



## India's Transition Towards Workforce Formalisation

**For Prelims:** [Formalization](#), [Employee's Provident Fund Organisation](#), [e-Shram Portal](#), [Udyam Portal](#), [Pradhan Mantri Shram Yogi Maan-dhan Yojana](#), [Informal sector](#), [Goods and Services Tax](#)

**For Mains:** Formalization of the Economy in India, Social Security Schemes in India, Social Security and Economic Stability

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

### Why in News?

India's economy is undergoing a **transformative shift** toward [formalization](#), redefining job structures, [employment security and social benefits](#) for millions, ensuring a larger segment of the population is covered by **social security systems**, offering greater economic stability and a more secure future.

- This transition, supported by the [Employee's Provident Fund Organisation \(EPFO\)](#), enhances economic stability by integrating more workers into social security systems.

### What is Formalization of the Workforce?

- **Definition:** Workforce formalisation is a **crucial step toward building an equitable and resilient Indian economy**.
  - It not only empowers workers through improved social security and working conditions but also strengthens economic fundamentals such as **productivity, tax compliance, and global competitiveness**.
  - Formalization is when jobs move from the [informal sector](#) (small, unregistered businesses and daily wage workers) into the [formal sector](#) (where employees have contracts, job security, and access to benefits).
- **Features:** Businesses operate under clear legal frameworks, ensuring compliance with laws and regulations.
  - Boosts tax revenues, **expanding the tax base** and ensuring a [fairer distribution of the tax burden](#).
  - Employees **receive social security**, healthcare, and benefits under labour laws, including minimum wage enforcement, retirement benefits, pensions, and insurance.
  - **Formal businesses** have **easier access to financial services** and credit from banks and institutions.
  - Formalization encourages **entrepreneurship**, enhances competitiveness, and promotes overall economic growth.

### What is Significance of Workforce Formalisation for the Indian Economy?

- **Widespread Informal Employment:** Approximately **85% of India's workforce is part of the informal sector**, which is not protected by [formal labour laws](#) or social security systems.

- Formalisation ensures better access to social security, healthcare, and pensions, reducing vulnerability to economic shocks.
- **Accurate Data Collection:** Formalisation allows for better data collection on employment trends, which aids in **effective policy-making and economic planning**.
- **Increased Tax Revenue:** A formal workforce contributes more to the [tax base](#), enabling the government to fund public services and infrastructure projects.
- **Reduce Black Money:** Enhances transparency, making [money laundering and illegal activities harder to conduct](#).
- **Digital Inclusion:** Formalisation encourages the adoption of digital tools and technologies, improving efficiency and transparency in the workforce.
- **Attracts Investment:** A formal workforce offers businesses a better operating environment and encourages investment, both domestic and international.

## What is EPFO and its Role in India's Workforce Formalization?

- **About:** The EPFO is one of the **world's largest social security organizations**, providing a wide range of social security benefits to millions of workers across India.
  - It was established under the **Employees' Provident Funds & Miscellaneous Provisions Act of 1952**.
  - EPFO manages over **29.88 crore accounts (EPFO's Annual Report 2022-23)**, underscoring its extensive reach and the magnitude of financial transactions it handles.
  - The EPFO is under the administrative control of the **Ministry of Labour & Employment, Government of India**.
- **Benefits of EPFO:** Ensures long-term financial security through retirement funds, insurance under [Employees' Deposit Linked Insurance \(EDLI\) Scheme, 1976](#), monthly pensions via [Employees' Pension Scheme \(EPS\), 1995](#), and partial withdrawals under EPF (1952) for emergencies, education, or home purchases.
  - The [Employees' Provident Fund \(EPF\) Scheme, 1952](#) allows partial withdrawals for emergencies, education, or home purchases, making it a versatile financial tool.
- **Role of EPFO in Increased Formalization:** From 2017 to 2024, over **6.91 crore members joined EPFO**, with a record 1.38 crore new members registering in the fiscal year 2022-23.
  - In July 2024 alone, **nearly 20 lakh new members were added**, indicating a steady increase in monthly registrations.
  - Many members chose to transfer their funds when changing jobs, ensuring continued access to social security benefits.
  - A significant portion of **new EPFO members are youth**, many of whom are first-time job seekers. Additionally, **more female workers are registering with EPFO**, reflecting a positive trend toward a more inclusive workforce.
  - The rise in EPFO registrations highlights the **growth of formal jobs in India**, with more employees gaining access to essential benefits such as job security, retirement savings, and insurance.

## What are the Challenges in Workforce Formalisation in India?

- **Cost of Formalisation:** Many [MSMEs \(Micro, Small, and Medium Enterprises\)](#) and small businesses find workforce formalisation costly and cumbersome, as nearly **80-90% of India's workforce operates informally**. Small businesses **prefer informality to avoid compliance burdens**.
  - Simplifying compliance and reducing financial barriers will be crucial in overcoming this challenge.
- **Seasonal Workforce:** Migrant and seasonal workers in agriculture, construction, and low-wage jobs **often lack formal contracts** due to frequent relocations, lack of documentation **hinder their formalisation**.
- **Resistance to Change:** Workers in the informal sector are **reluctant to formalise due to a preference for flexibility** and lack of awareness about the benefits.
- **Digital Divide:** Limited access to digital tools in rural areas hinders formal employment despite [Aadhaar](#) and [Unified Payments Interface \(UPI\)](#) advancements.
- **Skill Gaps:** Informal workers often lack the **necessary skills required** for formal jobs, and there

is a **shortage of accessible skill development programs** for these workers.

- **Gender Inequality:** [Women face disproportionate barriers to formal employment](#), including socio-cultural constraints, lack of **childcare services**, and gender bias in the workplace.

## India's Initiatives Related to Formalisation of Workforce

- [e-Shram Portal](#)
- [Udyam Portal](#)
- [Pradhan Mantri Shram Yogi Maan-dhan Yojana](#)
- **Labour Reforms:** The [labour codes](#), such as the [Social Security Code, 2020](#), [Industrial Relations Code, 2020](#), and [Occupational Safety, Health and Working Conditions Code, 2020](#), aim to simplify archaic labour laws, improve working conditions, and make it easier for businesses to hire formally.
- **GST and Digital Payment Systems:** [Goods and Services Tax \(GST, 2017\)](#) and [Digitalisation](#) are helping reduce informality by encouraging businesses to operate **transparently and contribute to the tax system**.
  - Increased financial transparency via digital payment systems and streamlined indirect taxation are formalising businesses.

## Way Forward

- **Incentivise Formalisation:** Policies should focus on reducing the cost of formalisation, providing incentives for businesses to transition to the formal sector.
- **Improve Financial Inclusion:** Expanding access to banking services through the [Pradhan Mantri Jan Dhan Yojana \(PMJDY\)](#) and promoting digital payment systems will help integrate more businesses into the formal economy.
- **Education and Skill Development:** Improving access to quality education and vocational training under the Skill India Mission will equip workers with the skills needed for formal jobs.
- **Promote MSMEs:** Strengthening MSMEs **through funds and functionaries** and making them more competitive on a global scale will boost formalisation and create more jobs.
- **Targeted Schemes:** Implement schemes specifically designed to formalise **tribal workers**. Ensure tribal workers are covered under social security schemes like [Pradhan Mantri Jeevan Jyoti Bima Yojana](#) and [Pradhan Mantri Suraksha Bima Yojana](#).

## Conclusion

The formalization journey strengthens India's workforce by providing job security and a safety net, crucial in uncertain times like the Covid-19 pandemic. This rise in EPFO registrations underscores India's progress toward a more organised economy, ensuring a secure and brighter future for millions.

### **Drishti Mains Question:**

Discuss the importance of formalising the Indian economy. How does this transition benefit workers and the country's economic stability?

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

### **Mains**

**Q.** How globalization has led to the reduction of employment in the formal sector of the Indian economy? Is increased informalization detrimental to the development of the country? **(2016)**

# Conduct Rules for Civil Servants

**For Prelims:** [All-India Services \(Conduct\) Rules, 1968](#), [Constitutional Values](#), [Quasi-Judicial Power](#), [Article 311](#), Delegated Legislation.

