III. **Koraput, Odisha:** Koraput Coffee (Times of India, 2023), produced by tribal farmers in Odisha's Eastern Ghats, has gained recognition under the 'Vocal for Local' campaign. The initiative promotes organic coffee cultivation, empowering tribal communities and enhancing their livelihoods.

Economic Impact on Rural Communities

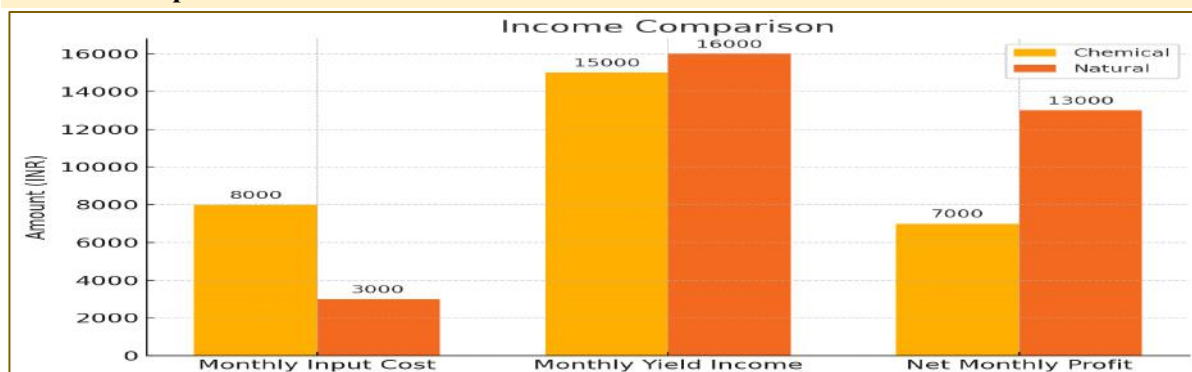


Figure 3: Income Comparison – Chemical vs. Natural Farming Households

Natural farming offers several economic benefits to rural communities:

- **Reduced Input Costs:** Eliminating the need for expensive chemical fertilizers and pesticides lowers production costs.
- **Increased Income:** Organic products often fetch higher market prices, boosting farmers' earnings.

- **Employment Generation:** The establishment of BRCs and demonstration farms creates job opportunities in rural areas.

For instance, the Godhan Nyay Yojana in Chhattisgarh has enabled women self-help groups to produce and sell organic manure, generating income and promoting sustainable farming practices.

Environmental Benefits

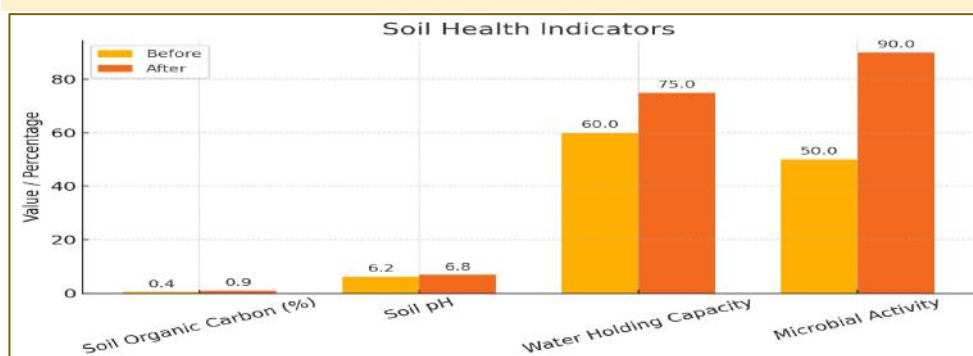


Figure 4: Soil Health Indicators – Before vs. After Natural Farming

Natural farming contributes to environmental conservation in various ways:

- **Soil Fertility:** Organic practices enhance soil structure and nutrient content.
- **Water Conservation:** Techniques like mulching and rainwater harvesting improve water retention.

- **Biodiversity Preservation:** Diverse cropping systems support a wide range of species.
- These practices help mitigate the adverse effects of conventional agriculture, such as soil degradation and water pollution.

Challenges and Way Forward

Challenges

- **Awareness and Training:** Many farmers are unaware of natural farming techniques.
- **Market Access:** Organic products often face challenges in reaching broader markets.
- **Policy Support:** Inconsistent policies can hinder the adoption of natural farming.

Way Forward

- **Enhanced Training Programs:** Expanding farmer education on natural farming practices.

- **Strengthening Market Linkages:** Developing platforms for organic products to reach consumers.
- **Policy Advocacy:** Advocating for supportive policies that encourage natural farming.
- The success of initiatives like the NMNF and state-level programs demonstrates the potential of natural farming in driving rural development.

Conclusion

Natural farming stands as a beacon of hope for India's rural communities, offering a path towards sustainable agriculture, economic empowerment, and environmental conservation.

By embracing traditional knowledge and integrating modern practices, natural farming can lead the way in transforming rural India.

References

1. Ensure IAS. (2024). *National mission on natural farming (NMNF)*. Ensure IAS. <https://www.ensureias.com/blog/current-affairs/national-mission-on-natural-farming-nmnf>.
2. Wikipedia contributors. (2023). *Ralegan Siddhi*. Wikipedia. https://en.wikipedia.org/wiki/Ralegan_Siddhi.
3. Wikipedia contributors. (2023). *Enabavi*. Wikipedia. <https://en.wikipedia.org/wiki/Enabavi>.
4. Times of India. (2023, March 7). *Koraput Coffee under Vocal for Local campaign*. <https://timesofindia.indiatimes.com/city/bhubaneswar/niti-aayog-includes-koraput-coffee-under-vocal-for-local-campaign/articleshow/121699116.cms>.
5. Wikipedia contributors. (2023). *Godhan Nyay Yojana*. Wikipedia. https://en.wikipedia.org/wiki/Godhan_Nyay_Yojana.
6. Super Kalam. (2024). *National mission on natural farming: Transforming India's agriculture*. <https://superkalam.com/current-affairs/articles/current-affairs-2024-national-mission-on-natural-farming>.