



## National Agriculture Code

**For Prelims:** [Bureau of Indian Standards](#), [National Building Code](#), [National Electrical Code](#), [Internet-of-Things](#), [International Organization for Standardization](#), International Electro-technical Commission.

**For Mains:** National Agriculture Code, Standardization in Agriculture, Agricultural Policies in India, Government Policies & Interventions.

**Source:** [IE](#)

### Why in News?

The [Bureau of Indian Standards \(BIS\)](#) is in the process of formulating the **National Agriculture Code (NAC)**, an ambitious project that seeks to establish standards across the entire agriculture cycle.

- This initiative, modelled after the [National Building Code \(NBC\) of India 2016](#) and [National Electrical Code \(NEC\) of India 2023](#), aims to enhance agricultural practices and provide clear guidelines for farmers, policymakers, and other stakeholders.
- In conjunction with drafting the NAC, the BIS is establishing **Standardised Agriculture Demonstration Farms (SADF)** at select agricultural institutes.

Note: The tentative deadline for completing the NAC is set for October 2025.

### What is the National Agriculture Code (NAC)?

- **Purpose:** The NAC aims to establish a **standardised framework for agricultural practices** across the entire agricultural cycle, from field preparation to storage of produce. It seeks to address areas that are **currently unregulated by existing standards**.
  - Currently, the BIS has established **standards for agricultural machinery** and inputs, but there remains a **significant gap in the regulation of agricultural practices**.
- **Scope:** The NAC will cover all agricultural processes, including **crop selection, land preparation, sowing, irrigation, soil health management, harvesting, post-harvest operations**, and storage.
  - It will also include standards for inputs like **fertilisers, pesticides, and weedicides**.
  - The NAC will incorporate standards for modern practices like [natural farming](#), [organic farming](#), and the use of [Internet-of-Things \(IoT\)](#) technology in agriculture.
- **Structure:** The code will be divided into **two parts**:
  - The first part will outline general **principles applicable to all crops**.
  - The second part will focus on **crop-specific standards** for various types of crops such as paddy, wheat, oilseeds, and pulses.
- **Objectives:** To create a **national code that considers agro-climatic zones**, crop types, socio-

economic diversity, and all aspects of the agri-food value chain.

- To foster a **quality culture in Indian agriculture** by guiding policymakers and regulators in incorporating NAC provisions into their schemes and regulations.
  - To provide a comprehensive guide for farmers, facilitating informed decision-making in agricultural practices.
  - To address horizontal aspects of agriculture, including **SMART farming**, sustainability, traceability, and documentation.
- **Guidance for Stakeholders:** The NAC will serve as a reference for farmers, agricultural universities, and policymakers, helping them make informed decisions and incorporate best practices into their operations.
  - **Training and Support:** After the code is finalised, the BIS plans to provide training programs for farmers to help them understand and implement the standards effectively.

## What are the Challenges in formulating a National Agriculture Code in India?

- **Diverse Agricultural Practices:** India has a wide range of **climates (15 agro-climatic zones) and soil types**, making it difficult to **create a one-size-fits-all set of standards**. Tailoring the NAC to accommodate these variations can be challenging.
- **State vs. Central Jurisdiction:** **Agriculture is a state subject** in India under the **Entry 14 of the State List in the Seventh Schedule** of the Constitution of India, which can lead to potential **conflicts between central and state regulations**.
  - Harmonising these laws while respecting state rights is a significant challenge.
- **Resource Constraints:** Many smallholder farmers may lack the resources or infrastructure to adopt new practices recommended by the NAC.
  - This includes access to **modern equipment, quality seeds, and efficient irrigation systems**.
  - Engaging these groups in the formulation process is essential to ensure acceptance.
- **Technological Barriers:** While the code aims to promote technology adoption, many farmers may lack access to the **necessary technology or skills**. Addressing these gaps is essential to realise the benefits of the code.
- **Data and Research Gaps:** There may be a lack of comprehensive data on **agricultural practices, yields, and market trends**, hindering evidence-based policy formulation. Addressing these gaps is crucial for creating an effective code.

