



NEWS ANALYSIS

28 JULY 2024

Today's prelims practice Question

Which of the following countries borders Myanmar?

1.Thailand

2.Laos

3.Cambodia

4.China

Select the correct answer code:

a) 1, 2, 3

b) 1, 3, 4

c) 1, 2, 4

d) 1, 2

EXPLANATION



Today's Prelims Practice Question

Janjatiya Gaurav Diwas' is celebrated to mark the birth anniversary of

- a) Sidhu and Kanhu Murmu**
- b) Birsa Munda**
- c) Rani Gaidinliu**
- d) Alluri Seetha Ram Raju**

Mains Practice Question

- Q. Act East Policy can only be successful if apprehensions of ASEAN nations are resolved. Discuss with the relevant examples. (150 words)

Approach

- Briefly discuss Act East Policy in introduction.
- Highlight ASEAN's apprehensions in the region.
- Highlight steps taken by India to overcome such apprehensions.




Introduction

Act East Policy of India, apart from focusing on ASEAN countries and economic integration also includes East Asian Countries and security cooperation. ASEAN as a group contributed almost 16% of total FDI flows to India between 2010 and 2016. Notably, the two-way trade between India and ASEAN is tilted towards ASEAN with the trade gap expanding rapidly.

ASEAN's Apprehensions

- ❑ **India's RCEP exclusion:** ASEAN nations support for greater integration among themselves and with their FTA partners highlighted in RCEP.
- ❑ **India not Joined RCEP-** unfavourable balance of trade, protection of domestic industry (dairy and steel), lack of consensus on rules of origin, etc.
- ❑ **Regional net security provider:** ASEAN nations face **regional security threats** from Chinese aggressiveness in the South China Sea for territorial domination. South-East Asian nations have been wanting a major country like India to play a greater role in balancing the security architecture in the region.



❑ **Belt and Road Initiative (BRI):** ASEAN nations have supported China's BRI initiative as this will further integrate their economy with the region and world. India has not joined the initiative due to sovereign issues, while ASEAN nations want India to provide for greater physical connectivity with the region.

❑ **Prevailing inequality in the region:** There is inequality among ASEAN nations like Laos, Cambodia, Vietnam are less developed than Indonesia, Malaysia, Singapore. India would have to balance out its relations at bilateral level also.

There are various measure that India can take to overcome such apprehensions of ASEAN nations:

❑ **Security co-operation** at bilateral levels like military exercises, for example Garuda with Indonesia, cooperation and development of blue economy in South China Sea, export of defence equipment to enhance their defensive capabilities, regional grouping like Quad. This would help counter Chinese aggressiveness.

❑ **Increasing physical connectivity** like Trilateral highway, development of Sittwe port in Myanmar, infrastructure projects in Myanmar.

❑ Alternative to BRI and providing market and connectivity with South Asia by BIMSTEC grouping.

Way Forward

- ❑ The success of India's Act East Policy, will depend upon connectivity projects in India's **North East region**.
- ❑ Therefore, India should expedite the **connectivity projects like India–Myanmar–Thailand Trilateral Highway and Kaladan Multi-Modal Transit Transport Project**.
- ❑ While pursuing Act East Policy India must work on its niche advantage i.e. **cultural and civilizational**.
- ❑ These cultural and civilizational linkages are dated from ancient times (**spread of Buddhism and Hinduism**).

Natural Farming In India

Should India focus on natural farming?

What are the concerns on yields? What have been the findings on the ground? How did two studies on the yield potential of natural farming differ? What happened when Sri Lanka decided to ban chemical fertilizers, substituting it with natural ones?

Vikas Vasudeva

The story so far:

In her Budget proposals for 2024-25, Union Finance Minister Nirmala Sitharaman announced that in the next two years, one crore farmers across the country will be initiated into natural farming supported by certification and branding. Implementation will be through scientific institutions and gram panchayats, adding that 10,000 need-based bio-input resource centres will be established.

What is the mission?

As part of the National Mission on Natural Farming (NMNF), the government intends to motivate farmers to adopt chemical-free farming and draw them towards adopting natural farming willingly on the system's merit. The government believes that the success of the NMNF will require a behavioural change in farmers to shift from chemical-based inputs to cow-based, locally-produced inputs. The natural farming scheme under the 'Bharatiya Prakritik Krishi Paddhati' has a total outlay of ₹4,645.69 crore for six years (2019-20 to 2024-25).

What is natural farming?