**For Mains:** Role of civil services in democracy, Implications of social media engagement by civil servants.

[Source: TH](#)

## Why in News?

Recently, **Kerala** has suspended two IAS officers citing violation of [All-India Services \(Conduct\) Rules, 1968 \(AIS rules\)](#).

- An IAS officer made **derogatory social media remarks** about a senior colleague, while another was suspended for allegedly forming a **religion-based WhatsApp group**.

## What do the All-India Services (Conduct) Rules, 1968 State?

- **About:** AIS rules, 1968 outline [ethical and professional standards](#) aimed at ensuring **impartiality, integrity**, and adherence to [constitutional values](#) in the conduct of IAS, IPS, and Indian Forest Service officers.
- **Standards Outlined:** The key standards outlined are summarised as follows.
  - **Ethical Standards:** Officers must exhibit **high levels of ethics, integrity, and honesty**. They are also expected to remain **politically neutral, accountable, and transparent** in their actions and decisions.
  - **Supremacy of Constitutional Values:** Officers must uphold **constitutional values**, reflecting their duty as public servants committed to the **nation's legal framework**.
  - **Engagement in Public Media:** Officers may engage in **public media in a bona fide professional capacity**. However, they are prohibited from using such platforms to criticise government policies.
  - **Legal and Media Appeals:** Officers are **not** permitted to seek **redress or defend official acts** subject to criticism through the court or media without prior government approval.
  - **General Conduct Clause:** Officers must refrain from any behaviour deemed ["unbecoming" of their service](#). This broad rule ensures that officers maintain a high standard of decorum and professionalism at all times.

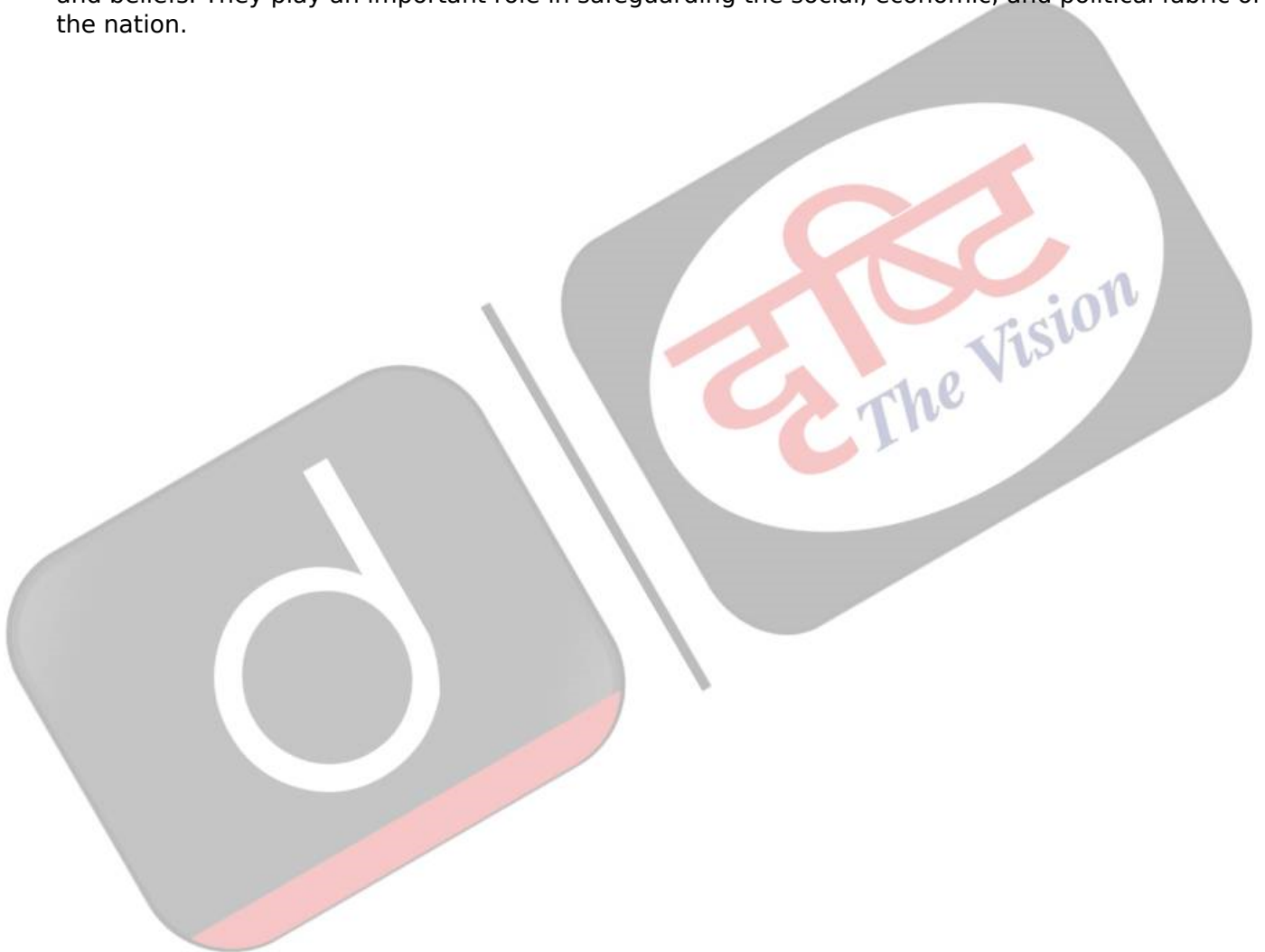
## What are the Issues with AIS Rules, 1968?

- **Lack of Explicit Social Media Guidelines:** The existing rules **do not** specifically address officers' communication and conduct on **social media platforms**.
  - The growth of digital engagement has created **ambiguity**, making it **hard to set boundaries** and enforce proper behaviour.
- **Unbecoming Conduct Clause:** The term "**unbecoming of a member of the service**" remains a **broad, undefined clause** which leads to inconsistent enforcement and creating potential for abuse.
- **Power Imbalance in Enforcement:** The enforcement of these rules often rests with **senior officers and government authorities**. Junior officers may be **vulnerable** to **misuse** of rules by superiors, requiring protections against bias and arbitrary actions.

## What is the Role of Civil Services in Democracy?

- **Policy Formulation:** Civil servants provide **technical expertise** and practical insights that help in formulation and determination of public policy.
- **Implementation of Policies:** Civil servants are responsible for the **execution of policies passed** by the legislature. This involves overseeing the practical application of laws and policies.
- **Delegated Legislation:** Civil servants are often tasked with framing **detailed rules and regulations** under delegated legislation. The legislature sets the framework, while civil servants define the specifics vital for daily government operations.
- **Administrative Adjudication:** Civil servants also hold **quasi-judicial powers** and are responsible for resolving cases that involve the rights and obligations of citizens.
  - It ensures **quick, fair decisions** in the public interest, especially for **vulnerable groups or technical issues**, facilitating timely dispute resolution.
- **Stability and Continuity:** Civil servants maintain **stability and continuity** in governance during **election-driven political changes**, ensuring smooth policy and administrative processes despite shifts in leadership.
- **Guardians of National Ideals:** Civil servants act as **custodians of the nation's ideals**, values, and beliefs. They play an important role in safeguarding the social, economic, and political fabric of the nation.

//



# FOUNDATIONAL VALUES FOR CIVIL SERVICES

The foundational values for civil services represent the fundamental principles and ethics that guide the conduct and responsibilities of civil servants.



## Integrity

- ⇒ Integrity refers to the soundness of moral principles, uncorrupted character, uprightness, honesty and sincerity.
- ⇒ **Types:**
  - ⇒ Moral Integrity
  - ⇒ Intellectual Integrity
  - ⇒ Professional Integrity
- ⇒ **Example:** Satyendra Dubey (IES officer) - one of the first whistleblowers of India - exposed corruption in the Golden Quadrilateral Highway Construction Project.

