



## PMAY-G and Rural Poverty Alleviation in India

**For Prelims:** [Pradhan Mantri Awas Yojana-Gramin](#), [Poverty](#), [Geo-tagging](#), [Swachh Bharat Mission Grameen](#), [World Bank](#), [Pradhan Mantri Gram Sadak Yojana](#), [Jal Jeevan Mission](#), [MGNREGA Scheme](#), [Lakhpati Didi](#), [Mission Indradhanush](#), [Unemployment](#), [Below Poverty Line](#), [Self-Help Groups](#)

**For Mains:** Pradhan Mantri Awas Yojana-Gramin, Rural development, Alleviating Rural poverty.

[Source: PIB](#)

### Why in News?

The **Ministry of Rural Development** highlighted the progress of the [Pradhan Mantri Awas Yojana-Gramin \(PMAY-G\)](#) and emphasized intensifying efforts to create **poverty-free villages**.

- By ensuring the timely and effective implementation of rural development schemes, the ministry aims to achieve poverty-free India.

### What are the Key Facts About PMAY-G?

- **About:** Introduced in **2016** to provide affordable housing for the rural poor. Beneficiaries are Selected based on [Socio-Economic Caste Census \(SECC\) 2011](#) data, validated through [Gram Sabha approvals](#) and [geo-tagging](#).
- **Benefits Under PMAY-G:**
  - **Financial Assistance:** Beneficiaries are given Rs 1.20 lakh in plain areas and Rs 1.30 lakh in 2 Hill States (Himachal Pradesh and Uttarakhand), North-Eastern Region, and Union Territories(UT) of Jammu and Kashmir and Ladakh.
    - Cost Sharing patterns include **60:40** (Centre: State) in plain areas and **90:10**(Centre: State) in northeastern, Himalayan states (Himachal Pradesh and Uttarakhand), and UT of Jammu and Kashmir. **100% Centre-funded** in UT Ladakh.
  - **Toilet Support:** Rs 12,000 for toilet construction via [Swachh Bharat Mission Grameen \(SBM-G\)](#).
  - **Cooking Fuel:** In convergence with [Pradhan Mantri Ujjwala Yojana](#), one LPG connection per house is provided.
  - **Employment Support:** 90/95 person-days of unskilled work under [Mahatma Gandhi National Rural Employment Guarantee Act \(MGNREGA\)](#) for house construction.
- **Earmarking of Targets:** The scheme reserves 60% of targets for [Scheduled Castes \(SC\)](#) and [Scheduled Tribes \(ST\)](#) households, with 59.58 lakh SC and 58.57 lakh ST houses completed.
- **Extension of the Scheme:** The scheme, initially targeting **2.95 crore houses by 2023-24**, has been extended to include **2 crore more houses** with a total outlay of Rs 3,06,137 crore for FY 2024-29.
- **Achievements of PMAY-G:** As of November 2024, **3.21 crore houses have been sanctioned**, and **2.67 crore houses have been completed**.
  - 4.19 lakh houses, including 71,000 under [Pradhan Mantri Janjati Adivasi Nyaya Maha](#)

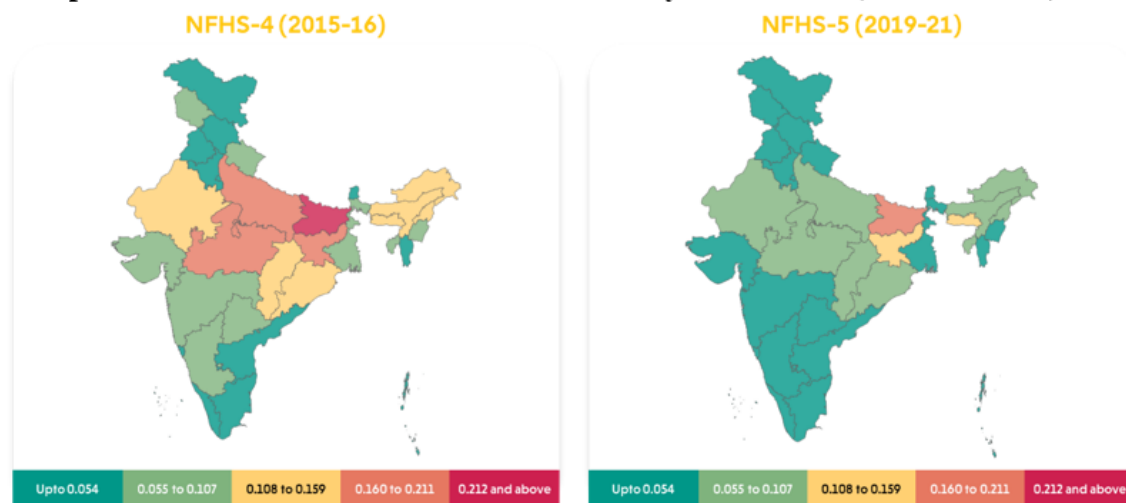
[Abhiyan \(PM-JANMAN\)](#), have been completed between **June and December 2024**.

- **Mobile Applications: Awas Plus-2024 App** launched to streamline beneficiary identification.
  - **Awas Sakhi App** introduced to enhance transparency and monitoring.

## Poverty

- **About:** According to the [World Bank](#), Poverty is the lack of sufficient income or resources to meet basic needs. It can manifest as **deprivation in areas like housing, food, or health**.
  - The broadest view of poverty focuses on an **individual's ability to function in society, encompassing lack of income, education, health, power, and political freedoms**.
  - The World Bank adopted **USD 2.15** as the international poverty line using the **2017 Purchasing Power Parity (PPP)**, up from USD 1.90 set in the 2015 update using the 2011 PPP.
- **Absolute Poverty:** A condition where individuals lack the resources to meet basic needs like food, shelter, and healthcare, typically measured by the poverty line.
- **Relative Poverty:** Poverty defined by an individual's standard of living compared to others in society, highlighting economic inequality.
- **Poverty Statistics in India:** [National Family Health Survey-5 \(2019-21\)](#) data shows that **14.96% of India's population** is multidimensionally poor, down from **24.85% in NFHS-4 (2015-16)**, with **135 million people escaping poverty**.
  - The [Multidimensional Poverty Index \(MPI\)](#) has decreased from 29.17% in 2013-14 to 11.28% in 2022-23, indicating a 17.89% point reduction.
  - The [Household Consumption Expenditure Survey \(HCES\)](#) reveals that **rural poverty dropped to 7.2% in 2022-23** from 25.7% in 2011-12, while **urban poverty fell to 4.6% from 13.7% in the same period**.

### Comparative view of the Multidimensional Poverty Index Score (State/UT-wise)



The colour represents the MPI score of a state. The colour moves from green, through yellow, to red as the MPI score increases. Green represents areas with the lowest MPI scores while red represents areas with the highest MPI scores. The legend shows the range of MPI scores in India, based on the values for 2015-16. Both the comparative maps use the same legend to represent the change in MPI scores between 2015-16 to 2019-21.

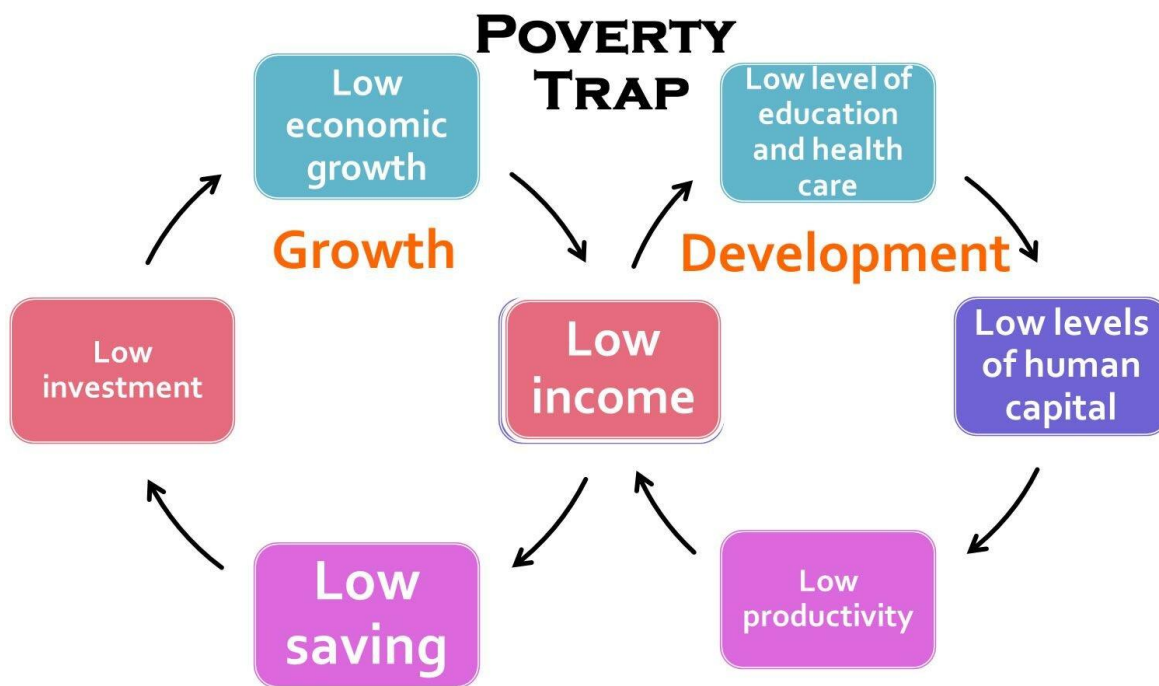
## What are the Other Schemes that Contribute to Poverty-Alleviation in Villages?