In natural farming, no chemical fertilizers and

'If we adopt natural farming for wheat and rice, which are India's staples, we shall be able to feed only around one-third of our population'

pesticides are used. It promotes traditional indigenous practices which are largely based on on-farm biomass recycling with a stress on biomass mulching, use of on-farm cow dung-urine formulation; managing pests through diversity, on-farm botanical concoctions and exclusion of all synthetic chemical inputs directly or indirectly. The emphasis is on improving natural nutrient cycling and increasing organic matter in the soil. Grounded in agro-ecology, it is a diversified farming system that integrates crops, trees and livestock, allowing the optimum use of functional biodiversity. Those advocating natural farming believe that it holds the potential to enhance farmers' income while delivering many other benefits, such as restoration of soil fertility and environmental health, and mitigating and/or reducing greenhouse gas emissions.

What are the challenges and concerns?

Agriculture and food experts have their reservations surrounding a large-scale transition from chemical farming to natural farming in a country like India, which has a huge population. Catering to its food-growing needs isn't an easy task, they point out. Recently, an academic paper titled, 'Zero Budget Natural Farming (ZBNF): Implications for Sustainability, Profitability, and Food Security', published by the National Bank for Agriculture and Rural Development and the Indian Council for Research on International Economic Relations, pointed out the "sheer disparity" in the outcomes of the two different experiments surrounding ZBNF (now renamed as Bhartiya Prakritik Krishi Paddhati), one conducted by the Centre for Economic and Social Studies (CESS) and Institute for Development Studies Andhra Pradesh, and the other by the Indian Council of Agricultural Research (ICAR) and the Indian Institute of Farming Systems Research (IIFSR).

Sandip Das, Mahima Khurana and Ashok Gulati write in the paper the importance of long-term experimentation before declaring natural farming as a nationwide agriculture practice. The paper, which delves into the promising yet contentious realm of natural farming, navigates through contrasting findings

from the two studies, revealing divergent perspectives on ZBNF. While Andhra Pradesh emerges as a forerunner in adopting ZBNF with encouraging results, the IIFSR study raises concerns about the sustainability and yield (productivity) potential of this farming method.

For instance, the paper notes the CESS study has found that in the case of a variety of crops, lower cost of biological inputs suggested under ZBNF has led to improved yields of crops and farmers' incomes, thus increasing the food and nutritional security of farmers practising ZBNF. However, findings of agro-scientists of the ICAR-IIFSR, a government institute, show a 59% decline in wheat yields and a 32% decline in basmati rice yield compared to integrated crop management, adversely impacting food supply.

What are the lessons from Sri Lanka?

It's vital that before launching a large-scale transition from chemical to natural cultivation, extensive studies and assessments are conducted. A couple of years ago, neighbouring Sri Lanka went through economic and political turmoil after it decided to turn completely organic, and banned the import of chemical fertilizers. The government's policy shift had severe consequences with farmers struggling to get natural fertilizers; they faced a reduction in yields of key crops including rice, the staple, putting the country's food security at risk. A sharp price escalation was witnessed in the country, resulting in huge protests and unrest.

What is the way forward?

Noted economist and former professor at the Ludhiana-based Punjab Agricultural University, M.S. Sidhu, asserts that natural farming could be beneficial at a localised level, but in a populous country like India, adopting natural farming at a large scale may not be a successful model. "Food security is a major concern. If we adopt natural farming for cereals, which are mostly staples, we shall be able to feed only around one-third of our population. Wheat and rice are our staple foods, growing these crops through natural farming could result in lower yields, and hence it's not advisable unless scientific studies are conducted on yields". Supplementary foodstuffs may be grown through natural farming, he points out. "Rigorous scientific tests of natural farming, especially surrounding the crop yields should be held before its nationwide implementation to fend off the fear of potential risk to national food security," says Prof. Sidhu.

- ❑ What are the concerns on yields? What have been the findings on the ground?
- ❑ How did two studies on the yield potential of natural farming differ?
- ❑ What happened when Sri Lanka decided to ban chemical fertilizers, substituting it with natural ones?



Hard at work: Workers transplanting paddy seedlings at a field in Palakkad, Kerala on July 13. K. K. MUSTAPPA

Union Budget 2024-25 on Natural farming

Budget proposals for 2024-25, -

- ❑ It announced that in the next two years, one crore farmers across the country will be initiated into natural farming supported by certification and branding.
- ❑ Implementation will be through scientific institutions and gram panchayats, adding that 10,000 need-based bio-input resource centres will be established.



