



PM Inaugurates Various Projects in Bihar | Bihar | 14 Nov 2024

Why in News?

Recently, the **Prime Minister** laid the foundation for the [All India Institute of Medical Science \(AIIMS\) hospital](#) and **other projects worth Rs 12,100 crore** in Darbhanga, Bihar.

- **25 additional projects in rail, road, health, and energy sectors** were also inaugurated across the region.

Key Points

- **About the Projects:**

- **AIIMS, Darbhanga Project:**

- The **AIIMS project in Darbhanga**, costing Rs 1264 crore and covering 187 acres in the **Sobhan area**, is expected to be completed within three years.
- This will be the **second AIIMS in Bihar**, aimed at expanding healthcare infrastructure in the state.
- The project will feature a **super-speciality hospital, an AYUSH block, a medical college, a nursing college**, along with a **night shelter and residential facilities for staff**.
- It will provide **advanced tertiary healthcare services** for people in Bihar and nearby regions.

- **Jan Aushadhi Kendras:**

- The PM will dedicate **18 Jan Aushadhi Kendras** at railway stations nationwide to **increase the availability of affordable medicines**.
- These centers aim to **promote the use of generic medicines**, helping to lower healthcare costs for passengers.
- It was **launched to provide affordable and quality medicines**, particularly for the poor and disadvantaged, and was revamped as the [Pradhan Mantri Jan Aushadhi Yojana \(PMJAY\)](#) in September 2015.

- **National Highway Development:**

- The PM will inaugurate and lay the **foundation stones of several highway projects** worth Rs 5,070 crore.
- This includes the new **four-lane Galgalia-Araria section on NH-327E**, providing an **alternative route from Araria to West Bengal**.

- **Railway Infrastructure Projects:**

- Railway projects worth over Rs 1,740 crore will be inaugurated, including **gauge conversions and a bypass line** to ease traffic congestion.
- New **Mainline Electric Multiple Unit (MEMU) train services** in the Jhanjharpur-Laukaha Bazar section will improve access to jobs and education for nearby communities.
 - A MEMU is an [Electric Multiple Unit \(EMU\) train](#) that serves short and medium-distance routes.

- **Petroleum and Natural Gas Sector Initiatives:**

- The PM will initiate projects worth more than Rs 4,020 crore in the **petroleum and natural gas sector**.
- These include a [City Gas Distribution network](#) in five districts of Bihar - **Darbhanga, Madhubani, Supaul, Sitamarhi and Sheohar** - by the **Bharat Petroleum Corporation Limited**.

- The PM also laid the foundation stone for a **new bitumen-manufacturing unit at the Barauni refinery** to reduce dependency on imports.

AYUSH

- AYUSH is the acronym of the medical systems that are being practised in India such as:
 - **Ayurveda**: Ancient system emphasising holistic well-being.
 - **Yoga**: Union of body, mind, and spirit through physical postures and meditation.
 - **Naturopathy**: Natural healing using elements like water, air, and diet.
 - **Unani**: Balance restoration through herbal medicines and humoral theory.
 - **Siddha**: Traditional Tamil medicine with roots in five elements and humours.
 - **Homeopathy**: Highly diluted remedies stimulating self-healing responses.
- These systems are based on **definite medical philosophies** and represent a way of **healthy living with established concepts** on **prevention of diseases** and promotion of health.
- The **Ministry of AYUSH**, is responsible for developing education, research and propagation of AYUSH in India.

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AYUSH Systems of Medicine

AYUSH encompasses Ayurveda, Yoga & Naturopathy, Unani, Siddha, Sowa Rigpa, and Homeopathy, with Ayurveda having a documented history of 5000+ years.

Ayurveda

- ↳ **Samhita Period (1000 BC):**
Emerged as mature medical system
 - ↳ **Charaka Samhita:** Oldest and most authoritative text
 - ↳ **Sushruta Samhita:** Gives fundamental principles and therapeutic methods in eight specialties
- ↳ **Main Schools:**
 - ↳ **Punarvasu Atreya** - School of physicians
 - ↳ **Divodasa Dhanvantari** - School of surgeons

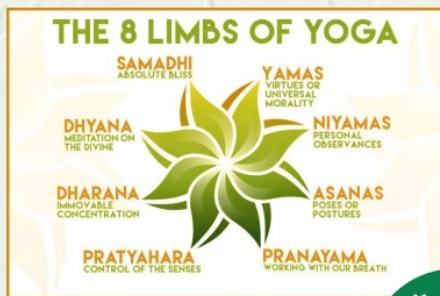
Lord Brahma is believed to be the 1st proponent of Ayurveda