- **Infrastructure:**
  - [Pradhan Mantri Gram Sadak Yojana\(PMGSY\)](#)
  - [Jal Jeevan Mission](#)
- **Social Protection Schemes:**
  - [National Social Assistance Program \(NSAP\)](#)
  - [Janani Suraksha Yojana](#)

- [Pradhan Mantri Jan Dhan Yojana](#)
- [Pradhan Mantri Jeevan Jyoti Bima Yojana](#)
- [Pradhan Mantri Suraksha Bima Yojana](#)
- **Livelihood Enhancement Schemes:**
  - [MGNREGA Scheme](#)
  - [NRLM \(National Rural Livelihood Mission\)](#)
  - [Pradhan Mantri Kaushal Vikas Yojana \(PMKVY\)](#)
  - [Pradhan Mantri Mudra Yojana](#)
  - [Lakshpati Didi Initiative](#)
- **Health:**
  - [Pradhanmantri Jan Arogya Yojana \(Ayushman Bharat\)](#)
  - [Mission Indradhanush](#)

## What are the Challenges in Removing Poverty in Rural India?

- **Dependency on Agriculture:** A large portion of the **rural population depends on agriculture**, which faces challenges like **climate change, erratic monsoons, and poor irrigation**.
  - **Low agricultural productivity** and reliance on traditional methods further limit income generation.
- **Unemployment and Underemployment:** There are limited job opportunities outside agriculture, leading to high **unemployment** and **underemployment** rates. This is compounded by a **lack of skills and education**.
- **Limited Access to Services:** Basic services such as education, healthcare, sanitation, and infrastructure are often inadequate.
- **Land Ownership:** Many rural families lack **land ownership or secure land rights, hindering investment in livelihoods**.
- **Social Inequality:** Marginalized communities, including women, SCs, and STs, face discrimination and limited access to resources. This perpetuates cycles of poverty.
- **Migration:** Many young, educated individuals migrate to **urban areas for better opportunities, leading to a "brain drain" in rural regions**.
- **Governance Challenges:** The **weak implementation or under-implementation of policies** like the **Operation Greens Scheme, corruption**, inadequate data, and limited public awareness further hinder effective poverty reduction in rural India.
  - A focus on **short-term measures** rather than long-term solutions also impedes progress.



## How Can Rural India be Made Poverty-free?

- **Achieve Sustainable Development Goals (SDGs):**
  - **No Poverty (SDG 1)** social protection and employment.
  - **Zero Hunger (SDG 2)** food security through **Public Distribution System** and agriculture schemes.
  - **Good Health and Well-Being (SDG 3)** universal health coverage under **Ayushman Bharat**.
  - **Reduced Inequalities (SDG 10)** improve financial inclusion and equitable access to resources.
- **Social Protection and Welfare:** Ensure comprehensive **coverage under old age, widow, and disability pensions**, 100% healthcare access and social protection for **Below Poverty Line (BPL) families to prevent poverty relapse**.
- **Employment Generation and Livelihoods:** Provide employment under MGNREGA as needed, identify **skill enhancement needs** through **ward and mahila sabhas**, and conduct **skill mapping and training** via **District Kaushal Kendras**.
- **Linking SHGs and Farmers' Groups:** Integrate **Self-Help Groups (SHGs)** and **Farmers Producer Organisations (FPO)** with enterprise schemes to improve income levels.
  - Empower **Pashu Mitras** and **Kisan Mitras** to support farmers with technical assistance.
- **Infrastructure Development:** Develop roads, schools, and community centers to enable growth and better access to services.
  - **As a part of Digital Inclusion**, ensure **100% registration of farmers on online platforms** (e.g., **National Agriculture Market (eNAM)**) to provide them with real-time access to schemes.
- **Behavioral and Social Change:** Actively discourage informal credits on exploitative terms. Address **substance abuse** within the community.
  - Encourage women's participation in decision-making and economic activities.
- **Disaster Preparedness and Climate Action:** Establish a **Task Force for Disaster Risk Reduction (DRR)** and integrate activities into the Gram Panchayat Development Plan (GPDP)
  - Promoting sustainable agriculture and climate-resilient practices via **Krishi Vigyan Kendras (KVKs)**.





## Achieve 100%



**100%** eligible beneficiaries covered under **old age, widow and disability pensions.**



**100%** self-help groups (SHGs) and farmers groups are linked to enterprise schemes.



**100%** access to services as per citizen's charter.



**100%** enrolment of households under public distribution system (PDS).



**100%** coverage under **Ayushman Bharat Yojana.**



**100%** distribution of job cards to all applicants.



**100%** registration of farmers on website: [www.upagriculture.com](http://www.upagriculture.com)



Continuous employment to **all active job card holders** as per demand under **MGNREGA.**

## Conclusion

Poverty alleviation in rural India needs a comprehensive approach, combining housing, financial aid, employment, and infrastructure development. Addressing challenges like **agriculture dependence**, **unemployment**, and **social inequality** is crucial for achieving poverty-free villages through sustainable development, skill enhancement, and financial inclusion.

### Drishti Mains Question:

Assess the challenges faced by rural India in achieving poverty reduction and the role government initiatives play in overcoming these challenges.

## **Prelims**

**Q. How does the National Rural Livelihood Mission seek to improve livelihood options of rural poor? (2012)**

1. By setting up a large number of new manufacturing industries and agribusiness centres in rural areas
2. By strengthening 'self-help groups' and providing skill development
3. By supplying seeds, fertilizers, diesel pump-sets and micro-irrigation equipment free of cost to farmers

**Select the correct answer using the codes given below:**

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

**Ans: (b)**

**Q. Increase in absolute and per capita real GNP do not connote a higher level of economic development, if (2018)**

- (a) industrial output fails to keep pace with agricultural output.
- (b) agricultural output fails to keep pace with industrial output.
- (c) poverty and unemployment increase.
- (d) imports grow faster than exports.

**Ans (c)**

**Q. In a given year in India, official poverty lines are higher in some States than in others because (2019)**

- (a) poverty rates vary from State to State
- (b) price levels vary from State to State
- (c) Gross State Product varies from State to State
- (d) quality of public distribution varies from State to State

**Ans (b)**

**Q. The Multi-dimensional Poverty Index developed by Oxford Poverty and Human Development Initiative with UNDP support covers which of the following?(2012)**

1. Deprivation of education, health, assets and services at household level
2. Purchasing power parity at national level
3. Extent of budget deficit and GDP growth rate at national level

**Select the correct answer using the codes given below:**

- (a) 1 only
- (b) 2 and 3 only

(c) 1 and 3 only

(d) 1, 2 and 3

Ans (a)

### Mains

**Q.** Though there have been several different estimates of poverty in India, all indicate reduction in poverty levels over time. Do you agree? Critically examine with reference to urban and rural poverty indicators **(2015)**

## Thorium-based Nuclear Energy Production

**For Prelims:** [Thorium](#), [Pressurised Heavy Water Reactors \(PHWRs\)](#), [Three-Stage Nuclear Power Program](#), [India's Clean Energy Goals](#), [Igneous Rocks](#), [Heavy Mineral Sands](#), [Plutonium](#), [Gamma Radiation](#), [Monazite](#), [Heavy Water](#), [Fast Breeder Reactors \(FBRs\)](#), [Thorium-Based Reactors](#).