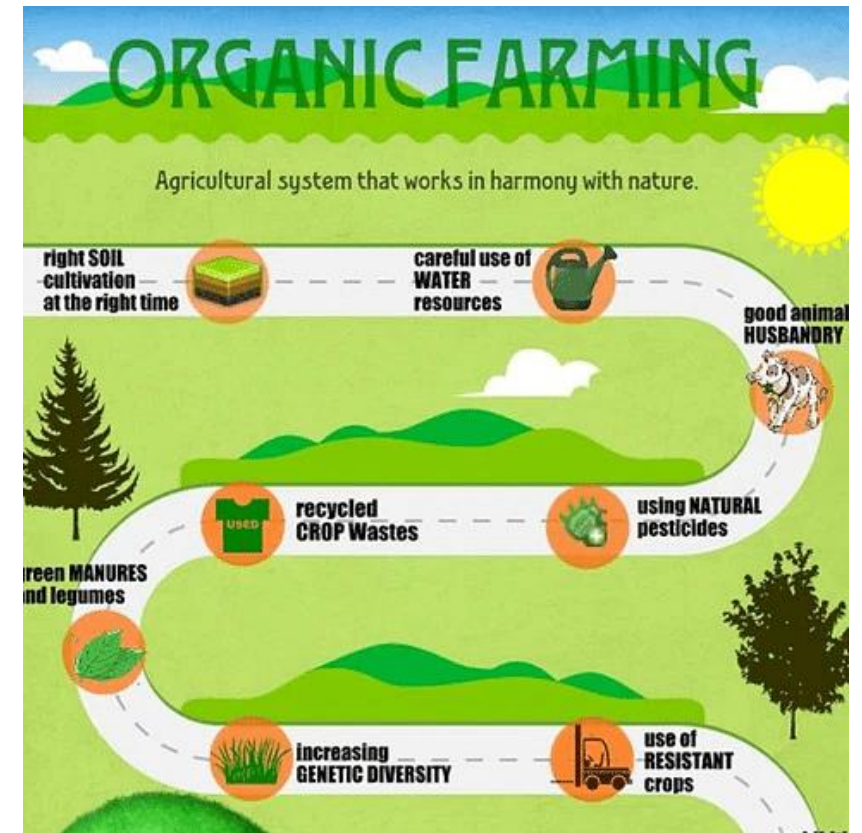
National Mission Natural Farming

- ❑ As part of the **National Mission on Natural Farming (NMNF)**, the government intends to motivate farmers to adopt chemical-free farming and draw them towards adopting natural farming .
- ❑ The government believes that the success of the NMNF will require a **behavioural change in farmers** to shift from chemical-based inputs to cow-based, locally-produced inputs.