## Impartiality

- ⇒ The quality of being fair, or not being biased or partial towards anything or anyone and acting solely according to the merits of the case.
- ⇒ **Example:** An officer should distribute funds based on the needs of the communities rather than showing bias towards their own interests.

## Non-Partisanship

- ⇒ Non-disposition towards any political party, i.e., to exhibit political neutrality.
- ⇒ **Example:** T.N. Seshan, as Chief Election Commissioner (CEC) from 1990-96, brought changes to ensure non-partisanship in the election process.

## Objectivity

- ⇒ Following facts rather than personal opinions to achieve equality.
- ⇒ **Example:** When designing social welfare programs, the focus should be on the needs of the underprivileged populations, rather than favouring the wealthy/politically influential groups.

## Tolerance

- ⇒ Respect, acceptance and appreciation of the opinions, practices, race, religion etc. different from one's own.
- ⇒ **Example:** Ashoka's Dhamma (religious tolerance and discouraged religious persecution)

## Dedication to Public Service

- ⇒ Being committed, responsive, and putting the public interest first.
- ⇒ **Example:** Ashok Khemka (IAS officer) known for his stance against corruption.

## Nolan Principles of Public Life



Drishiti IAS

- First set out by **Lord Nolan** in a report on Committee on Standards in Public Life in the UK (1995)
- Outline the ethical standards those working in the public sector

### Principles:

- Selflessness ■ Integrity ■ Objectivity ■ Accountability ■ Openness ■ Honesty ■ Leadership

## Article 311

- **Article 311 (1):** It ensures that **no** government employee can be **dismissed, removed, or reduced** in rank by an authority subordinate to the one that appointed them.
- **Article 311 (2):** A civil servant cannot be dismissed or removed unless an **inquiry** has been **conducted** where they are informed of the charges and given a reasonable opportunity to defend themselves.
- **Exceptions to Inquiry Requirement (Article 311 (2)):** An inquiry is not required in the following circumstances:
  - **Criminal Conviction:** If the civil servant is dismissed or removed based on conduct leading to a **criminal conviction (Clause 2(a))**.

- **Practical Impossibility:** If the authority is satisfied, in writing, that holding an inquiry is **not practically possible (Clause 2(b))**.
- **National Security:** If the President or Governor determines that an inquiry is **not expedient** for reasons of national security **(Clause 2(c))**.

## Way Forward

- **Precise Social Media Guidelines:** The rules should **explicitly define** the boundaries for officers' use of **social media** ensuring that officers can engage in **public communication** about government initiatives in a responsible manner.
- **Clarifying the 'Unbecoming Conduct' Clause:** The ambiguous term "**unbecoming of a member of the service**" can be clarified by providing an **illustrative list** based on **past instances** where actions were taken under this clause.
- **Responsible Anonymity:** The emphasis on remaining **neutral and impartial** while serving the public can be reinforced, especially in the age of social media where visibility is often prioritised over discretion.
- **Judicious Use of Social Media:** Officers, especially **younger ones**, should be reminded that while social media is a tool for promoting **government initiatives**, it must **uphold the dignity and impartiality** of the civil service.
  - They should **avoid personal opinions or partisan statements** that could compromise their neutrality.

### ***Drishti Mains Question:***

How do the All-India Services (Conduct) Rules, 1968 ensure that civil servants maintain ethical standards in their professional conduct?

## UPSC Civil Services Examination, Previous Year's Question (PYQs)

- Q.** "Institutional quality is a crucial driver of economic performance". In this context suggest reforms in the Civil Service for strengthening democracy. (2020)
- Q.** Initially Civil Services in India were designed to achieve the goals of neutrality and effectiveness, which seems to be lacking in the present context. Do you agree with the view that drastic reforms are required in Civil Services? Comment. (2017)
- Q.** "Traditional bureaucratic structure and culture have hampered the process of socio-economic development in India." Comment. (2016)

## Regulatory Framework for Laboratory-Grown Meat

**For Prelims:** [Food Safety and Standards Authority of India \(FSSAI\)](#), [Plant-based Protein Products](#), [Cultivated Protein](#), [Zoonotic Diseases](#), [Bird Flu](#), [Swine Flu](#), [Covid-19](#), [Greenhouse Gases](#), [Animal Cell](#), [EU](#), [Legume](#), [Plant Oil](#), [Food Safety and Standards Act, of 2006](#), [Bioreactor](#).

**For Mains:** Regulation of laboratory-grown meat in India. Scope and challenges in adoption of laboratory-grown meat.

[Source: LM](#)

## Why in News?

Recently, the [Food Safety and Standards Authority of India \(FSSAI\)](#) is planning to put a **regulatory framework** for **laboratory-grown meat**, dairy, and egg products.

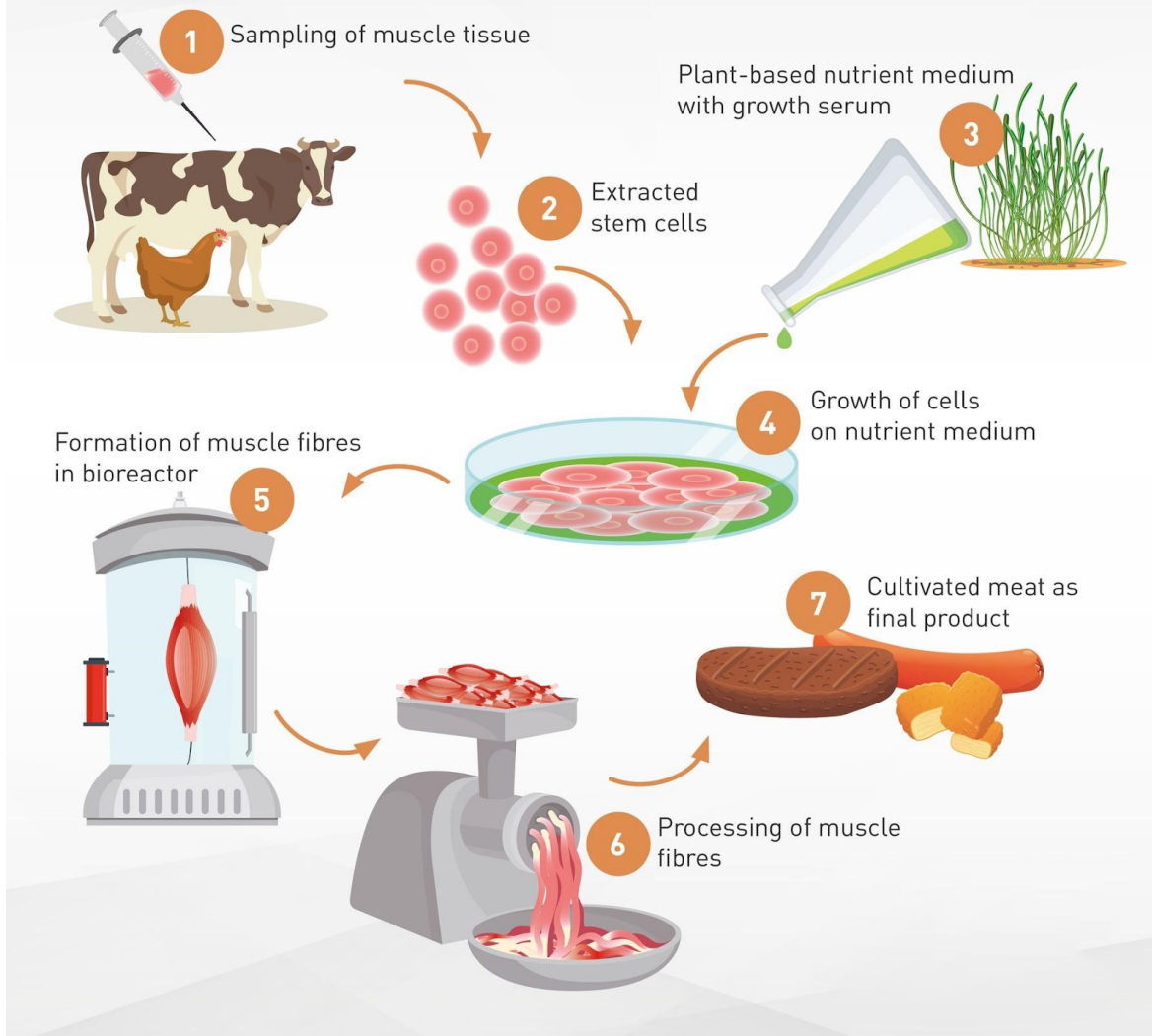
- FSSAI regulates [plant-based protein products](#), but [lab-grown](#) and fermentation-derived proteins have no clear regulations.