Branches of Ayurveda:

- Kayachikitsa (internal medicine)
- Shalya Tantra (surgery)
- Shalakya Tantra (disease of supra-clavicular origin)
- Kaumarabhritya (paediatrics)
- Agada Tantra (toxicology)
- Bhootavidya (psychiatry)
- Rasayana Tantra (rejuvenation and geriatrics)
- Vajikarana (eugenics & science of aphrodisiac)



Yoga & Naturopathy



- ↳ **Naturopathy:** Healing with help of 5 natural elements - Earth, Water, Air, Fire and Ether
 - ↳ Based on theories of self-healing capacity of body and principles of healthy living
 - ↳ Encourages a **person-centred approach** rather than disease-centred

Yoga first propounded by Maharishi Patanjali in systematic form Yogsutra

Unani

Pioneered in Greece, developed by Arabs as 7 principles (Umoor-e-Tabbiya)

- ↳ Based on the framework of teachings of **Buqrat** (Hippocrates) and **Jalinoos** (Galen)
 - ↳ Hippocratic theory of **four humors** viz. blood, phlegm, yellow bile, and black bile
- ↳ **Recognised by WHO** and granted official status by India as an alternative health system

Siddha

Dates back to 10000 – 4000 BC; Siddhar Agasthiyar - Father of Siddha Medicine

- ↳ Preventive, promotive, curative, rejuvenative, and rehabilitative health care
- ↳ **4 Components:** Latro-chemistry, Medical practice, Yogic practice & Wisdom
- ↳ Diagnosis based on 3 humors (**Mukkuttram**) and 8 vital tests (**Ennvagai Thervu**)

Sowa Rigpa

Origin: Lord Buddha in India before 2500 years

- ↳ Traditional medicine in Himalayan regions of Ladakh, Himachal Pradesh, Arunachal Pradesh, etc.
- ↳ Recognised in India by Indian Medicine Central Council Act, 1970 (As amended in 2010)

Homeopathy

German physician Dr. Christian F. S. Hahnemann codified its fundamental principles

- ↳ Medicines prepared mainly from natural substances (plant products, minerals, animal sources)
- ↳ Brought in India by European missionaries - 1810; official recognition - 1948
- ↳ **3 Key Principles:**
 - ↳ *Similia Similibus Curentur* (let likes be cured by likes)
 - ↳ Single Medicine
 - ↳ Minimum Dose



Why in News?

Recently, the [National e-Governance Division \(NeGD\)](#) of [Ministry of Electronics and IT \(MeitY\)](#) in collaboration with the Government of Uttar Pradesh, organised a two-day Cybersecurity Workshop in Lucknow.

Key Points

- **Cybersecurity Training Program by NeGD:**
 - [NeGD's Cybersecurity Training Program](#), part of the **State Capacity Building Scheme**, is designed to strengthen cybersecurity resilience among state government officials.
 - The program equips **Chief Information Security Officers (CISOs)** and Deputy CISOs with critical skills to handle and mitigate cyber risks effectively.
 - The NeGD was **established in 2009** by the **Ministry of Electronics & Information Technology** as an Independent Business Division under the [Digital India Corporation](#).
 - Its aim was to **facilitate and catalyze the implementation of the Digital India Program** across Ministries and State Governments.
 - **Objective:**
 - **Cybersecurity Awareness:** Increase understanding of cybersecurity issues, cyber threats, and [e-governance](#) frameworks.
 - **Cyber Resilience and Artificial Intelligence (AI):** Enhance participants' knowledge of the **Cyber Resilience Ecosystem** and the role of [AI](#) in cybersecurity.
 - **Cyber Suraksha Kendra:** Educate on the importance of [Cyber Suraksha Kendra](#) for protecting state-level **e-governance** systems.
 - **Data and Application Security:** Provide insights into data protection ([Digital Personal Data Protection Act, 2023](#)) application security, and endpoint security.
 - **Crisis Management:** Train participants in developing [Cyber Crisis Management Plans \(CCMP\)](#) for effective incident response.
 - **Identity and Access Management:** Address challenges in identity and access management to secure government digital systems.
- **State Capacity-Building Scheme:**
 - NeGD, under MeitY, has **launched a series of capacity-building workshops** for state leaders, CISOs, and officials across the nation.
 - These workshops provide **practical training and best practices for managing cyber threats**, adopting secure IT frameworks, and strengthening digital governance.