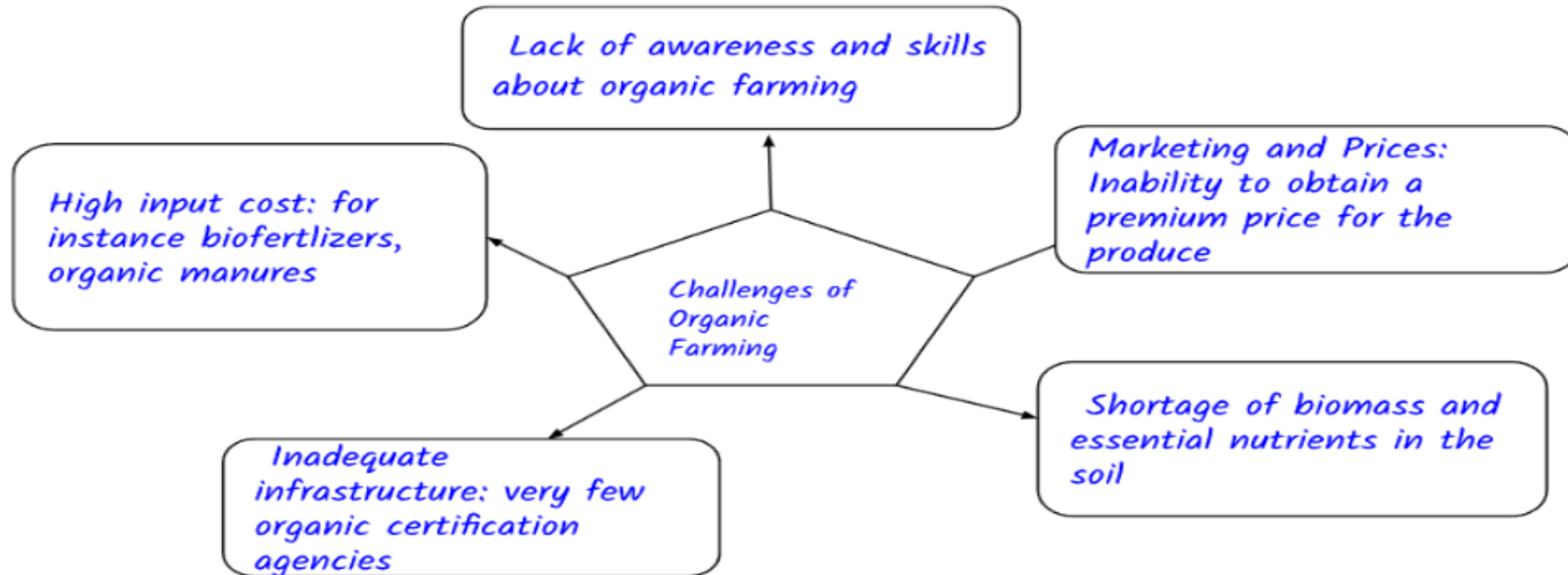


What Is Natural Farming

- ❑ In natural farming, **no chemical fertilizers and pesticides** are used.
- ❑ It **promotes traditional indigenous practices** which are largely based on on-farm biomass recycling with a stress on biomass mulching, use of on-farm cow dung-urine formulation.
- ❑ The emphasis is on **improving natural nutrient cycling** and increasing organic matter in the soil.
- ❑ Benefits, such as **restoration of soil fertility and environmental health**, and mitigating and/or reducing greenhouse gas emissions.



What are the challenges and concerns



What is the Way forward

- ❑ **Natural farming could be beneficial at a localised level**, but in a populous country like India, adopting natural farming at a large scale may not be a successful model.
- ❑ **“Food security is a major concern**. If we adopt natural farming for cereals, which are mostly staples, we shall be able to feed only around one-third of our population.
- ❑ Wheat and rice are our staple foods, growing these crops through natural farming could result in lower yields, and hence it’s not advisable unless **scientific studies are conducted on yields”**.



What are Notified Disasters?

Centre has no plans to include heatwave as 'notified disaster'



Context:

Recently, the Minister of state for Union ministry of science and technology informed Lok Sabha that 15th Finance Commission declined to include heatwaves on the notified disaster list.

Despite unprecedented heatwave deaths, Finance Commission ruled against expanding disaster list, cited current coverage sufficiency

Notified Disaster

About Notified Disaster:

- ❑ In India, the **Disaster Management Act, 2005**, defines a disaster as a "**catastrophe, mishap, calamity or grave occurrence**" arising from **natural or man-made causes** that results in substantial loss of life, destruction of property, or damage to the environment.
- ❑ **Currently 12 disasters** are classified as Notified Disaster namely: Cyclone, drought, earthquake, fire, flood, tsunami, hailstorm, landslide, avalanche, cloud burst, pest attack and frost and cold wave.
- ❑ Presently the notified list of disasters eligible for **National Disaster Response Fund/State Disaster Response Fund (SDRF)** assistance.

What are Heat Waves

- ❑ The basic criteria for IMD to declare a heatwave are when a place's temperature exceeds **40 degrees Celsius (°C) in the plains, 37°C in coastal areas, and 30°C in the hills.**
- ❑ These temperature values are the thresholds established by the IMD for the declaration of heatwaves in India.

WHAT CAUSES A HEATWAVE

Heatwaves are generally the result of trapped air



- Heat waves form when high pressure aloft (3,000–7,600 metres) strengthens and remains over a region for several days up to several weeks
- This high concentration of pressure makes it difficult for other weather systems to move into the area, which is why a heatwave can last for several days or weeks
- High-pressure systems force air downward
- The high-pressure inhibits winds. It also prevents clouds from entering the region
- This force prevents air near the ground from rising
- The end result is a continual build-up of heat at the surface that people experience as a heat wave
- The sinking air acts like a cap. It traps warm ground air in place



Thank you

Address

**B-47, Main Road Shivalik
Enclave, Block-B, Shivalik Colony,
Malviya Nagar, New Delhi-110017**

Phone Number +91 8178833167