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Cultivating Life: The Power of Natural Farming (Jatin Kumar Singh¹, Ashutosh Tiwari², Shubham Singh², Neha Rani², Sushant Kumar² and ^{*}Pradumn Kumar Mourya³) ¹Department of Entomology, GBPUAT, Pantnagar, Uttarakhand, India ²M.Sc. Scholar, Department of Agronomy, National Post Graduate College, Barhalganj, Gorakhpur, Uttar Pradesh, India ³Ph.D. Scholar, Department of Entomology, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.), India ^{*}Corresponding Author's email: <u>pkmourya563@gmail.com</u>

Natural farming is a sustainable farming practice that focuses on addressing issues including food shortages, farmer distress, health concerns from chemical residues, and environmental degradation by utilising locally accessible resources and traditional knowledge. This environmentally friendly farming method was developed by Subhash Palekar in India and was initially introduced by Masanobu Fukuoka. It does not use artificial fertilisers or pesticides, instead relying on natural inputs like urine, cow dung, and biomass recycling. Natural farming is becoming more popular in India thanks to government programs like the Paramparagat Krishi Vikas Yojana (PKVY). It encourages increased crop yields, biodiversity, soil revitalisation, reduced production costs, and higher farmer incomes. Natural farming plays a critical role in promoting self-reliance (Atma Nirbharta) and tackling global issues like climate change by lowering input prices and creating local jobs.

Keywords: Natural farming, sustainable farming, self-reliance, BPKP, PKVY

Introduction

Farmers are at the centre of agriculture, which is the nation's path to Atma Nirbharta, or selfreliance. Our government has continuously worked to improve farmers' status, stability, and access to technical, economic, and social resources. We constantly research different approaches in our quest to come up with economically and environmentally sound solutions. One such technique that can accomplish all of these objectives is natural farming. It is an agricultural method based on locally accessible resources and is supported by our extensive traditional knowledge, making it both sustainable and profitable. Food hunger, farmer anguish, health issues resulting from pesticide and fertiliser residue in food and water, global

warming, climate change, and natural disasters are just a few of the issues that natural farming may help with. It may also lead to jobs, which would stop young people from moving to the country. As the name implies, natural farming is the art. practice, and increasingly science of collaborating with nature to accomplish



Image source: https://timesofagriculture.in/wp content/uploads/2023/10/1600x800_Natural_farming-1024x576.jpg

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significantly more with less.

One of the founding figures of modern-day natural farming is Masanobu Fukuoka. Natural farming, commonly known as "The Natural Way of Farming," "The Fukuoka Method," or "Do-Nothing Farming," is an ecological farming technique developed by Masanobu Fukuoka (1913-2008). The phrase was first used by Japanese farmer and philosopher Fukuoka in his 1975 book "The One-Straw Revolution." The worsening agrarian situation was attributed by the farmers themselves to annual crop cultivation and increased use of chemical pesticides and fertilisers. Subhash Palekar Natural Farming (SPNF) is a technique that the Bajaj Foundation introduced to encourage cropping patterns that are robust to climate change. In India, he is often referred to as the Father of Natural Farming. In 2016, the Indian government awarded Sh. Palekar the fourth-highest civilian honour, Padma Shri, makes him the country's first working farmer.

Agroecology-based natural farming blends cattle, plants, and trees with functional biodiversity without the use of chemicals. In India, the government-sponsored Paramparagat Krishi Vikas Yojana (PKVY), also known as the Bharatiya Prakritik Krishi Paddhati Programme (BPKP), promotes natural farming. The BPKP seeks to advance indigenous customs that have historically existed and require minimal outside assistance. It is mainly based on the recycling of biomass on the farm, with a particular emphasis on biomass mulching, the use of formulations made from cow dung and urine, the periodic aeration of the soil, and the avoidance of any synthetic chemical inputs. According to the HLPE Report, smallholder farmers will have less debt since natural farming will reduce the need for input purchases.



- To protect the native wildlife and flora
- To replenish the biological vitality of the soil and its fertility .
- To keep crop production diverse
- To effectively use land and natural resources (air, water, and light)
- To encourage naturally occurring beneficial organisms, bacteria, and insects in the soil to recycle nutrients and biologically control pests and diseases



- To encourage regional breeds for the integration of livestock
- Utilising inputs derived from natural or local resources
- To lower the cost of agricultural production's inputs to boost farmers' incomes

State Practising Natural Farming Methods

India's natural farming is becoming more and more popular. An estimated 4.09 lakh hectares of land in India are expected to be used for natural farming as of 2023. A total of Rs. 4587.17 lakh has been released in eight different states in the nation. The top states with the most land used for natural farming under the BPKP scheme are:

- Andhra Pradesh, covering one million hectares
- Madhya Pradesh contains 0.99 lakh hectares.
- Chhattisgarh covers 0.85 lakh hectares
- Kerala, covering 0.84 lakh hectares
- Odisha covers 1.24 lakh hectares
- Himachal Pradesh 1.12 lakh hectares
- Jharkhand covers 0.034 lakh hectares
- Tamilnadu covering 0.02 lakh hectares

Benefits of Natural Farming

- **Boost Production:** Farmers who followed traditional agricultural practices reported lower yields than those who practised natural farming. Higher yields per harvest were also recorded in a number of cases.
- **Increased Net Income for Farmers:** The goal of Natural Farming is to raise farmers' net incomes through cost savings, risk mitigation, equivalent yields, and income from intercropping to make farming sustainable and aspirational.
- **Minimised Production Costs:** By encouraging farmers to prepare vital biological inputs using on-farm, natural, and home-grown resources, natural farming seeks to significantly reduce production costs.
- **Better Health:** Because Natural Farming doesn't utilise any artificial chemicals, there are no health dangers or hazards. The food delivers greater health benefits because it has a higher nutrition density.
- **Creation of Employment:** Because of value addition, local marketing, input businesses, and other factors, natural farming creates jobs. The extra money from organic farming is used to improve the village.
- **Removes Utilising Synthetic Chemical Sources:** The misuse of pesticides, herbicides, weedicides, and synthetic fertilizers particularly urea alters the biology and structure of the soil, which results in a loss of fertility and soil organic carbon.
- **Decreased Water Use:** Natural farming maximises "crop per drop" by using a variety of crops that complement one another and cover the soil to reduce needless water loss through evaporation.
- **Preservation of the Environment:** Better soil biology, more agrobiodiversity, and more prudent water use with significantly lower carbon and nitrogen footprints are all guaranteed by natural farming.
- **Revitalises the soil:** Natural farming has the greatest direct effect on soil biology, specifically on bacteria and other living things like earthworms. The life within the soil is the only factor that determines its health.
- **Sustainability of Livestock:** A key component of natural farming is the integration of cattle into the agricultural system, which aids in the ecosystem's restoration. Jivamrit and Beejamrit, two eco-friendly bio-inputs, are made from cow dung, urine, and other natural ingredients.

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Conclusion

In conclusion, natural farming provides a comprehensive and long-term response to numerous issues confronting contemporary agriculture, such as rising input costs, farmer distress, and environmental damage. It strengthens soil health, biodiversity, and farmer income in addition to promoting ecological balance through the use of locally derived natural inputs and traditional knowledge. Natural farming is spreading throughout India with the help of government programs like the Paramparagat Krishi Vikas Yojana (PKVY), which helps the country achieve its objectives of food security and self-sufficiency. This approach has the potential to revolutionise agriculture by making it more environmentally friendly, economically feasible, and sustainable as it grows, which will benefit both farmers and society at large.

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