## What is Laboratory-Grown Meat?

- **About:** Lab-grown meat is **produced in laboratories** using cells from **living animals or fertilised eggs**, rather than coming from slaughtered animals.
  - It is also known as [cultured meat or cultivated meat](#).
- **Production Process:**
  - **Cell Extraction:** The process begins by **extracting cells** from living animals.
  - **Growth Medium:** The cells are then placed into a **mixture** containing **amino acids, fatty acids, sugars, salts, vitamins**, and other essential nutrients.
  - **Cultivation:** These cells grow into **larger masses**, eventually forming **muscle tissue** that resembles **traditional meat**.
- **Current Market Availability:** The US, the EU, Singapore and Israel have issued regulations for cultivated and fermentation-derived protein.
- **Environmental Impact:** Lab-grown meat is considered to be **more environmentally friendly** than conventional meat production.
  - Early studies suggest that lab-grown meat requires **45% less energy, uses 99% less land, and produces 96% fewer greenhouse gas emissions** compared to beef.



# Cultivated meat production



## Plant-Based Meat

- **About:** **Plant-based meat** is a meat **alternative** made from **plant ingredients** that replicates the **taste, texture, and appearance** of actual animal meat (such as sausage, and chicken) without using any animal products.
- **Ingredients:** Plant-based meat is made primarily from **vegetables, grains, and legumes**.
  - Common ingredients include **protein sources** like tofu, tempeh, soy, and peas, as well as **plant oils** (e.g., sunflower, canola) and **vegan binding agents** (e.g., flour, aquafaba, beans).
- **Processing:** Plant-based meat manufacturers use advanced technologies like **extrusion** and **wet texturization** to enhance the **texture** and consistency of the product.
  - **Heat and mechanical pressure** make plant products more **meat-like**, creating **stringy or sinewy textures** similar to animal meat.

## What is the Need to Regulate Laboratory-Grown Meat in India?

- **Public Health Concerns:** Regulating lab-grown meat can help reduce the risks of **zoonotic diseases** like **bird flu, swine flu, and Covid-19** by ensuring safety and quality standards.
- **Ecological Sustainability:** Lab-grown meat is a **sustainable alternative**, using less land, water, and energy, and emitting fewer **greenhouse gases**.

- Clear regulations are needed to ensure sustainable production and maximise environmental benefits..
- **Market Development:** India has **over 15 companies** working on **cultivated meat** with several **start-ups** preparing to launch these products and seek regulatory approvals.
  - Companies need clear standards for **quality, labelling, and marketing** of lab-grown meat to build consumer trust and ensure food safety compliance.
- **Potential for Growth:** Experts said that lab-grown meat could **capture 10-15%** of the traditional animal meat industry's market share as **younger and more environmentally-conscious** generations may show interest.
- **Ethical Considerations:** Lab-grown meat, which is cultivated from **animal cells** without the need for **slaughter**, addresses growing concerns over **animal cruelty** in traditional meat production.
- **Global Competitiveness:** As countries like the **US, EU, Singapore, and Israel** already have **regulatory frameworks** in place for cultivated and fermentation-derived proteins, **India risks falling behind** in this emerging industry without a clear regulatory stance.

## India's Meat Market

- India has the **world's largest** livestock population.
  - The country is the **largest producer of buffalo meat, 2nd largest producer of goat meat, and ranks 5th in poultry** meat production.
- In **2022-23**, India produced around **2.1 million tonnes of cattle**, 13.6 million tonnes buffaloes, 73.7 million tonnes sheep, 9.3 million tonnes pigs and **331.5 million poultry meat**.
- India's **exports** of animal products in **2023-24** was worth **USD 4.5 billion**, which included **buffalo meat** worth **USD 3.7 billion**, **poultry meat** worth **USD 184.58 million**, and **sheep or goat meat** of **USD 77.68 million**.
- Indian Council of Agricultural Research (ICAR)-**Central Marine Fisheries Research Institute (CMFRI)** has undertaken a research project to develop **lab-grown fish meat**.

## Food Safety and Standards Authority of India

- FSSAI is an **autonomous statutory body** established under the **Food Safety and Standards Act, of 2006**.
- The Act of 2006, **consolidates various laws** related to food, such as the **Prevention of Food Adulteration Act, 1954, the Fruit Products Order, 1955**, the Meat Food Products Order, 1973, and other acts that were previously handled by different ministries and departments.
- FSSAI is responsible for **protecting and promoting public health** by regulating and supervising food safety and quality in India, operating under the **Ministry of Health & Family Welfare**.
- The **Chairperson and Chief Executive Officer** of FSSAI is appointed by the central government. The Chairperson is in the **rank of Secretary** to the Government of India.

## What are the Challenges in Promotion of Laboratory-Grown Meat?

- **Regulatory Uncertainty:** The lack of a clear regulatory framework for lab-grown meat creates uncertainty, **confusing manufacturers and investors** and hindering sector growth.
  - Scaling up production to a mass level remains a significant challenge as **no country** has been able to **scale up production at a mass scale**.
- **Dietary Preferences:** In India, food habits are shaped by cultural, religious, and social factors, with many avoiding both meat and meat-like products.
  - While lab-grown **meat may mimic taste and texture**, it **lacks equivalent nutrition**.
    - A survey revealed that **73%** of Indians are protein-deficient, and over **90%** are unaware of their daily protein needs.
- **Lack of Consumer Awareness:** The concept of laboratory-grown meat is still **relatively new** in India. People who are **meat eaters** may give it a **try but not continue it for long**.
- **Environmental Impact:** Lab-grown meat production is **highly energy-intensive, using 4 to 25 times** more energy than retail beef, raising concerns about its long-term environmental impact, especially in resource-constrained countries like India.

- **Resistance from Traditional Meat Industry:** Lab-grown meat faces resistance from India's traditional meat industry, which sees it as a threat to small-scale farmers' livelihoods.
  - Additionally, **limited market acceptance** persists as many Indian consumers prefer traditional meat for its familiar taste, texture, and affordability.

## Way Forward

- **Clear Regulatory Framework:** FSSAI must prioritise the **creation of regulations** for laboratory-grown meat to ensure that the production of lab-grown meat aligns with **national food safety standards and global best practices**.
- **Consumer Awareness:** Educating the public on the **safety, nutritional value, and environmental impact** of lab-grown meat can help shift attitudes and build confidence in the new technology.
- **Research in Biotechnology:** Investing in R&D in biotechnology can **reduce costs, improve nutrition**, and make lab-grown meat a viable long-term alternative to traditional meat.
- **Leveraging Livestock Population:** India can leverage its **diverse livestock**, such as **buffalo, goats, and poultry**, to develop lab-grown meat, creating a **competitive edge** and positioning itself as a key player in the global market.
- **Scale Up Production:** India needs to develop infrastructure, including **bioreactors and cell culture facilities**, to scale up lab-grown meat production.
  - Collaboration with **global biotech firms** could provide the technical expertise needed for rapid scaling.

### **Drishti Mains Question:**

What is laboratory-grown meat? Discuss the need for a regulatory framework for laboratory-grown meat in India.

## India's Cooperative Movement

**For Prelims:** [NABARD](#), [Government of India Act, 1919](#), [Multi-Unit Cooperative Societies Act](#), [Directive Principle of State Policy](#), [Urban Cooperative Banks](#)

**For Mains:** Cooperative Societies for Inclusive Growth, Government's Efforts for Strengthening Cooperatives, Historical Evolution of the Cooperative Movement.