## What Can be Done to Address the Challenges in formulating NAC?

- **Customisation and Flexibility:** Develop region-specific guidelines within the NAC to address the diverse agro-climatic conditions across India.
  - Ensure the NAC is scalable and adaptable to different farm sizes and resource levels, from smallholder farms to large agricultural enterprises.
- **Environmental Considerations:** The code must address issues such as **land degradation, water scarcity, and climate change** while promoting agricultural growth.
- **Capacity Building:** Create hands-on training programs for farmers on the NAC and develop mobile apps like **Meghdoot** and platforms like **e-NAM and Kisanbandi** for real-time advice and information sharing.
- **Policy and Regulatory Support:** Establish a supportive legislative framework for the NAC to ensure enforceability and create incentive structures, like **tax benefits and recognition programs**, to reward farmers for compliance.

## Agricultural Policy in Other Countries

- **Common Agricultural Policy (CAP):** Agriculture is the only sector in the **European Union (EU)** with a common policy, the CAP, provides subsidies, direct payments to farmers, supply controls, and overall support for farmers.
- **Growing Forward 2 (GF2):** It is a five-year federal-provincial-territorial policy framework for **Canada's agriculture and agri-food sector**. It focuses on innovation, competitiveness, and market development.

## Standardised Agriculture Demonstration Farms (SADF)

- SADF farms will serve as experimental sites to test and implement various agricultural practices and new technologies in line with Indian Standards.
- These farms will offer a platform for extension officials, farmers, and industry professionals to learn about standardised agricultural practices, supported financially by the BIS.

## What is the National Building Code of India?

- The NBC is a model code that provides comprehensive guidelines for all agencies involved in building construction.
  - It was first published in 1970, revised in 1983, and in 2005. The current version, **NBC 2016, was introduced to address the changing landscape of building construction.**
- **Key Provisions of the NBC 2016:** Emphasises the involvement of professionals for effective project execution and features a streamlined, **single-window approval process** that allows for enhancing the **[ease of doing business](#)** and promotes **Digitalization**.
  - Accessibility requirements have been revised to accommodate **[persons with disabilities](#)**. Enhanced **fire and life safety** measures are included, particularly for **complex buildings and high-rises**.
  - The code incorporates modern structural standards for safety against disasters and encourages the use of innovative materials and technologies to promote sustainability in construction.

## What is the National Electrical Code (NEC) of India?

- The NEC is an all-inclusive **Electrical Installations Code** prepared by **BIS**, providing guidelines for regulating electrical installation practices across the country.
  - NEC was originally formulated in 1985 and revised in 2011 and 2023 to align with contemporary international practices.
- **Key Provisions of the NEC 2023:** Focuses on protective measures against electric shock, fire, and overcurrent. They address the **design, selection, and maintenance of standby power sources for emergencies**.
  - The guidelines ensure safety against electrical faults in agricultural settings, accounting for **external factors like water and corrosive substances**.
  - Additionally, they categorise hazardous areas based on the likelihood of dangerous atmospheres and provide tailored guidelines, while also offering comprehensive standards for **[solar installations](#)**, emphasising safety and quality.

## Bureau of Indian Standards (BIS)

- BIS is the **National Standard Body of India** established under the BIS Act 2016 for the harmonious development of the activities of standardisation, marking and quality certification of goods. **BIS has its headquarters at New Delhi.**
- BIS provides traceability, tangibility, safe reliable quality goods, minimises health hazards, promotes exports and imports substitute, and controls proliferation of varieties through standardisation, certification and testing.
- It conducts capacity building programs on quality assurance and represents India in the **[International Organization for Standardization \(ISO\)](#)** & **International Electro-technical Commission (IEC)**.
  - IEC is an international standard setting body that publishes international Standards for all electrical, electronic and related technologies.
  - **Standardization Management Board (SMB)** is an apex governance body of IEC responsible for technical policy matters.

## Conclusion

The proposed NAC represents a significant step towards modernising agricultural practices in India. As the development process unfolds, stakeholder engagement will be crucial in shaping a code that meets the diverse needs of India's agricultural landscape.

### **Drishti Mains Question:**

Discuss the objectives and significance of the National Agriculture Code in transforming agricultural practices in India.

## UPSC Civil Services Examination, Previous Year Question (PYQ)

### **Mains:**

**Q.** Given the vulnerability of Indian agriculture to vagaries of nature, discuss the need for crop insurance and bring out the salient features of the Pradhan Mantri Fasal Bima Yojana (PMFBY). **(2016)**

PDF Reference URL: <https://www.drishtias.com/printpdf/national-agriculture-code>

