



Programme on Science of Natural Farming

[Source: PIB](#)

Why in News?

Recently, the "**Regional Consultation Program on the Science of Natural Farming**" emphasised the importance of natural farming as a sustainable agricultural practice.

- It was announced that farmers who practise natural farming on a portion of their land for 3 years will be eligible for government subsidies.



What is Natural Farming?

- **About:**
 - Natural farming is an agricultural practice that emphasises **minimal intervention and the use of natural resources** to cultivate crops.
 - It seeks to enhance soil health, biodiversity, and ecosystem balance without relying on synthetic fertilisers, pesticides, or herbicides.
 - It is largely based on **on-farm biomass recycling** with major stress on **biomass mulching**, use of **on-farm cow dung-urine formulations**; maintaining **soil aeration** and **exclusion of all synthetic chemical inputs**.
- **Aims and Objectives:**
 - Preserve natural flora and fauna
 - Restore soil health and fertility
 - Maintain diversity in crop production
 - Efficient utilisation of land and natural resources
 - Promote natural beneficial insects, animals, and microbes
 - Promotion of local breeds for livestock integration
 - Use of natural/local resource-based inputs

- Reduce input cost of agricultural production
- Improve economics of farmers

▪ **Components:**



COMPONENTS OF NATURAL FARMING



Beejamrit

The process includes treatment of seed using cow dung, urine and lime based formulations.

Whapasa

The process involves activating earthworms in the soil in order to create water vapor condensation.



Jivamrit

The process enhances the fertility of soil using cow urine, dung, flour of pulses and jaggery concoction.

Mulching

The process involves creating micro climate using different mulches with trees, crop biomass to conserve soil moisture.

Plant Protection

The process involves spraying of biological concoctions which prevents pest, disease and weed problems and protects the plant and improves their soil fertility.

▪ **Current Scenario:**

- Several states, including Andhra Pradesh, Gujarat, Himachal Pradesh, Odisha, Madhya Pradesh, Rajasthan, Uttar Pradesh, and Tamil Nadu, have initiated programs to promote natural farming.
- Currently, over **10 lakh hectares** of land in India are being used for natural farming.

▪ **Government Schemes:**

- **Bharatiya Prakritik Krishi Paddhati (BPKP)**: It is a sub-mission under the **Paramparagat Krishi Vikas Yojana (PKVY)**, which falls within the umbrella of the **National Mission on Sustainable Agriculture (NMSA)**.
- **National Mission on Natural Farming**

कृषि
The Vision

Table 1: Difference between Organic and Natural Farming

Organic Farming	Natural Farming
Organic fertilizers and manures like compost, vermin-compost and cow dung manure are used and added to farmlands from external sources.	In natural farming, neither chemical nor organic fertilizers are added to the soil. In fact, no external nutrient sources added to soil.
Organic farming is still expensive due to the requirement of bulk manures, and it has an ecological impact.	It is an extremely low-cost farming method, completely moulding with local on biodiversity surrounding environments.
In organic farming the manures and composts are to be incorporated into the soil for their proper decomposition and this requires more effort and cost.	In natural farming, decomposition of organic matter by microbes and earthworms is encouraged right on the soil surface itself, which gradually adds nutrition in the soil, over the years.
Organic farming has a slight adverse effect on the surrounding environment as it involves intervening with the natural processes.	Natural farming practice does not have any effect on the surrounding environment and it confirms with local processes of biodiversity.
Guidelines & regulations to be followed for certification purpose.	Less regulated.

Read more: [Plough to Plate: Natural Farming Unleashed](#), [Natural Farming](#)

UPSC Civil Services Examination, Previous Year Question (PYQ)

Prelims

Q.1 How is permaculture farming different from conventional chemical farming? (2021)

1. Permaculture farming discourages monocultural practices but in conventional chemical farming, monoculture practices are predominant.
2. Conventional chemical farming can cause an increase in soil salinity but the occurrence of such phenomenon is not observed in permaculture farming.
3. Conventional chemical farming is easily possible in semi-arid regions but permaculture farming is not so easily possible in such regions.
4. Practice of mulching is very important in permaculture farming but not necessarily so in conventional chemical farming.

Select the correct answer using the code given below.

- (a) 1 and 3
- (b) 1, 2 and 4
- (c) 4 only
- (d) 2 and 3

Ans: (b)

Q.2 Which of the following is the chief characteristic of 'mixed farming'? (2012)

- (a) Cultivation of both cash crops and food crops
- (b) Cultivation of two or more crops in the same field
- (c) Rearing of animals and cultivation of crops together
- (d) None of the above

Ans: (c)

Mains

Q.1 What are the present challenges before crop diversification? How do emerging technologies provide an opportunity for crop diversification? **(2021)**

Q.2 How has India benefited from the contributions of Sir M. Visvesvaraya and Dr. M. S. Swaminathan in the fields of water engineering and agricultural science respectively? **(2019)**

PDF Reference URL: <https://www.drishtias.com/printpdf/programme-on-science-of-natural-farming>