**For Mains:** Need Thorium in India's nuclear energy production.

[Source: BS](#)

### Why in News?

India's largest power generator, **National Thermal Power Corporation (NTPC) Limited** has signed a **strategic pact** with US-based **Clean Core Thorium Energy (CCTE)** to explore development and deployment of **advanced nuclear energy for enriched life (ANEEL)**, thorium-based fuel.

- Developed by CCTE, Aneel is a [thorium-based fuel](#) for [pressurised heavy water reactors \(PHWRs\)](#).
- The Department of Atomic Energy (DAE) plans to utilize India's abundant **thorium** reserves in its [three-stage nuclear power program](#) as a long-term strategy.

### What is Advanced Nuclear Energy for Enriched Life (ANEEL)?

- About:** ANEEL is a patented **nuclear fuel** that is a blend of **Thorium** and **High Assay Low Enriched Uranium (HALEU)**.
  - The fuel is named to honor **Dr. Anil Kakodkar**, one of India's foremost nuclear scientists.
  - HALEU is **uranium enriched between 5% and 20%**, required for many advanced nuclear reactor designs.
    - It is currently produced at scale only in **Russia and China**, with limited production in the US.
- Compatibility with PHWRs:** ANEEL fuel can be used in **existing PHWRs**, which are the backbone of India's nuclear power fleet.
  - Presently, India has **22 operating reactors**, with an installed capacity of **6780 MWe**. Among these **18 reactors** are PHWRs and **4** are **Light Water Reactors (LWRs)**.
  - India is **building 10 more PHWRs**, each with a capacity of **700 MW**.
- Ease of Thorium Deployment:** ANEEL provides an **easier and quicker alternative** for the deployment of thorium leveraging imported HALEU.

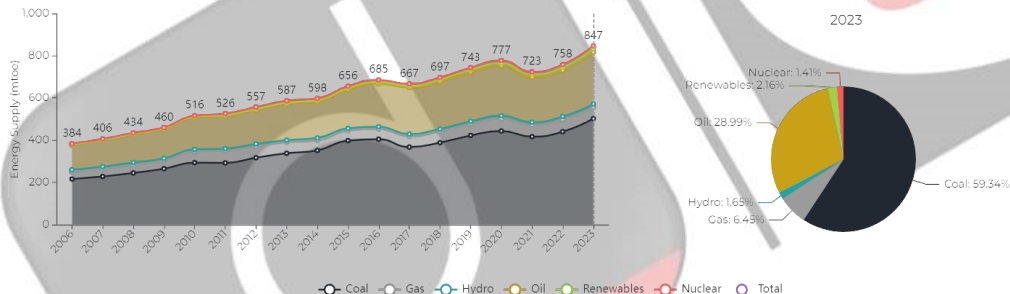
- India's traditional approach involves creating **thorium blankets around uranium or plutonium reactors** to generate **uranium-233**, which is time-intensive.

#### ▪ Benefits:

- **Efficiency:** ANEEL fuel has a burn-up efficiency of **60,000 MW-days per tonne**, compared to **7,000 MW-days per tonne** for conventional natural uranium.
  - In a typical **220 MW PHWR**, the use of ANEEL fuel reduces the lifetime bundle requirement **from 1,75,000 to 22,000**, cutting waste volume and operational costs significantly.
- **Non-Proliferation:** Thorium and spent ANEEL fuel is **non-weaponizable**, easing proliferation concerns for foreign uranium suppliers and reactor operators.
- **Economic and Environmental Impact:** ANEEL fuel **reduces operating costs** for reactors due to its higher efficiency and longer-lasting fuel bundles.
  - It aligns with [India's clean energy goals](#) and the global commitment to **tripling nuclear capacity**, as highlighted during **COP28, Dubai, UAE**.
- **Global Collaboration:** The HALEU-thorium blend in ANEEL has gained **global attention** as **Canadian Nuclear Laboratories** signed an MoU with CCTE to advance ANEEL fuel research and licensing.

## Thorium

- **About:** Thorium is a **silvery, slightly radioactive metal**. It is commonly found in [igneous rocks](#) and [heavy mineral sands](#).
- **Abundance:** Thorium is **three times more abundant** in the Earth's crust than uranium, with an average concentration of **10.5 parts per million (ppm)** of thorium, compared with about **3 ppm of uranium**.
- **Fissionable but Not Fissile:** The only naturally occurring isotope of [thorium](#) is thorium-232, which is **fissionable (can undergo fission) but not fissile (cannot sustain a chain reaction without external neutrons)**.
  - Thorium-232 requires **high-energy neutrons** to undergo fission.



## What is a Thorium-based Nuclear Reactor?

- **About:** Thorium-based Nuclear Reactor uses **thorium-232 as a primary fuel** instead of uranium-235 or plutonium-239.
  - Thorium is **not a fissile material but a fertile material**, meaning it requires **pairing with Uranium-235 or Plutonium-239** to be used as nuclear fuel.
  - To **initiate and sustain** the nuclear reaction, thorium must be used along with a fissile material such as **233U, 235U or 239Pu**.
- **Fuel Cycle Strategies:**
  - **Thorium with Low Enriched Uranium (LEU):** LEU has a **235U enrichment of 19.75%** and is mixed with thorium to form **Thorium-LEU Mixed Oxide (MOX) fuel**.
  - **Thorium with Plutonium (Pu):** This configuration uses [plutonium](#) as an external fissile feed.



#### ▪ **Advantages:**

- **Reduced Nuclear Waste:** Thorium-based reactors produce significantly **fewer long-lived minor actinides** (ionizing radiation emitting elements) compared to uranium-plutonium fuel cycles.
- **Safety:** The presence of  $^{232}\text{U}$  in spent fuel introduces **hard gamma radiation**, deterring weaponization.
- **Recycling Potential:** Lower non-fissile absorption in  $^{233}\text{U}$  facilitates multiple recycling cycles, improving fuel efficiency.
- **Enhanced Fuel Utilization:** Thorium can generate **more fissile uranium-233 than it consumes** in water-cooled or molten-salt reactors, ensuring efficient fuel use.

#### ▪ **Challenges:**

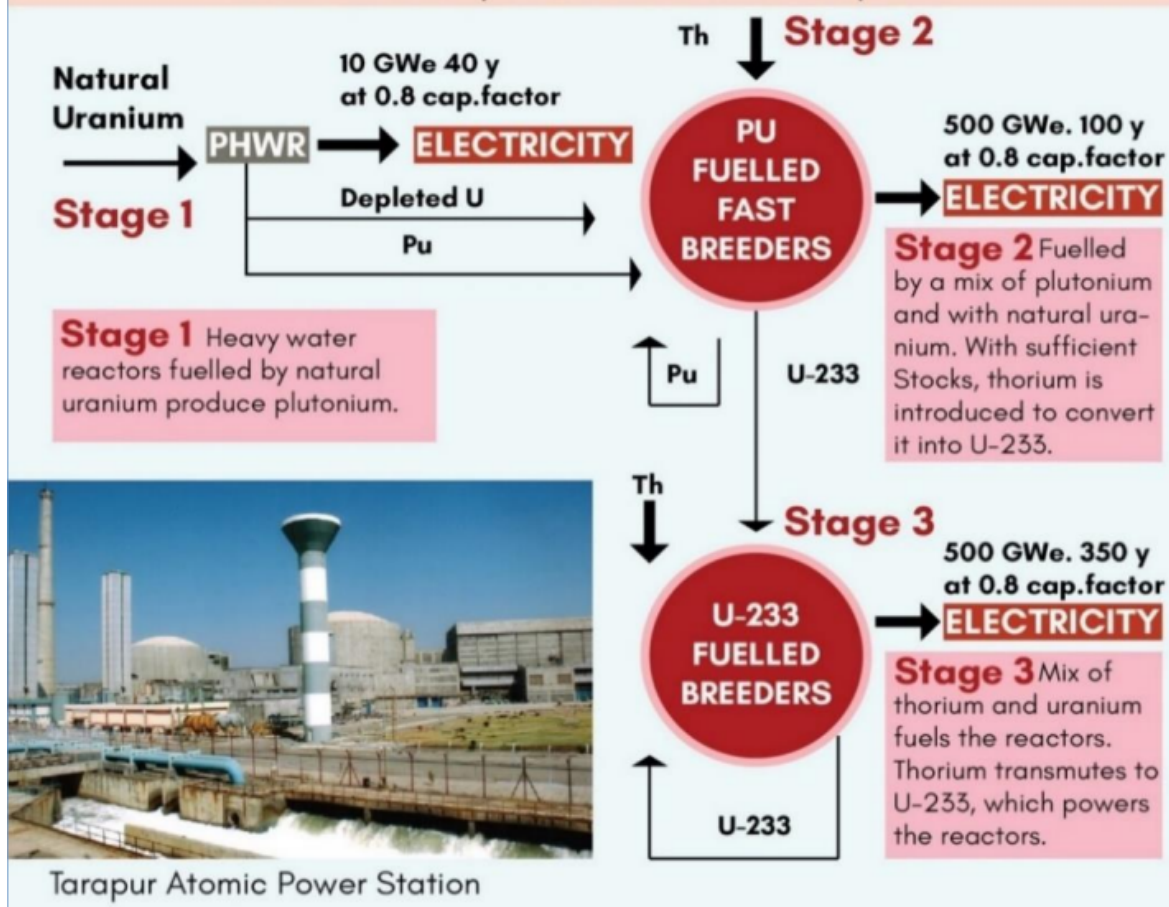
- **Extraction Costs:** Thorium extraction is **costly**, as it is a **by-product of monazite mining** driven by rare earth demand, making dedicated mining uneconomical.
- **Dependence on Fissile Drivers:** Thorium is a **fertile mineral**. It requires an **external fissile material** like **uranium-235 or plutonium-239** to initiate and sustain a chain reaction.
- **Limited Experience:** Most nuclear power systems are **historically optimized for uranium**, leading to limited research, development, and operational experience with thorium.