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

### Why in News?

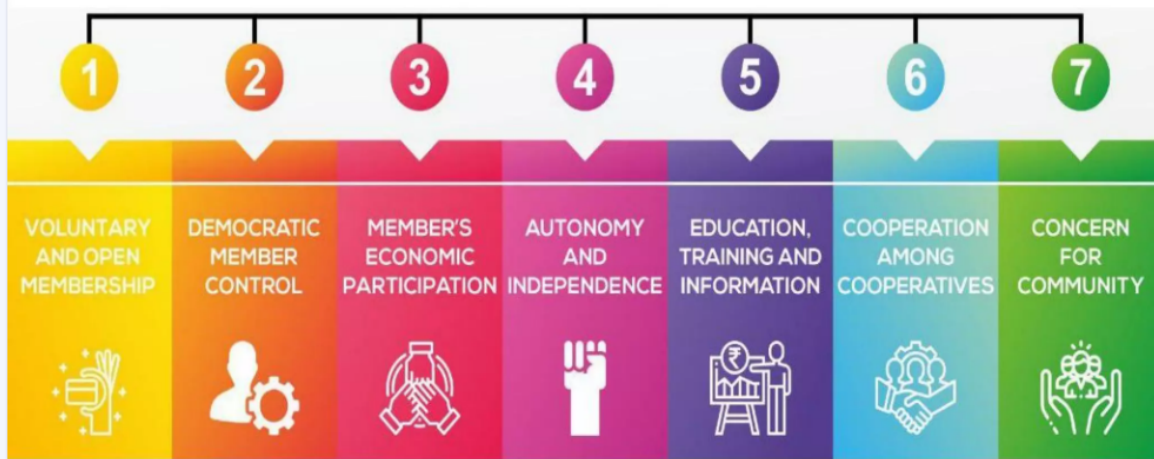
As India prepares to host the **International Cooperative Alliance (ICA) Global Conference** in November 2024, organised by [Indian Farmers Fertilizer Cooperative \(IFFCO\)](#) with support from **18 ICA member organisations**. The event aims to promote the cooperative movement, which includes over 800,000 societies across 29 sectors.

### What are Cooperative Societies?

- **About:**

- A **cooperative society** is a **voluntary, member-owned organisation** formed to meet common economic, social, and cultural needs.
- Cooperatives emphasise **self-help, mutual assistance**, and **community welfare**, which distinguishes them from profit-driven enterprises.
- **Historical Evolution of the Cooperative Movement:**
  - **Pre-Independence Era:** Cooperative principles existed informally through local initiatives, such as **Chit Funds, Mutual-Loan Associations** in Madras, and community management of resources like **village tanks or forests** known as **Devarai or Vanarai**. However, formal legislation began in the early 20th century.
    - In the **Madras Presidency, Mutual-Loan Associations**, known as **'Nidhis'**, were formed to offer financial assistance.
    - In **Punjab**, a cooperative society was created in 1891 to oversee common village land for the benefit of all co-sharers.
    - In **1904, the Cooperative Credit Societies Act** legally recognized cooperatives in India, setting guidelines for their formation, membership, profits, and dissolution. However, it excluded non-credit and other societies.
    - The **Government of India Act, 1919**, empowered provinces to legislate on cooperatives, resulting in the **Bombay Cooperative Society Act, 1925**, the first provincial cooperative law.
    - The **Cooperative Societies Act of 1912** expanded to include marketing, handloom, and artisan societies.
    - In **1914, the Maclagan Committee** proposed a three-tier cooperative banking system for the Centre, Province, and District levels.
    - In **1942**, India enacted the **Multi-Unit Cooperative Societies Act** to regulate multi-province cooperatives, delegating Central Registrar powers to State Registrars for practicality.
  - **Post-Independence Era:** Post-Independence, India aimed to decentralize economic power and promote public participation in economic development with a focus on social justice. Cooperatives became key in **Five-Year Plans**, starting with the **First Plan**, coordinating with village panchayats.
    - The establishment of **National Cooperative Development Corporation (NCDC)** in 1963 and **NABARD** in 1982 were crucial milestones for supporting rural credit and cooperative development.
    - In **1984, India passed the Multi-State Cooperative Organisations Act** to unify cooperative laws, further consolidated by the **2002 National Policy on Cooperatives** for legal harmonization.
      - The **Multi-State Cooperative Societies (MSCS) Amendment Act 2023** aims to enhance governance, transparency, and structural changes in Multi-State Cooperative Societies, granting cooperatives greater independence.
    - **97th Constitutional Amendment Act of 2011**, established the right to form cooperative societies as a **fundamental right (Article 19)**.
      - Introduced a new **Directive Principle of State Policy** on Cooperative Societies (**Article 43-B**).
      - Added a new **Part IX-B** to the Constitution titled "**The Co-operative Societies**" (**Articles 243-ZH to 243-ZT**).
      - Empowered Parliament to enact laws governing **multi-state cooperative societies (MSCS)** and delegated authority to state legislatures for other cooperative societies.
    - The **Ministry of Cooperation, established in 2021**, has further reinforced the government's commitment to supporting cooperatives as a key driver of economic progress.

## 7 Cooperative Principles



### What are the Types of Cooperatives in India?

- **Consumers' Cooperatives:** Offer goods at reasonable prices by directly sourcing from producers, cutting out the middlemen. e.g., [Kendriya Bhandar](#).
- **Producers' Cooperatives:** Assists small producers by supplying essential production materials, including raw materials and equipment.
- **Cooperative Marketing Societies:** Help small producers sell their products collectively, e.g., [Anand Milk Union Limited \(AMUL\)](#).
- **Cooperative Credit Societies:** Provide financial services like savings and loans, e.g., [Urban Cooperative Banks](#), [Village Service Cooperative Society](#).
- **Cooperative Farming Societies:** Help small farmers gain the benefits of large-scale farming, e.g., [lift-irrigation cooperatives](#), [cooperatives](#) and [pani-panchayats](#).
- **Housing Cooperative Society:** Provides cost-effective housing options by acquiring and developing land for its members, e.g. [Employees' Housing Societies](#) and [Metropolitan Housing Cooperative Society](#).

### What are Some Recent Developments and Key Initiatives About Cooperatives in India?

- **Ministry of Cooperation's Role:**
  - Launched **Sahakar Se Samridhhi** (Prosperity through Cooperation) to connect every village to cooperatives.
  - **Model Bye-Laws** for [Primary Agricultural Credit Societies \(PACS\)](#) to improve governance and enhance inclusivity.
  - **Computerization of PACS** through a Rs 2,516 crore project to modernize and link 63,000 **PACS** with **NABARD**.
  - Establishment of new **Multipurpose PACS** in rural areas to serve various functions such as **dairy**, **fisheries**, and **grain storage**.
- **Government's Efforts for Strengthening Cooperatives:**
  - **Decentralized Grain Storage Plan:** Establishing warehouses and agri-infrastructure at the PACS level to reduce waste and transportation costs.
  - **Formation of [Farmer Producer Organizations \(FPOs\)](#):** Empowering farmers with better market linkages.
  - **[PM Bhartiya Jan Aushadhi Kendra](#):** PACS are being used to provide affordable medicines through **Janaushadhi Kendras**.
  - **[PM-KUSUM Convergence](#):** Enabling PACS members to adopt **solar pumps** for irrigation, promoting sustainable farming practices.
- **Impact on Rural Development and Financial Inclusion:**
  - **Cooperatives for Financial Inclusion:** Cooperatives like [Urban and Rural](#)

**Cooperative Banks** play a crucial role in providing affordable credit, particularly to farmers and small entrepreneurs who are excluded from mainstream banking services.

- **Empowerment of Women and Marginalised Communities:** Women's cooperatives and rural cooperatives focus on creating economic opportunities and improving living standards in underserved areas.