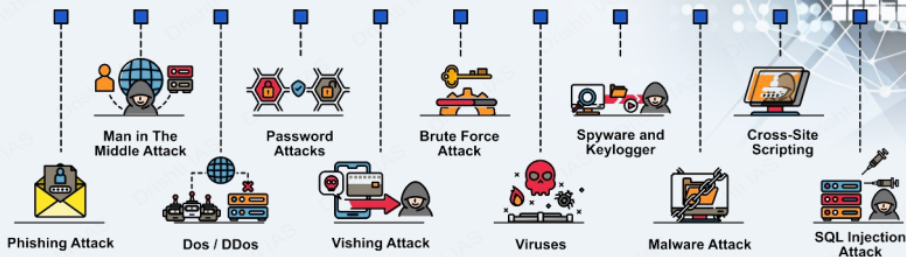
Digital Personal Data Protection Act, 2023

- It aims to **protect the digital personal data of individuals in India** and regulate the collection, storage, processing, and sharing of such data.
- **Key features:**
 - Establishes a **Data Protection Board of India** to enforce compliance.
 - Requires **explicit consent** for data collection and processing.
 - **Mandates data fiduciaries** to implement reasonable security safeguards.

CYBER SECURITY

Cybersecurity refers to any technology, measure, or practice for preventing cyberattacks or mitigating their impact.

CYBER SECURITY ATTACKS



'Crime in India' Report 2022 (NCRB) highlighted 24.4% surge in cybercrimes in India since 2021.

Common Cybersecurity Myths

- Strong passwords alone are adequate protection
- Major cybersecurity risks are well-known
- All cyberattack vectors are contained
- Cybercriminals don't attack small businesses

Cyber Warfare

- Digital attacks to disrupt vital computer systems, to inflict damage, death, and destruction.

CYBER THREAT ACTORS

CYBER THREAT ACTOR	MOTIVATION
NATION-STATES	GEOPOLITICAL
CYBERCRIMINALS	PROFIT
HACKTIVISTS	IDEOLOGICAL
TERRORIST GROUPS	IDEOLOGICAL VIOLENCE
THRILL-SEEKERS	SATISFACTION
INSIDER THREATS	DISCONTENT

Types of Cybersecurity

- Critical infrastructure security (Robust access controls)
- Network security (Deploying firewalls)
- Application security (Code reviews)
- Cloud Security (Tokenization)
- Information security (Data masking)

Recent Major Cyber Attacks

- WannaCry Ransomware Attack (2017)
- Cambridge Analytica Data Breach (2018)
- Financial data of 9M+ cardholders, including SBI, leaked (2022)

Regulations & Initiatives

- International:**
 - UN Group of Governmental Experts (GGE) on Advancing Responsible State Behaviour in Cyberspace
 - NATO's Cooperative Cyber Defense Centre of Excellence (CCDCOE)
 - Budapest Convention on Cybercrime, 2001 (India not a signatory)
- India:**
 - IT Act, 2000 (Sections 43, 66, 66B, 66C, 66D)
 - National Cyber Security Policy, 2013
 - National Cyber Security Strategy 2020
 - Cyber Surakshit Bharat Initiative
 - Indian Cyber Crime Coordination Centre (I4C)
 - Computer Emergency Response Team-India (CERT-In)

Steps Needed for Cyber Security

- Network Security
- Malware Protection
- Incident Management
- User Education and Awareness
- Secure Configuration
- Managing User Privileges
- Information Risk Management Regime



Impact of PMUY in Jammu and Kashmir | Jammu & Kashmir | 14 Nov 2024

Why in News?

A study was conducted to assess the impact of [Pradhan Mantri Ujjwala Yojana \(PMUY\)](#) in Jammu and Kashmir.

- Under the scheme the **government has distributed 10.3 crore [Liquified Petroleum Gas connections](#)**.

Key Points

▪ Methodology and Aim of the Study:

- The study **collected primary data from 820 households across 48 villages** in **Kulgam and Rajouri**, two relatively disadvantaged districts in J&K.
 - This study investigates the **PMUY's impact on clean cooking fuel adoption in the districts**, focusing on socio-economic and health outcomes, barriers to exclusive LPG use, and the role of awareness.
- The sample includes representation from various economic groups:
 - [Above Poverty Line \(APL\)](#), [Below Poverty Line \(BPL\)](#), and [Antyodaya Anna Yojana \(AAY\)](#) households.

▪ Findings of the Study:

◦ LPG Connection Adoption:

- In rural J&K, 85.07% of households have official LPG connections, with **68% of these obtained through the PMUY**.
- Only 4.41% of rural households, primarily in hilly areas like Rajouri, lack access to LPG, while 10.53% rely on unofficial connections.
- Despite increased LPG availability, [traditional cooking methods](#) remain common:
 - **92% of households still use traditional chulhas**, and 85% engage in fuel stacking by using both solid fuels and LPG.