### What is India's 3-Stage Nuclear Power Program?

- **About:** It is a strategy to develop nuclear energy that focuses on the **judicious utilization of limited uranium resources** and the **vast thorium reserves** available in the country.
  - It was formulated by **Dr. Homi Bhabha** to address India's long-term energy needs and ensure self-reliance.
- **3-Stages:** The 3-stage strategy integrates different types of reactors to gradually transition to thorium-based power generation.
  - **Stage I:** It includes the setting up of **PHWRs** and uses natural uranium ( $\text{U-238}$ ) as fuel and **heavy water (deuterium oxide)** as coolant and moderator.
    - The spent fuel from these reactors is **reprocessed to obtain Plutonium**.
  - **Stage II:** It envisages use of **Fast Breeder Reactors (FBRs)** fuelled by **plutonium** produced in Stage I reactors.
    - In addition to using plutonium, **FBRs breed uranium-233 (U-233)** from thorium.
  - **Stage III:** It envisages use of **Thorium-Based Reactors** using **uranium-233 (U-233) and thorium as fuel**.
    - Stage III aims to use U-233, bred from **thorium**, as **India's primary nuclear fuel**.

# INDIA'S THREE-STAGE NUCLEAR PROGRAMME

Homi Bhabha envisioned India's nuclear power programme in three stages to suit the country's low uranium resources profile



**Note:** The operationalisation of the **prototype fast breeder reactor (PFBR)** will mark the start of **stage II** of India's three-stage nuclear power programme.

- The PFBR is a machine that **produces more nuclear fuel than it consumes**.
- Operationalisation of an **indigenous PFBR** has been initiated at the **Madras Atomic Power Station in Kalpakkam, Tamil Nadu**.

## Conclusion

India's nuclear strategy, based on its **3-stage program**, focuses on harnessing **abundant thorium reserves** for sustainable energy. Collaboration with CTE for advanced thorium fuel (ANEEL) highlights a **promising future for efficient, low-waste nuclear power**. Despite challenges, thorium's potential in **addressing India's energy needs is significant**.

### Drishti Mains Question:

Discuss the significance of thorium-based nuclear reactors in India's energy strategy. How does the 3-stage nuclear power programme align with this objective?

## UPSC Civil Services Examination, Previous Year Questions (PYQs)

### Prelims

**Q. In India, why are some nuclear reactors kept under “IAEA safeguards” while others are not? (2020)**

- (a) Some use uranium and others use thorium
- (b) Some use imported uranium and others use domestic supplies
- (c) Some are operated by foreign enterprises and others are operated by domestic enterprises
- (d) Some are State-owned and others are privately owned

**Ans: (b)**

**Q. In the Indian context, what is the implication of ratifying the ‘Additional Protocol’ with the ‘International Atomic Energy Agency (IAEA)’?(2018)**

- (a) The civilian nuclear reactors come under IAEA safeguards.
- (b) The military nuclear installations come under the inspection of IAEA.
- (c) The country will have the privilege to buy uranium from the Nuclear Suppliers Group (NSG).
- (d) The country automatically becomes a member of the NSG.

**Ans: (a)**

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### Mains

**Q. With growing energy needs should India keep on expanding its nuclear energy programme? Discuss the facts and fears associated with nuclear energy. (2018)**

**Q. Give an account of the growth and development of nuclear science and technology in India. What is the advantage of the fast breeder reactor programme in India? (2017)**

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## Farmer's Demand for Legalizing MSP

**For Prelims:** [Supreme Court of India](#), [Minimum Support Price](#), [1991 Economic liberalisation](#), [World Trade Organisation](#), [Food inflation](#), [Pradhan Mantri Annadata Aay SanraksHan Abhiyan](#), [Pradhan Mantri Fasal Bima Yojana](#)

**For Mains:** Agricultural Policies in India, Economic Challenges in Agriculture, Farmer Protests, Agriculture Diversification and Sustainability

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

## Why in News?

The [Supreme Court \(SC\) of India](#) recently criticized the Central Government for failing to engage with protesting farmers and address their grievances.

- The court urged the Centre to consider the demands of farmers while responding to a fresh plea seeking a **legal guarantee for [Minimum Support Price \(MSP\)](#)**.
- This development follows the prolonged protests by farmer groups at the **Punjab-Haryana border**.

## What is the Petition for MSP Guarantee?

- **Petition:** It seeks a legal guarantee for MSP on crops, based on promises made during the [2021 farmers' protests](#) after the **repeal of the [farm laws](#)**.
  - The petition demands that the **MSP must be enshrined as a legal right to ensure stable incomes** for agricultural producers.
- **SC's Response:** The SC while not issuing a direct order, the **Court suggested using the High-Powered Committee** to resolve the issue and asked the Centre to respond immediately.
  - The SC's involvement adds legal weight to the ongoing protests, suggesting the need for a more systematic and legal solution.

## Why are Farmers Protesting in India?

- **Reasons For Farmers Protests:** The protests stem from long-standing grievances dating back to [India's 1991 economic liberalisation](#), which prioritised industrialisation over agriculture.
  - This has led to increasing distress in rural areas, where farmers struggle with low crop returns and rising input costs.
  - Though the **government sets MSP for many crops, implementation is limited**, with procurement mostly for rice and wheat.
    - Farmers, especially in **non-major cropping areas**, often sell produce below production costs.
  - The [World Trade Organisation \(WTO\)](#) agreements, which are often seen as **promoting free trade**, limit India's ability to **impose trade restrictions or provide subsidies to farmers**.
    - This, according to the protesters, hinders India's ability to control procurement policies and subsidies for farmers.
- **Key Demands of Farmers:** The primary demand is for a law that guarantees MSP for all crops.
  - This is based on the [Swaminathan Commission Report](#), which recommends a 50% profit margin over the cost of production, using the '**C2+ 50%**' formula.
    - The **comprehensive cost (C2)** includes all **paid-out expenses**, the imputed value of unpaid family labor, rentals, and interest foregone on owned land and fixed capital.
    - While **MSPs are currently fixed at 50% above A2+FL**, which includes paid-out expenses and unpaid family labor.
  - **Other Key Demands: Full debt waiver for farmers and labourers.** Compensation and pensions for farmers, particularly for those affected by protests or agricultural distress.
    - Better working conditions and wages for agricultural labour.
    - Protection of **indigenous peoples' rights** over land and water.
- **Government's Position:** The central government has repeatedly stated that a legal **guarantee for MSP would be unfeasible**, citing logistical challenges and the high cost of procurement.
  - The government is also concerned about the **economic implications of such a policy**, including [food inflation](#) and **budgetary constraints**.