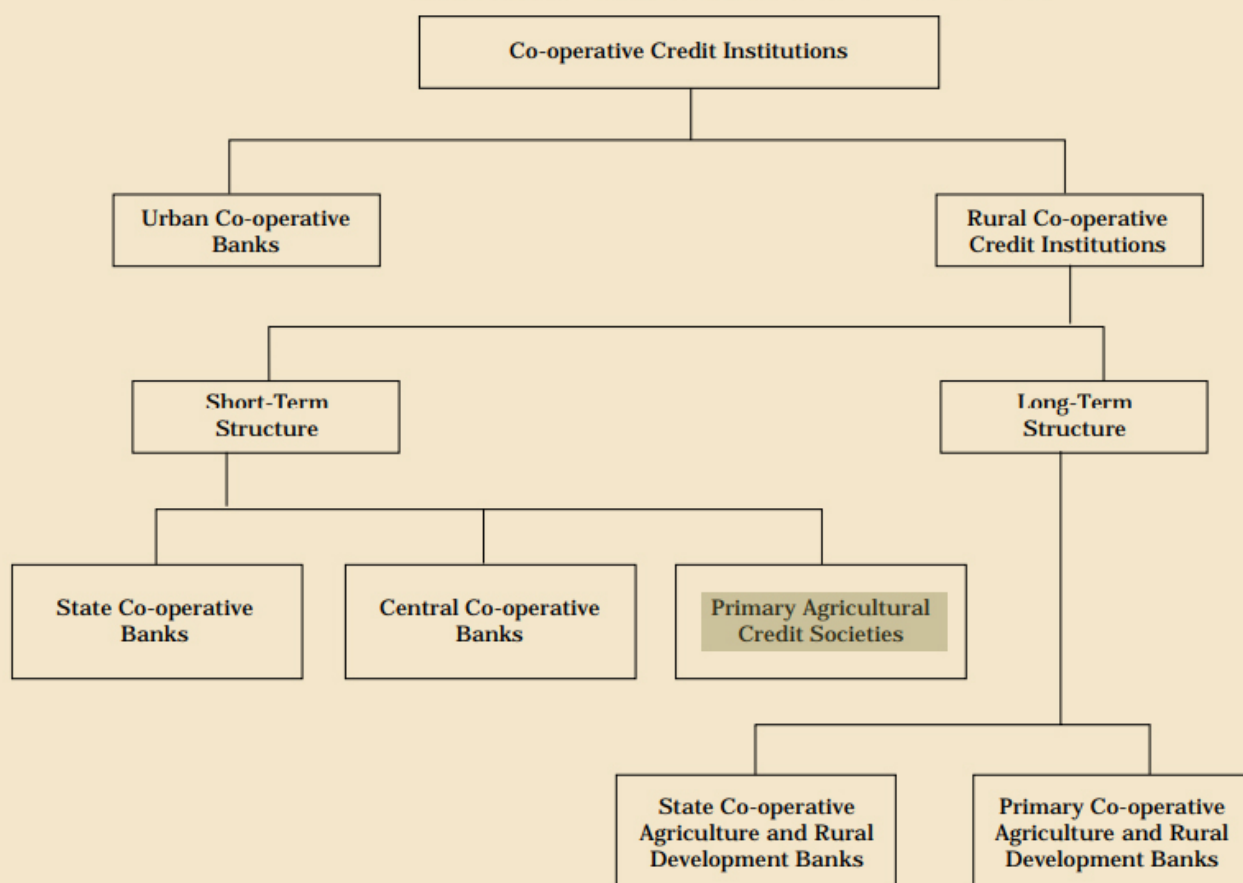
## Examples of Cooperatives in India

- **HOPCOMS (Horticultural Producers' Cooperative Marketing and Processing Society):** HOPCOMS, is a farmers' society founded in 1965 for the direct marketing of farm produces. It is headquartered in Bengaluru.
- **Lijjat Papad (Shri Mahila Griha Udyog Lijjat Papad):** An inspiring women's cooperative empowering women through papad (Indian lentil cracker) production
- **Indian Coffee House:** It is a restaurant chain in India run by a series of worker co-operative societies. The chain was started by the Coffee Cess Committee, with the first outlet—then named 'India Coffee House'—opening in Churchgate, Bombay, in 1936. It was operated by the Indian Coffee Board.

## Primary Agricultural Credit Societies

- PACS are village level cooperative **credit societies** that serve as the last link in a three-tier cooperative credit structure headed by the **State Cooperative Banks (SCB) at the state level.**
  - The **first PACS was formed in 1904.**
- Credit from the SCBs is transferred to the **District Central Cooperative Banks (DCCBs)**, that operate at the **district level.** The DCCBs work with PACS, which deal directly with farmers.
- PACS provide **short-term, and medium-term agricultural loans** to the farmers for the various agricultural and farming activities.

### Structure of Co-operative Credit Institutions



## What are the Challenges Faced by the Cooperatives?

- **Governance Challenges:** Cooperatives struggle from the challenges of lack of transparency, accountability, and democratic decision-making processes.
- **Limited Access to Financial Resources:** Many cooperatives, particularly those serving marginalised communities, face challenges in accessing financial resources.
  - They often **lack collateral or formal documentation** required by traditional financial institutions, making it difficult to obtain loans.
- **Socio-economic Disparities and Exclusion:** Cooperatives often face issues related to **lack of inclusivity, existence of structural inequalities** etc.
- **Infrastructural Constraints:** Infrastructural constraints and **lack of connectivity** affects their efficiency and effectiveness leading to limited outreach.
- **Lack of Technical and Managerial Capacities:** Lack of training and skill development initiatives is another challenge that leads to outdated human resources.
- **Low Awareness and Participation:** Lack of awareness about the cooperative model and its benefits among potential members **limits their participation**.
- **Political Interference:** Political interference in the functioning of cooperatives undermine their autonomy and impact their ability to serve members' interests effectively.

## Way Forward

- **Infrastructure Development:** There is a need for greater investment in the development of infrastructure such as **warehouses, cold storage facilities, and processing units** to strengthen value chains and enhance market access for cooperative products.
- **Cooperatives as Innovation Hubs:** Shifting the perception of cooperatives away from merely traditional and rural, to **hubs of experimentation and innovation**.
- **Cooperative-led Tourism Initiatives:** Developing cooperative-run eco-tourism and community-based tourism initiatives in rural areas, allowing travelers to **experience local culture, traditions, and livelihoods**.
- **Collaborate with other Cooperatives:** Financial cooperatives can collaborate with other cooperatives, including **credit unions**, to **share resources, expertise, and best practices**. This can help improve efficiency and reduce costs.
- **Expand Services:** Financial cooperatives can expand their services beyond traditional savings and loans to include investment products, insurance, and financial education.

## Conclusion

India's cooperative movement is a cornerstone of the country's **inclusive growth** strategy. By promoting **financial inclusion, socio-economic empowerment, and rural development**, cooperatives have contributed significantly to reducing inequalities and fostering sustainable livelihoods.

### **Drishti Mains Question**

Evaluate India's cooperative movement's evolution, challenges, and potential in enhancing inclusive growth.

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

### **Prelims**

**Q. In India, which of the following have the highest share in the disbursement of credit to agriculture and allied activities? (2011)**

- (a) Commercial Banks
- (b) Cooperative Banks
- (c) Regional Rural Banks
- (d) Microfinance Institutions

**Ans: (a)**

### **Mains:**

**Q.** “In the Indian governance system, the role of non-state actors has been only marginal.” Critically examine this statement. (2016)

**Q.** “In the villages itself no form of credit organisation will be suitable except the cooperative society.” – All India Rural Credit Survey. Discuss this statement in the background of agricultural finance in India. What constraints and challenges do financial institutions supplying agricultural finance face? How can technology be used to better reach and serve rural clients? (2014)

---

## **Dhudmaras Village**

**Source: IE**

### **Why in News?**

Dhudmaras, a village in Chhattisgarh’s Bastar district, has been selected to **participate in the Best Tourism Village Upgrade Programme (BTVUP)** under the **United Nations Tourism for Rural Development Programme (UNTRDP)** by the **UN World Tourism Organisation (UNWTO)**.