◦ Health Benefits for PMUY Beneficiaries:

- PMUY adoption has led to **significant health improvements for women**, by reducing exposure to smoke from traditional fuels.
- Among **BPL households, respiratory issues were reduced**.
- **AAY households** also saw **reduced health issues** from 13% among non-beneficiaries to 10% for beneficiaries.

◦ Barriers to Exclusive LPG Usage:

- **Lack of awareness** remains a barrier, with 47% of households unaware of solid fuel health risks.
- The **cost of LPG refills is prohibitive for many, leading to fuel stacking** with cheaper solid fuels.
 - Fuel stacking remains common in 85% of households, highlighting the need for additional financial support.

◦ Recommendations:

- Expanding the **LPG distribution network in rural areas** and providing additional financial support for refills can further promote clean fuel adoption and reduce reliance on solid fuels.

Pradhan Mantri Ujjwala Yojana (PMUY)

▪ About:

- The [Ministry of Petroleum and Natural Gas](#) introduced the '**Pradhan Mantri Ujjwala Yojana**' (PMUY) as a flagship scheme with the objective of making **clean cooking fuel such as LPG available to the rural and deprived** households which were otherwise using traditional cooking fuels such as firewood, coal, cow-dung cakes etc.
 - Usage of traditional cooking fuels had detrimental impacts on the health of rural women as well as on the environment.

▪ Objectives:

- Empowering women and protecting their health.
- Reducing the number of deaths in India due to unclean cooking fuel.
- Preventing young children from a significant number of acute respiratory illnesses caused due to indoor air pollution by burning fossil fuel.

▪ Features:

- The scheme provides a **financial support of Rs 1600 for each LPG connection to the BPL households.**
 - Along with a deposit-free LPG connection, [Ujjwala 2.0](#) will provide the first refill and a Stove, free of cost to the beneficiaries.
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Earthquake in Jammu and Kashmir | Jammu & Kashmir | 14 Nov 2024

Why in News?

Recently, an [earthquake](#) with a magnitude of 5.2 struck Jammu and Kashmir, but **no loss of life or damage to property was reported.**

- The earthquake **originated in the Afghanistan region**, with its tremors reaching the Kashmir Valley.

Key Points

- An earthquake is a natural phenomenon characterised by a **sudden shaking of the ground caused by the passage of seismic waves** through Earth's rocks.
- The vibrations called seismic **waves are generated from earthquakes** that travel through the Earth and are recorded on instruments called **seismographs.**
 - The **location below the earth's surface where the earthquake starts** is called the **hypocenter**, and the **location directly above it** on the surface of the earth is called the **epicenter.**

EARTHQUAKE



ABOUT

- Shaking of the earth; caused due to release of energy, generating **seismic waves in all directions**

EARTHQUAKE WAVES

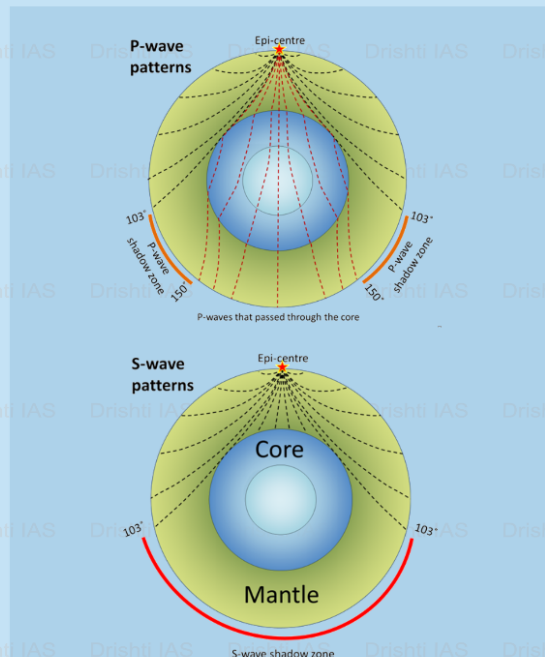
- Body Waves:** Move in all directions travelling through the body of the earth
 - P Waves:** Move faster, First to arrive at surface, Similar to sound waves, Travel through gaseous, liquid and solid materials
 - S Waves:** Arrive at surface with some time lag, Travel only through solid materials
- Surface Waves:** Last to report on seismographs, More destructive, Cause displacement of rocks
 - Love Waves:** Same motion as S-waves (horizontal) without vertical displacement, Sideways motion perpendicular to the direction of propagation, Faster than Rayleigh waves
 - Rayleigh Waves:** Cause the ground to shake in an elliptical pattern, Spread out the most of all seismic waves, Move vertically and horizontally in a vertical plane

HYPOCENTER

- Location where the earthquake starts (below earth's surface)

EPICENTER

- Location right above the Hypocenter (on the earth's surface)



CAUSES OF EARTHQUAKES

- Release of energy along a Fault/Fault Zones** (break in the crustal rocks)
- Movement of **tectonic plates (most common)**
- Volcanic eruption** (stress changes in rock-injection/withdrawal of magma)
- Human activities** (mining, explosion of chemical/nuclear devices etc.)