## What are the Arguments For and Against the Legalization of MSP?

- **Arguments for the Legalization of MSP:**
  - **Addressing Farmer Distress:** Legalizing MSP ensures farmers **receive fair prices for their crops**, addressing low returns from market fluctuations and providing **financial**



**security** by covering production costs and guaranteeing fair returns for farmers.

- **Agriculture's share in India's economy has dropped to below 15%**, with **minimal income growth for farmers** despite industrial and services sector growth.

- Legalizing MSP can bridge this gap by ensuring fair prices and supporting agricultural development.

- **Promoting Formal Markets:** Legalizing MSP could promote **formal market transactions**, reduce reliance on **informal markets**, and align with the government's goal of enhancing **transparency through [digital agriculture](#)**.
- **Stable Market Prices:** Legalizing **MSP can reduce price volatility** in the agricultural market, stabilizing both farm incomes and consumer prices.
- **Cost Calculation Methods:** The **current methods of cost calculation often fail to reflect the true cost of cultivation**, leading to prices below farmers' expenses.
  - A more accurate pricing model, such as the C2+50% method, could better align agricultural prices with other sectors.
- **Agricultural Investment:** Legalizing MSP would **provide farmers with a predictable income**, encouraging investment in agriculture and improving productivity through **sustainable practices and green technologies**.

▪ **Arguments Against the Legalization of MSP:**

- **Logistical Challenges:** Implementing MSP across all crops nationwide is **difficult due to inadequate infrastructure**, such as the **mandi system**, which is not functional in many states.
- **High Costs for Government:** Procuring all crops at **MSP would require massive financial resources**, leading to budgetary constraints and potential economic strain.
- **Food Inflation:** MSP could lead to **higher food prices**, affecting consumers, especially if the government is forced to buy all crops at MSP.
- **Market Distortion:** A legal MSP could **disrupt the natural dynamics of supply and demand** in agricultural markets, leading to inefficiencies.
- **WTO Constraints:** International trade agreements like the **WTO limit the ability of the government** to provide subsidies or impose restrictions on agricultural trade, which could undermine the effectiveness of MSP legalization.

## What Can be Alternatives to Legalizing MSP Nationwide?

- **Targeted Approach:** Legalizing MSP for a smaller percentage of crops could stabilize prices without straining the procurement system.
  - This can be supported by [Pradhan Mantri Annadata Aay Sanraksan Abhiyan \(PM-AASHA\)](#), which ensures fair prices for farmers through MSP and price deficiency payments.
  - Some states, such as **Madhya Pradesh, Chhattisgarh, and Odisha**, have successfully **expanded procurement systems**.
    - Instead of a **nationwide rollout**, **state-specific legislation for legalizing MSP, tailored to local conditions**, could be considered to address regional agricultural challenges effectively.
- **Cooperatives' Role:** One alternative being considered is the **promotion of cooperatives and FPOs**, which have been successful in some sectors like [milk production](#).
- **Supportive Infrastructure:** A robust legal framework, modern storage facilities, and improved infrastructure are essential for cooperatives and FPOs.
  - The [Pradhan Mantri Kisan Sampada Yojana \(PMKSY\)](#) can complement this by enhancing infrastructure and reducing [post-harvest losses](#).
- **Contract Farming:** Encouraging **contracts between farmers and corporations** or cooperatives, where farmers can secure a guaranteed price for their produce.
- **Crop Insurance Schemes:** Expanding and improving crop insurance to protect farmers against losses due to natural disasters or market fluctuations through initiatives like the [Pradhan Mantri Fasal Bima Yojana \(PMFBY\)](#).
- **Diversification:** Encouraging farmers to diversify their crops and income sources, reducing their dependence on a few crops that may be subject to market volatility.

# MINIMUM SUPPORT PRICE (MSP)

The rate at which the govt. purchases crops from farmers; based on a calculation of at least 1.5x the cost of production incurred by the farmers

## RECOMMENDED BY

**Commission for Agricultural Costs & Prices (CACP)** (recommends MSPs for 22 mandated crops and Fair and Remunerative Price for Sugarcane)

## 22 MANDATED CROPS

(14 Kharif, 6 Rabi and 2 Other Commercial crops)

7 <b>CEREALS</b>	Paddy, Wheat, Barley, Jowar, Bajra, Maize And Ragi
5 <b>PULSES</b>	Gram, Arhar/tur, Moong, Urad And Lentil
7 <b>OILSEEDS</b>	Groundnut, Rapeseed/mustard, Soyabean, Sunflower, Sesamum, Safflower And Niger Seed
<b>RAW COTTON</b>	
<b>RAW JUTE</b>	
<b>COPRA</b>	

MSP is the price at which the govt. is supposed to procure the mandated crops from farmers if the market price falls below it

## FACTORS FOR RECOMMENDING MSP

- ▶ Cost of cultivation
- ▶ Demand-Supply situation for the crop
- ▶ Market price trends
- ▶ Inter-crop price parity
- ▶ Implications for consumers (inflation)
- ▶ Environment (soil and water use)
- ▶ Terms of trade b/w agri and non-agri sectors (ratio of farm inputs and outputs)

Considers both A2+FL and C2 costs

Actual expenses on seeds, fertilisers, irrigation and the like

Unpaid family labour

A2

FL

+

C2

Rentals or interest foregone on owned land and fixed capital assets

MSP has no statutory backing — a farmer cannot demand MSP as a matter of right



Drishti IAS

**Drishti Mains Question:**

Discuss the implications of legalizing the Minimum Support Price for all crops in India. Should it be considered a sustainable solution to address agricultural distress?

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

**Prelims:**

**Consider the following statements: (2020)**

1. In the case of all cereals, pulses and oil-seeds, the procurement at Minimum Support Price (MSP) is unlimited in any State/UT of India.
2. In the case of cereals and pulses, the MSP is fixed in any State/UT at a level to which the market price will never rise.

**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)**

**Mains:**

**Q.** What are the reformative steps taken by the Government to make the food grain distribution system more effective? **(2019)**

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**National Sports Awards 2024**

**Source: PIB**

**Why in News?**

Recently, the **Ministry of Youth Affairs & Sports** announced the [National Sports Awards 2024](#).

- Names of the awardee were announced for the [Major Dhyan Chand Khel Ratna](#), [Arjuna](#), [Dronacharya](#), [Rashtriya Khel Protsahan Puraskar](#), and **Maulana Abul Kalam Azad (MAKA) trophy**.

## Who are the Recipients of National Sports Awards 2024?

Awards	Recipients
Major Dhyan Chand Khel Ratna Award	<a href="#">Gukesh D (Chess)</a> , <a href="#">Harmanpreet Singh (Hockey)</a> , Praveen Kumar (Para-Athletics) and <a href="#">Manu Bhaker (Shooting)</a> .
Arjuna Awards for outstanding performance	Jyothi Yarraji (Athletics), Annu Rani (Athletics), Nitu (Boxing), <a href="#">Rakesh Kumar (Para-Archery)</a> , <a href="#">Navdeep (Para-Athletics)</a> etc.
Arjuna Awards (Lifetime) for outstanding performance	Sucha Singh (Athletics), <a href="#">Murlikant Rajaram Petkar (Para-Swimming)</a>
Dronacharya Award	Subhash Rana (Para-Shooting), S Muralidharan (Badminton) etc.
Rashtriya Khel Protsahan Puraskar	<a href="#">Physical Education Foundation of India</a>
MAKA Trophy	<a href="#">Chandigarh University (Overall winner)</a>

## What are the Various Sports Awards Given in India?

- **Major Dhyan Chand Khel Ratna Award:** It is considered **India's highest sporting honour**.
  - The award is given for **outstanding performances** in sports spanning over a period of **four years** and the winners receive a **medallion, certificate and a cash prize**.
- **Arjuna Award:** It is awarded for **consistently good performance over a period of four years**.
  - The winners of the Arjuna Award receive a **statuette of Arjuna, a certificate and a cash prize**.
- **Dronacharya Award:** It is India's highest sports honour for **coaches**.
  - It is awarded to individuals for **producing medal winners** at prestigious international events.
- **Major Dhyan Chand Award:** It is another award named after India's hockey magician [Dhyan Chand](#).
  - It represents **India's highest honour for lifetime achievements** in sports.
- **Maulana Abul Kalam Azad Trophy:** It is given to an **institution or university** for top performance in **inter-university tournaments** over the last **one year**.
- **Rashtriya Khel Protsahan Puraskar:** It is awarded to **organisations or corporates (both private and public) and individuals** for playing a role in the area of sports promotion and development over the last three years.