- This recognition marks its potential as a hub for **eco-tourism** and sustainable development.

### **What are the Key Facts About Dhudmaras Village?**

- **Location:** Dhudmaras, located in **Kanger Valley National Park(KVNP)**, is surrounded by dense forests, the **Kanger River**, and rich biodiversity, making it a prime eco-tourism destination.
  - KVNP is named after the **Kanger River**, which flows through it. It was designated as a **national park in 1982**.
  - KVNP is home to three notable caves **Kutumbasar, Kailash and Dandak** famous for their **stalagmites** (mineral formations that rise from the floor of a cave) and **stalactites** (mineral formations that hang from the ceiling of a cave).
  - The park is dominated by **Sal, Teak, and Bamboo**, forming a **moist deciduous forest**.
- **Cultural Significance:** Dhudmaras, home to the Dhurwa Tribe, offers visitors a chance to experience authentic tribal life through homestays, traditional food, and guided tours.
  - The Dhurwa Tribe, part of the **Gond Tribe**, speak Paarji, a **Gond dialect**. Their lifestyle is closely tied to nature, relying on forests and natural resources for sustenance.
- **Recognition and Support:** As part of the UNWTO’s initiative under the BTVUP, Dhudmaras will now receive **assistance to enhance areas like economic sustainability, environmental sustainability, and tourism development**, ensuring long-term growth.

### **What is the UN Tourism for Rural Development Programme?**



- **About:** UNTRDP promotes **development, inclusion, and innovation** in rural areas through tourism, aiming to combat depopulation and encourage sustainable practices.
- **Evaluation Criteria:** Villages participating in the program are **evaluated under nine key areas**, which include cultural and natural resources, economic and social sustainability, tourism development, and infrastructure, among others.
  - This evaluation ensures that the selected villages meet standards of **sustainability, inclusiveness, and governance.**
- **Three Pillars of UNTRDP:**
  - **Best Tourism Villages by UN Tourism:** Recognizes rural tourism destinations for their cultural and natural assets, community values, and commitment to innovation and sustainability.
  - **BTVUP:** Assists villages in improving weak areas to fast-track applications for Best Tourism Village recognition.
  - **The Best Tourism Villages Network:** Offers a platform for sharing experiences and collaborating on best practices in rural tourism, connecting experts, communities, and stakeholders.

## United Nations World Tourism Organisation

- The UNWTO, established in 1975 and headquartered in **Madrid, Spain**, promotes responsible, sustainable, and accessible tourism.
- **It has 159 member countries, including India**, it serves as a global forum for tourism policy, advocates the [Global Code of Ethics for Tourism](#), and aligns tourism with the [2030 Agenda for Sustainable Development](#).
  - **Target 8.9 of the Sustainable Development Goals (SDGs)** focuses on promoting sustainable tourism that creates jobs and preserves local culture and products.

## Indian Equatorial Electrojet Model

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

### Why in News?

Recently, scientists from the [Indian Institute of Geomagnetism \(IIG\), Navi Mumbai](#) have developed the **Indian Equatorial Electrojet (IEEJ) Model** to accurately predict the **Equatorial Electrojet** over the Indian sector.

- Ground-based magnetometers at **Tirunelveli station**, near India's southern tip, are used for regular EEJ measurements.

### What are the Key Facts About Equatorial Ionospheric Processes?

- **Equatorial Electrojet:** It is a **concentrated, intense electric current** flowing within the **Earth's ionosphere** at the **geomagnetic equator** at a height of around **105-110 km**.
  - India's **southern tip** is close to the Earth's geomagnetic equator where a **strong current exists.**
- **IEEJ Model Capabilities:** It has a **web interface** that allows simulations of EEJ for different dates and **solar activity conditions.**
- **Applications:** The model helps in understanding **equatorial ionospheric processes** and has practical applications in several ways:
  - **Satellite** orbital dynamics
  - [Global Navigation Satellite Systems \(GNSS\)](#)-based navigation/positioning

- Satellite communication links
- Electrical power grids
- Transmission lines
- Oil and gas industry pipelines

## Note:

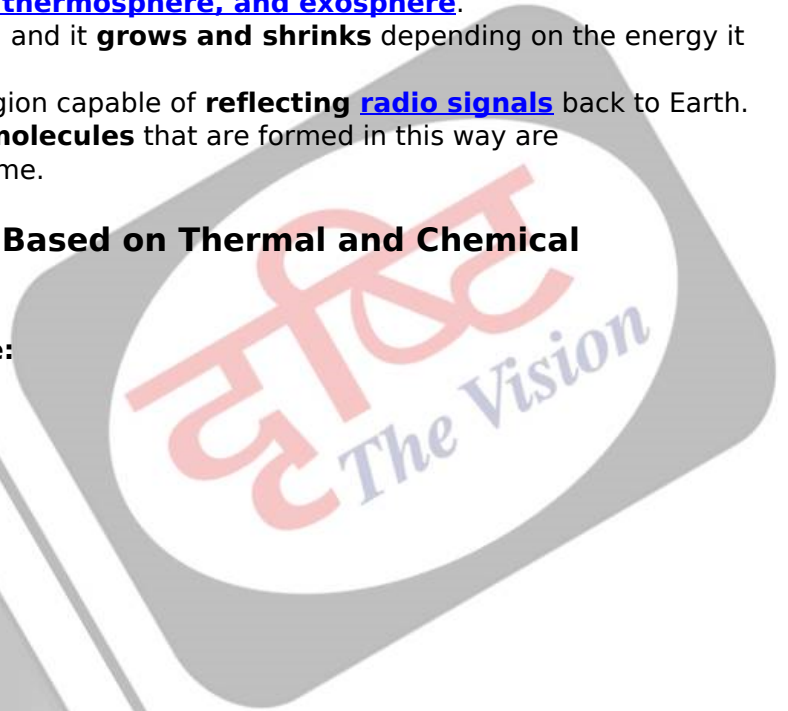
- **The geomagnetic equator** is the **midpoint** between the **magnetic north and south poles**, running around the Earth.
- Unlike the geographic equator, it can **shift and change position** due to variations in the **Earth's magnetic field**.

## Ionosphere

- It is **not a distinct layer** like the Troposphere or Stratosphere. Instead, the ionosphere **overlaps** the **mesosphere, thermosphere, and exosphere**.
- It's a very active part of the atmosphere, and it **grows and shrinks** depending on the energy it absorbs from the sun.
  - It is an electrically conducting region capable of **reflecting radio signals** back to Earth.
- The **electrically charged atoms and molecules** that are formed in this way are called **ions**, giving the ionosphere its name.

## What is the Division of Atmosphere Based on Thermal and Chemical Composition?

- **Thermal Composition of Atmosphere:**



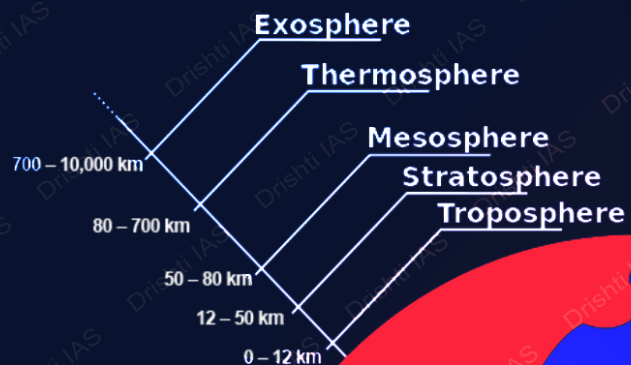
# ATMOSPHERE AND ITS LAYERS

## ATMOSPHERE

- One of the main components of Earth's interdependent physical system
- It is composed of about 78% nitrogen, 21% oxygen, and 1% other gases