## UPSC Civil Services Examination, Previous Year Questions (PYQs)

### Prelims

Q.Consider the following pairs with regard to sports awards: (2023)

ward Name	Purpose
Major Dhyan Chand Khel Ratna Award	For the most spectacular and outstanding performance by a sportsperson over the last four years.
Arjuna Award	For lifetime achievement by a sportsperson.
Dronacharya Award	To honour eminent coaches who have



	successfully trained sportspersons or teams.
Rashtriya Khel Protsahan Puraskar	To recognize the contribution made by sports persons even after their retirement.

**How many of the above pairs are correctly matched?**

- (a) Only one
- (b) Only two
- (c) All three
- (d) All four

**Ans: (b)**

**Q. Consider the following statements in respect of the Laureus World Sports Award which was instituted in the year 2000:**

1. American golfer Tiger Woods was the first winner of this award.
2. The award was received mostly by 'Formula One' players so far.
3. Roger Federer received this award the maximum number of times compared to others.

**Which of the above statements are correct?**

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

**Ans: (c)**

## Sanskrit Inscription Found in POK

[Source: TOI](#)

### Why in News?

Recently, a 4<sup>th</sup> century CE **Sanskrit inscription** was found near **Gilgit** in **Pakistan-Occupied Kashmir (POK)**, written in **Brahmi script**.

- The inscription found in **Gilgit** mentions "**Pushpasingha**" installing a **Mahesvaralinga** for the merit of his guru (name partially lost).

### Note

- Earlier in 2024, a 10<sup>th</sup>-century CE **Sanskrit and Sharada script (used in Kashmir for Sanskrit**

and Kashmiri) inscription was discovered near **Peshawar**, referencing **Buddhist Dharini** chants with the mention of "Da(Dha)rini" in line six.

- **Buddhist Dharini** refers to sacred **mantras** or **chants** used in **Buddhism** for **protection**, **purification**, and invoking **blessings**.
- These chants are believed to have spiritual power and are often recited in **rituals** to promote **well-being**. Dharinis typically contain sacred **syllables** or phrases.

## What is the Importance of Historical Inscriptions?

- **Primary Historical Sources:** Inscriptions are authentic and direct sources for reconstructing **ancient Indian history**, offering evidence free from later interpolations and biases.
  - Dates and events inscribed help in establishing accurate historical timelines.
- **Insight into Political History:** They provide valuable details about **rulers**, **dynasties**, **conquests**, **treaties**, and **administration** in ancient India.
- **Administrative Systems:** Inscriptions often include information about **revenue systems**, **land grants**, **taxation**, and **judicial frameworks**.
  - For example, the **Junagarh (Girnar) Inscription of Rudradaman** describes the construction and repairs of the **Sudarshana Lake dam**, providing evidence of administrative priorities in water management.
- **Linguistic Evolution:** Inscriptions document the development of **languages**, **scripts**, and **literary styles**.
  - The **Ashokan Edicts**, inscribed in **Prakrit**, **Greek**, and **Aramaic**, highlight the linguistic diversity and the use of local scripts to communicate governance effectively.
- **Socio-Economic Structures:** Insights into **trade practices**, **societal norms**, **caste systems**, and **economic transactions** are often gleaned from inscriptions.
  - Inscriptions reveal details about **ancient religions**, **temple construction**, **rituals**, and **royal patronage**.

Some Important Inscriptions of Ancient India

## Some Important Inscriptions of Ancient India

- **Political Inscriptions:**
  - **Junagarh (Girnar) Inscription (Rudradaman):** A 2<sup>nd</sup>-century CE Sanskrit inscription detailing **Rudradaman's achievements** and mentioning the construction of the **Sudarshana Lake dam** by **Chandragupta Maurya's** governor, **Pushyagupta**.
  - **Bhitari Pillar Inscription:** Chronicles **Skandagupta's military success** against the **Hunas** and his **administrative reforms**.
- **Administrative and Land Grant Inscriptions**
  - **Paharpur Inscription (Buddha Gupta):** Found in Bangladesh, it highlights land grants and religious patronage during the Gupta period.
  - **Mandsaur Inscription :** Details **Yashodharman's** victory over the Huns, emphasizing his role in restoring stability in the region.
  - **Gwalior Inscription (King Bhoja I):** Describes **grants to Brahmins** and mentions **Agraharas**, reflecting **socio-economic practices** under the **Gurjara-Pratiharas**.
  - **Banskhera Copper Plate:** Signed by **Harshavardhana**, it provides details about his **ancestry**, **administration**, and **governance**.
  - **Deopara Prashasti:** Celebrates the achievements of **Bengal's Vijay Sena**, providing insights into the **socio-political scenario** of the time.



# INSCRIPTIONS AND ROCK EDICTS



## Sohgaura Copper Plate

- Location - Sohgaura, Gorakhpur (UP)
- Mentions - Famine relief efforts
- Language - Prakrit\*
- Features - **Mauryan dynasty**
  - Earliest-known copper plate
  - (Rare) **Pre-Ashokan Brahmi inscription**

## Ashokan Edicts

- Location - Eastern India
- Mentions - Ashoka's view of Dharma (Buddhist philosophy)
- Language - Magadhi Prakrit\*
- Features - 33 inscriptions (pillar edicts, Major rock edicts, Minor rock inscriptions)
  - 1<sup>st</sup> **tangible evidence of Buddhism**
  - Ashoka as **Devanampiyadasi** "Beloved servant of the God"

## Rummindei Pillar Edicts

- Location - Lumbini, Nepal
- Mentions - Ashoka's visit to Lumbini and tax exemptions he made there
- Script - Brahmi
- Features - Minor pillar inscriptions

## Prayag-Prashasti (Allahabad Pillar)

- Location - Allahabad Fort (earlier Kaushambi)
- Mentions - Ashoka Stambh but with 4 different inscriptions
- Script - Brahmi
- 4 Inscriptions include -
  - Usual Ashokan Inscriptions
  - Queen's Kaurwaki edict
  - Samudragupta's conquests by Harisena
  - Jahangir's inscriptions in Persian

## Mehrauli Inscription (Mehrauli Iron Pillar)

- Location - Qutub Minar complex, Delhi
- Mentions - Credits **Chandragupta II** for the conquest of Vakatakas and Vanga countries
- Script - Brahmi
- Features - **Gupta dynasty**
  - Pillar estd by Chandragupta II as **Vishnupada** (in honor of Lord Vishnu)
  - Notable for rust-resistant metal composition

## Kalsi Inscription

- Location - Kalsi town (Uttarakhand)
- Mentions - Ashoka's humane approach in administration, non-violence, spirituality
- Language - Prakrit\*
- Features - Only place in north India to have 14 Ashokan rock edicts

## Maski Inscription

- Location - Maski (an archaeological site in Karnataka)
- Mentions - Dharma shaṣana (promotes Buddhist tenets)
- Language - Prakrit\*
- Features - 1<sup>st</sup> edict to contain Ashoka's name instead of Piyadasi.

## Kalinga Edicts

- Location - Kalinga, Odisha
- Mentions - Kalinga war turning point for Ashoka
- Language - Magadhi Prakrit, Script - Brahmi
- Features - Set of 11 out of 14 rock edicts
  - 2 special rock edicts signifying pacification
  - Ashoka gave up **Digvijaya**, adopted non-violence & Buddhism.

## Aihole Inscription

- Location - Meguti temple, Karnataka
- Mentions - **Pulakeshin II** defeated Harshavardhana
- Language - Sanskrit; Script - Kannada
- Features - Chalukya victory → Pallavas
  - Capital: **Aihole → Badami**
  - Written by Ravikirti (Pulakeshin II's court poet)
  - Samudragupta's conquests by Harisena

**AIHOLE WAS THE FIRST CAPITAL OF CHALUKYAS**

## Hathigumpha Inscription (Elephant Cave Inscription)

- Location - Udaygiri-Khandgiri Caves, Odisha
- Mentions - History of King Kharvela - a champion of Jainism
- Language - Prakrit\*
- Features - **Mahameghavahana dynasty**

**NOTE:** \*implies that wherever language is Prakrit, the script is Brahmi



## UPSC Civil Services Examination, Previous Year Questions (PYQs)

### Prelims:

**Q. Who among the following rulers advised his subjects through this inscription? (2020)**

"Whosoever praises his religious sect or blames other sects out of excessive devotion to his own sect, with the view of glorifying his own sect, he rather injures his own sect very severely."

**(a) Ashoka**

**(b) Samudragupta**

(c) Harshavardhana

(d) Krishanadeva Raya

Ans: (a)

**Q. In which of the following relief sculpture inscriptions is 'Ranyo Ashoka' (King Ashoka) mentioned along with the stone portrait of Ashoka? (2019)**

(a) Kanganahalli

(b) Sanchi

(c) Shahbazgarhi

(d) Sohgaure

Ans: (a)

**Mains:**

**Q. Discuss the Tandava dance as recorded in the early Indian inscriptions.(2013)**

## Extension of Crop Insurance Schemes

[Source: TH](#)

### Why in News?

The **Union Cabinet** has approved critical measures to support **Indian farmers**, including the extension of a special subsidy for **Diammonium Phosphate (DAP) fertilizers** and the **continuation of crop insurance schemes until 2025-26**.

### What are Recent Key Measures to Support Indian Farmers?

- **Crop Insurance Scheme:** The Union Cabinet approved the continuation of the [Pradhan Mantri Fasal Bima Yojana](#) and [Restructured Weather Based Crop Insurance Scheme \(RWBCIS\)](#) till 2025-26.
- **Di-Ammonium Phosphate (DAP):** It approved extending the one-time special package on DAP beyond the [Nutrient Based Subsidy](#) from **1<sup>st</sup> January, 2025** till further orders.
  - It ensures **affordable DAP fertilizers** for farmers in **Kharif and Rabi 2024-25** despite global market volatility.
- **Fund for Innovation and Technology (FIAT):** It approved the creation of FIAT with a corpus of **Rs 824.77 crore** for funding technological initiatives under the scheme namely, **YES-TECH and WINDS** for increasing **transparency and claim calculation and settlement**.
  - **Yield Estimation System using Technology (YES-TECH):** YES-TECH uses [remote sensing technology](#) for yield estimation with **minimum 30% weightage to technology** based yield estimates.
  - **Weather Information and Network Data Systems (WINDS):** [WINDS](#) aims to install [automatic weather stations](#) at the **block level** and [rain gauges](#) at the **panchayat level**, increasing network density fivefold for **hyper-local weather data**.

## Pradhan Mantri Fasal Bima Yojana (PMFBY)

- **About:** It is a [crop insurance scheme](#) to protect farmers from financial losses due to unforeseen crop failures like **rainfall, temperature, frost, humidity** etc.
- **Aim:** It is a **central sector scheme** and provides comprehensive crop insurance from **pre-sowing to post-harvest period**.
- **Coverage:** It covers **food crops** (cereals, millets and pulses), [oilseeds](#) and annual **commercial/annual horticultural crops**.
  - All **farmers** including **sharecroppers** and **tenant farmers** growing notified crops in the notified areas are **eligible for coverage**.
- **Premium:** Farmers pay a premium of **2% for Kharif crops, 1.5% for Rabi crops, and 5% for commercial horticulture crops** under the scheme.

**Note:** PMFBY relies on **actual crop loss assessment** to provide compensation to farmers for losses due to natural calamities, pests, or diseases. **In contrast, RWBCIS** compensates farmers based on deviations from predefined weather parameters such as **rainfall, temperature, humidity, and wind speed**.

- RWBCIS uses these weather parameters as a proxy for crop yields to estimate and compensate for deemed crop losses, without requiring direct field-level assessment.

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

**Q. With reference to 'Pradhan Mantri Fasal Bima Yojana', consider the following statements: (2016)**

1. Under this scheme, farmers will have to pay a uniform premium of two percent for any crop they cultivate in any season of the year.
2. This scheme covers post-harvest losses arising out of cyclones and unseasonal rains.

**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: (b)**

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## Indo-Pak Exchange of Nuclear and Prisoner Lists

**Source: HT**

Recently, India and Pakistan exchanged lists of [nuclear installations](#) and shared details of **prisoners**



and fishermen, despite ongoing strained diplomatic ties.

- The exchange of lists of **prisoners and fishermen** is mandated by the [Agreement on Consular Access, 2008](#) occurring biannually on **1st January and 1st July**.
- The exchange of **nuclear installation** lists occurred under the [Agreement on the Prohibition of Attack against Nuclear Installations, 1988](#).
  - This was the **34<sup>th</sup> consecutive exchange**, with the first on **1<sup>st</sup> January, 1992**.
  - This agreement, signed on **31<sup>st</sup> December, 1988**, and effective from **27<sup>th</sup> January, 1991**, requires India and Pakistan to exchange nuclear installation details **annually on 1<sup>st</sup> January**.
  - However, **neither** country discloses **details** of the nuclear installations.
- **Article 36** of [Vienna Convention on Consular Relations, 1963](#) mandates that foreign nationals arrested or detained must be **promptly informed of their right to have their embassy or consulate notified**.

Read More: [Consular Access: Kulbhushan Jadhav Case](#)

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## Thanthai Periyar Memorial

Source: TH

- Recently, Kerala and Tamil Nadu Chief Ministers inaugurated the renovated **Thanthai Periyar memorial in Vaikom**, a significant site commemorating the contributions of Tamil reformist **E.V. Ramasami Naicker, popularly known as Thanthai Periyar**.
- The memorial honors **Thanthai Periyar**, who played a pivotal role in the [Vaikom Satyagraha](#), recognized as the **first organized** movement for the rights of the '**untouchable**' communities in India in **April 1924**.
  - Periyar's activism led to his imprisonment twice for his involvement in the movement, earning him the **title Vaikom Veeran**.
- The renovated memorial includes a **new library** and a **wealth of materials** detailing Periyar's biography, **history of the [Dravidian movement](#)**, and his interactions with prominent leaders.
- **Contributions of Periyar:**
  - The Vaikom Satyagraha, a peaceful protest held in Vaikom, Kerala, from **30<sup>th</sup> March 1924 to 23<sup>rd</sup> November 1925** was led by visionary leaders **T.K. Madhavan, K.P. Kesava Menon, and K. Kelappan**.
  - He started the **Self-Respect Movement and Dravidar Kazhagam** and is known as the '**Father of the Dravidian movement**'.



Read More: [100 Years of Vaikom Satyagraha](#)

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## MoU Between CENJOWS and NDMA

[Source: PIB](#)

Recently, The **Centre for Joint Warfare Studies (CENJOWS)** has signed a **MoU** with the [National Disaster Management Authority \(NDMA\)](#) to enhance India's disaster management capabilities.

- The partnership aims to **address critical challenges in disaster mitigation**, preparedness, and response through a **'whole of the nation'** approach.
- **Framework for Joint Initiatives:**

- **Collaborative Research:** Joint studies on disaster management and [humanitarian assistance and disaster relief \(HADR\)](#) operations to provide policy inputs to the government.
- **Capacity Building:** Organizing seminars, workshops, and training programs for stakeholders, including armed forces personnel and NDMA officials.
- **Awareness Campaigns:** Promoting disaster preparedness and risk mitigation through nationwide initiatives.
- **International Engagements:** Facilitating global collaboration on disaster management aligned with **India's foreign policy objectives**.
- **CENJOWS** was established by the [Ministry of Defence](#) in **2004**, and is registered under the [Societies Registration Act of 1860](#).
  - CENJOWS seeks to promote **jointness as a driver of Comprehensive National Power** by offering **research-based alternatives** and fostering debates to aid doctrinal and policy formulation for stakeholders.
- **NDMA:**
  - It was **established in 2006 under the Disaster Management Act, 2005**, and is India's apex statutory body for disaster management.
  - It is chaired by the **Prime Minister** and includes **nine members**, one serving as **Vice-Chairperson**.

Read More: [National Disaster Management Authority \(NDMA\)](#)

## Inter-State Translocation of Tigers

[Source: TOI](#)

Recently, **Madhya Pradesh** has directed the **translocation of 15 tigers** from Madhya Pradesh to **Rajasthan, Chhattisgarh, and Odisha** for conservation purposes.

- The tigers will be **translocated from the [Bandhavgarh](#), [Pench](#), and [Kanha tiger reserves](#)** in Madhya Pradesh.
- A total of **12 tigresses** and **3 tigers will be moved**, following approval from the [National Tiger Conservation Authority \(NTCA\)](#).
  - The distribution plan includes **six tigresses and two tigers for Chhattisgarh, four tigresses for Rajasthan, and one tiger and two tigresses for Odisha**.
- **Madhya Pradesh has the highest number of tigers in India, with 785 tigers** according to the [NTCA 2022 report](#).
  - The state has **Nine tiger reserves**, including the newly notified [Madhav Tiger Reserve in Shivpuri District](#).
- Translocation is a strategy to enhance genetic diversity in tiger populations by introducing new individuals to isolated groups, reducing inbreeding risks and supporting long-term species survival.
  - It serves as a **reinforcement strategy**, aimed at **increasing the genetic diversity** of existing tiger populations.