## LAYERS

- Troposphere:**
  - Extends from Earth's surface upto 12 kilometers
  - The **lowest part of the atmosphere**- the part we live in
  - Temperature in the troposphere decreases with height
    - The top of the troposphere is called **tropopause**
  - Densest atmospheric layer
  - Contains about **75% of all of the air in the atmosphere**, and 99% of water vapour (which forms clouds and rain)
- Stratosphere:**
  - Located between 12 and 50 kilometers above Earth's surface
  - Contains much of the **ozone** in the atmosphere
    - Ozone molecules in this layer **absorb ultraviolet (UV) radiation** from the Sun, resulting in an increase in temperature
  - It is **nearly cloud- and weather-free**
  - It's the **highest part of the atmosphere that jet planes can reach**
- Mesosphere:**
  - Located between about 50 and 80 kilometers above Earth's surface
  - The top of this layer is the **coldest place found within the Earth system**
  - It forms **noctilucent clouds**, the highest clouds in Earth's atmosphere
  - Most **meteors burn up** in this atmospheric layer
  - Sounding rockets and rocket-powered aircraft** can reach the mesosphere
- Thermosphere:**
  - Located between about 80 and 700 kilometers above Earth's surface
  - Its **lowest part contains the ionosphere**
  - The **temperature of the thermosphere varies between night and day and between the seasons**
  - The **aurora borealis (northern) and aurora australis (southern)** are sometimes seen here
- Exosphere:**
  - Located between 700 and 10,000 kilometers above Earth's surface.
  - The **highest layer of Earth's atmosphere**.
  - There's **no weather at all** in this layer.
  - Most Earth **satellites orbit in this layer**.
  - At the bottom of the exosphere is a **transition layer called the thermopause**.



- **Chemical Composition of Atmosphere:** On the basis of **chemical composition**, the atmosphere is divided into **two broad zones**.
  - **Homosphere:** Homosphere can be defined as the **lowest part** of the Earth's atmosphere. It lies between the heterosphere and the surface of the earth.
    - It is the earth's atmosphere below the altitude of **roughly 90 kms** where there is an **almost-homogenous** composition of **nitrogen (78%), oxygen (21%), argon (10%), carbon dioxide** as well as traces of constituents like **dust particles, aerosols and cloud droplets**.
    - It is divided into the Troposphere, Stratosphere and Mesosphere.
  - **Heterosphere:** The **atmosphere laying beyond the homosphere** is termed as heterosphere. It extends from **90 km to 10,000 km**.
    - The air is **rare** and the **molecules** are **wide apart**. The mixing of the gases is not possible as the **turbulence is not happening there**.
    - It is divided into two main spheres i.e., **thermosphere and exosphere**.

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

### Prelims

**Q. Consider the following: (2013)**

1. Electromagnetic radiation
2. Geothermal energy
3. Gravitational force
4. Plate movements
5. Rotation of the earth
6. Revolution of the earth

**Which of the above are responsible for bringing dynamic changes on the surface of the earth?**

- (a) 1, 2, 3 and 4 only
- (b) 1, 3, 5 and 6 only
- (c) 2, 4, 5 and 6 only
- (d) 1, 2, 3, 4, 5 and 6

**Ans: (d)**

**Q. A layer in the Earth's atmosphere called Ionosphere facilitates radio communication. Why? (2011)**

1. The presence of ozone cause the reflection of radio waves to Earth.
2. Radio waves have a very long wavelength.

**Which of the statements given above is/are correct?**

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2

(d) Neither 1 nor 2

**Ans: (d)**

---

## Grand Commander of the Order of the Niger (GCON) Award

[Source: IE](#)

Recently, Nigeria conferred its **2<sup>nd</sup>-highest national award**, the **Grand Commander of the Order of the Niger (GCON)**, on India's Prime Minister.

- **India's Prime Minister** became the **2nd foreign dignitary** to receive the distinction after **Queen Elizabeth**, who was conferred the award in **1969**.
- **Key Facts about Nigeria:**
  - It is often called the "**Giant of Africa**" and is the **most populous** country in **Africa**.
  - It is the **largest economy** and the **richest oil resource** center of the **African continent**.
  - It is located in **West Africa** and opens in the **Atlantic Ocean**.
  - It is bordered by **Niger, Chad, Cameroon, and Benin**.



**Read More:** [High-grade lithium discovered in Nigeria](#)

---

## Bharat National Cyber Security Exercise 2024

[Source: PIB](#)

Recently, the **Bharat National Cyber Security Exercise** (Bharat NCX 2024) was inaugurated to

fortify India's [cybersecurity resilience](#).

- It is a **12-day exercise** to prepare India's [cybersecurity professionals](#) to tackle evolving threats with advanced cyber defence capabilities.
- **Key Features of the Exercise:**
  - **Cyber Defense Training:** Offers training on defending against [cyberattacks](#) and incident response.
  - **Live-Fire Simulations:** Provides hands-on experience with cyberattacks on IT systems.
  - **Strategic Decision-Making:** Simulates decision-making during **national cyber crises** for senior management.
  - **CISO's Conclave:** Chief Information Security Officers (CISO) from various sectors discuss trends and government initiatives.
  - **Cybersecurity Startup Exhibition:** Showcases innovative cybersecurity solutions from Indian startups.

Read More: [Strengthening India's Cyber Defence](#)

---

## Tuna Export Hub in Andaman & Nicobar Islands

[Source: TH](#)

Recently, the [Fisheries Department](#) plans to develop the [Andaman and Nicobar \(A&N\) Islands](#) as a tuna export hub.

- The global tuna market is worth USD 41.94 billion and the **Indian Ocean** is considered the **second-largest tuna region**, producing **21% of the world's tuna**.
  - As per [Marine Products Export Development Authority](#), India's tuna exports surged by 31.83% in 2023-24, (valued at USD 87.96 million).
- The majority of the market is made up of four tuna species namely, **Skipjack, Yellowfin, Bigeye, and Albacore**.
  - Due to their [vascular system](#), tunas can uniquely maintain their body temperature above the surrounding water, often between 5 to 12 °C (higher than the ambient temperature).
- **A&N Islands:**
  - This comprises of two island groups (Andaman Islands and the Nicobar Islands) which **separates the Andaman Sea to the east from the Indian Ocean**.
  - The **Ten Degree Channel** is a narrow strait that separates both the group of Islands.
    - **Indira Point (situated on Great Nicobar Island) is the southernmost tip of the Nicobar Islands.**
  - The ANI is home to 5 [Particularly Vulnerable Tribal Groups](#): Great Andamanese, Jarwas, Onges, Shompens and North Sentinelese.



Read more: [Andaman and Nicobar Islands to be Maritime and Startup Hub](#)

## World Toilet Day

Source: [PIB](#)

[World Toilet Day](#), observed annually (since 2013) on **19th November**, is a [United Nations](#) initiative raising awareness about the **global sanitation crisis** and promoting **safe, accessible toilets** as part

of [Sustainable Development Goal 6: Ensuring water and sanitation for all by 2030.](#)

- **2024 Theme: 'Toilets-A Place for Peace'** which emphasises that billions of people face heightened threats to sanitation due to **conflict, climate change, natural disasters, and systemic neglect.**
- **Global Sanitation Crisis:** 3.5 billion people lack safely managed sanitation, and 419 million still practise open defecation, contributing to health risks such as **cholera.**
  - The [World Health Organization \(WHO\)](#) in 2023 reported that unsafe water, sanitation, and hygiene are responsible for approximately **1,000 deaths of children under the age of five every day**, and improved sanitation could potentially save **1.4 million lives annually.**
- **India's Efforts for Safe Sanitation:** India launched the "**Hamara Shauchalay: Hamara Samman**" campaign, linking sanitation with human rights, dignity, and privacy, particularly for women and girls.
  - **Swachh Bharat Mission (SBM) (Grameen):** 75% of villages in India achieved **Open Defecation Free(ODF) Plus(+)** status under **Phase II of the SBM Grameen.**
  - **SBM-Urban:** 63.63 lakh household latrines and 6.36 lakh community toilets were constructed under **SBM-Urban.**
  - 93% of women in ODF regions reported **enhanced feelings of security and dignity.**



Read more: [Making Swachh Bharat Mission A Reality](#)