# TIGER

Royal Bengal Tiger (*Panthera tigris*) is the National animal of India.

## Subspecies of Tiger

- \* The continental (*Panthera tigris tigris*)
- \* The Sunda (*Panthera tigris sondaica*)

## Habitat

Tropical rainforests, evergreen forests, temperate forests, mangrove swamps, grasslands, and savannas



## Countries Where Tiger Population Is Found

- Found only in 13 Tiger Range countries- India, Nepal, Bhutan, Bangladesh, Myanmar, Russia, China, Thailand, Malaysia, Indonesia, Cambodia, Laos, and Vietnam
- As per the latest report by IUCN, tiger has gone extinct in Cambodia, Laos, and Vietnam

## Protection Status

- IUCN Red List: Endangered
- CITES: Appendix I
- WPA 1972: Schedule I

## Threats

- Habitat loss
- Poaching and illegal trade
- Human-Wildlife conflict

## Conservation Efforts

- International Big Cats Alliance (IBCA):** For conservation of seven big cats namely Tiger, Lion, Leopard, Snow Leopard, Cheetah, Jaguar and Puma (launched by India)
- Tx2 campaign:** Launched by WWF; stands for 'Tiger times 2' signalling the goal to double the tiger population by 2022
- National Tiger Conservation authority (NTCA):** Constituted under the WPA, 1972
- Project Tiger:** Launched in 1973
- Tiger Census:** Every 4 years

## Tigers In India

- India has the **largest** population
  - As of 2022, India has 3167 tigers
  - Largest population has been found in Central Indian Highlands & Eastern Ghats Landscape
- Tiger Reserves:** India now has 53 tiger reserves
  - Ranipur in UP** is the latest
  - Nagarjun Sagar (Andhra Pradesh)** is the **largest** while Orang (Assam) is the **smallest** (Core area)



Read More: [Tiger Translocation for Genetic Diversity](#)

## AICTE's 2025 'Year of AI'

Source: [TOI](#)

Recently, the [All India Council for Technical Education \(AICTE\)](#) has designated **2025** as the "**Year of Artificial Intelligence**" to position India as a global leader in AI.

- AICTE aims to promote **AI in education** through **updated curricula, workshops for faculty, and collaborations with AI-driven companies** for real-world exposure.
  - Core elements of this initiative includes **AI affirmation Pledge, Comprehensive AI integration, AI awareness campaign, Faculty development and industry partnerships, Recognition of excellence.**
- The initiative will affect **over 14,000 colleges and 40 million students**, aiming to integrate AI



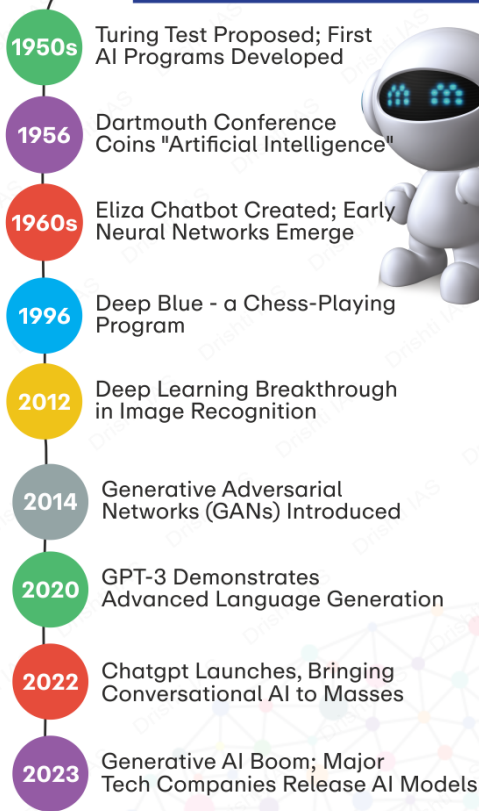
into higher education and foster innovation and leadership.

- The government launched **AI-enabled tools and safety measures** to enhance consumer protection, including the **National Consumer Helpline**, **e-maap portal** and **Jago Grahak Jago mobile application and guidelines** to regulate deceptive marketing in ecommerce.
- The government is focusing on ensuring consumer confidence in the digital market with tools like the **e-Daakhil Portal** for online complaint filing and measures to address e-commerce safety concerns.
- **AICTE:**
  - It is a **statutory body**, and a **national-level council for technical education**, under the **Ministry of Education**.
  - It was set up in **November 1945** as a **national-level apex advisory body**.

# Artificial Intelligence(AI)

*AI is the simulation of human intelligence in machines programmed to think and learn like humans, capable of problem-solving, reasoning, and adapting to new information.*

## AI Timeline - Major Milestones



## Applications of AI

- ➔ **Healthcare:** Personalised medicine
- ➔ **Finance:** Algorithmic trading
- ➔ **Transportation:** Autonomous vehicles
- ➔ **Marketing & Customer Service:** Targeted advertising, chatbots
- ➔ **Education:** Adaptive learning systems, personalised tutoring
- ➔ **Agriculture:** Crop monitoring
- ➔ **Cybersecurity:** Threat detection
- ➔ **Energy:** Smart grid management, consumption forecasting

## Concerns

- ➔ Deepfakes & misinformation
- ➔ Algorithmic bias
- ➔ Automation & job displacement
- ➔ Privacy issues
- ➔ Data ownership & liability issue
- ➔ Ethical decision-making complexes

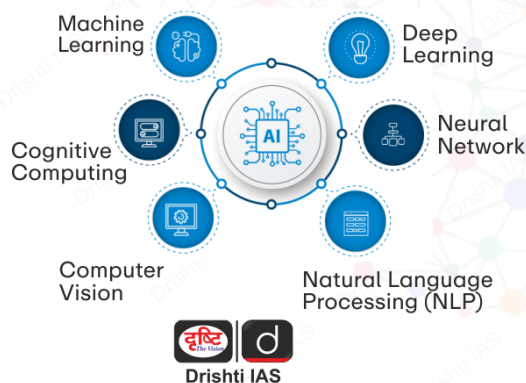
## Regulating AI

- ➔ **Global Partnership on AI (GPAI)** launched in 2020
- ➔ **Bletchley Declaration (2023):** Enhance Global Collaboration on AI
- ➔ **G20 New Delhi Leaders' Declaration (2023):** Harnessing AI responsibly for good and for all
- ➔ **Hiroshima AI Process (2023)** by G7

## India and AI

- ➔ **National Strategy For AI 2018**
- ➔ **AI For All:** Self-learning online program
- ➔ **GPAI Summit 2023** hosted by India
- ➔ **IndiaAI Mission 2024**
- ➔ **US India Artificial Intelligence (USIAI) Initiative:** AI cooperation in critical areas
- ➔ **AIRAWAT** (AI Research, Analytics and Knowledge Assimilation Platform): Supercomputer

## KEY COMPONENTS OF AI





## Property Restoration under MWPSC Act, 2007

Source: HT

- The [Supreme Court's](#) recent ruling on the [Maintenance and Welfare of Parents and Senior Citizens \(MWPSC\) Act, 2007](#) emphasizes the empowerment of tribunals to restore property to parents if their children neglect their care obligations.
- **Section 23 of the MWPSC Act, 2007** allows tribunals to declare property transfers void if the **transferee fails to provide agreed-upon basic needs.**
  - If a senior citizen cannot enforce these rights, an authorized organization (tribunals) can act on their behalf.
- The MWPSC Act, 2007, is administered by the **Ministry of Social Justice & Empowerment**, provides statutory protection for elderly citizens, allowing them to **seek maintenance from children or legal heirs** if they cannot support themselves.
- **Key Features of MWPSC Act:** The Act is enforced through **Tribunals and Appellate Tribunals** at district and sub-division levels for efficient processing.
  - Tribunals **can levy fines or order imprisonment to individuals** who fail to pay maintenance.
  - Abandonment of senior citizens by caregivers results in a **fine or imprisonment for up to 3 months.**

Read more: [Safeguarding the Rights of Elderly](#)

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