MEASURING EARTHQUAKE

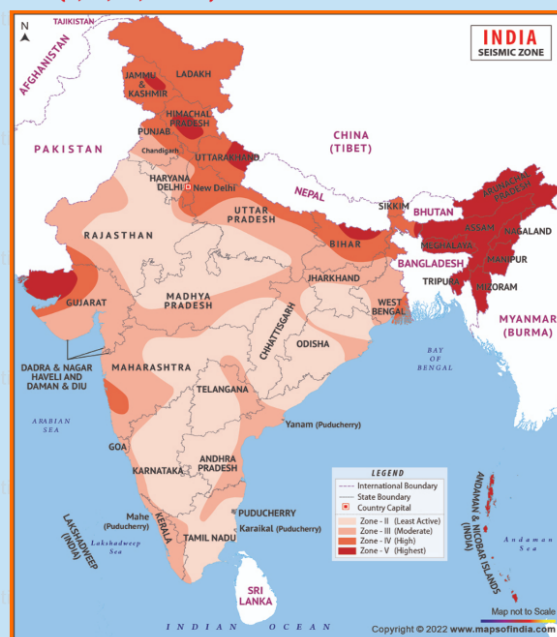
- Seismometers** - Measures seismic waves
- Richter Scale** - Measures magnitude (energy released; range: 0-10)
- Mercalli** - Measures intensity (visible damage; range: 1-12)

DISTRIBUTION

- Circum-Pacific Belt** - 81% of earthquakes
- Alpide Earthquake Belt** - 17% of the largest earthquakes
- Mid-Atlantic Ridge** - Mostly submerged underwater

EARTHQUAKE IN INDIA

- India is **one of the highly earthquake affected countries** due to the presence of technically active mountains - the Himalayas.
- India has been divided into **4 seismic zones (II, III, IV, and V)**



Leopard Died in Bandhavgarh Tiger Reserve | Madhya Pradesh | 14 Nov 2024

Why in News?

Recently, a [leopard](#) died at Madhya Pradesh's [Bandhavgarh Tiger Reserve \(BTR\)](#).

- Earlier a **group of elephants had also died** in the BTR **due to toxicity** from over consumption of [fungal-infected kodo millet plants](#).

Key Points

▪ About Leopard:

- The leopard (*Panthera pardus*) is the smallest of the Big Cat family (of **genus Panthera** namely the [Tiger](#), [Lion](#), [Jaguar](#), **Leopard**, and [Snow Leopard](#)), and is known for its ability to adapt in a variety of habitats.
- A **nocturnal animal**, feeds on smaller species of herbivores found in its range, such as the chital, hog deer and wild boar.

▪ Melanism in Leopards:

- Melanism is a common occurrence in leopards, wherein the entire skin of the animal is black in colour, including its spots.
 - A melanistic leopard is often called a [black panther](#) and is mistakenly thought to be a different species.

▪ Geographical Extent:

- Members of the cat family, leopards live in Asia, **sub-Saharan Africa**, Southern Russia, and the Indian subcontinent.
 - The **Indian leopard (*Panthera pardus fusca*)** is found extensively across the Indian subcontinent.

▪ Population in India:

- As per the '[Status of Leopards in India, 2022](#)', India's leopard population rose by **8% from 12,852 in 2018 to 13,874 in 2022**.
 - About **65% of the leopard population** is present outside protected areas in the **Shivalik landscape**. Only about a **third of the leopards are within protected areas**.
- **Madhya Pradesh has the highest number of leopards (3,907)**, followed by Maharashtra, Karnataka, and Tamil Nadu.

▪ Threat:

- Habitat loss
- [Poaching](#)
- [Human-wildlife conflict](#)

▪ Protection Status:

- [IUCN Red List](#): Vulnerable
- [CITES](#): Appendix I
- [Wildlife Protection Act 1972](#): Schedule I

INTERNATIONAL BIG CAT ALLIANCE

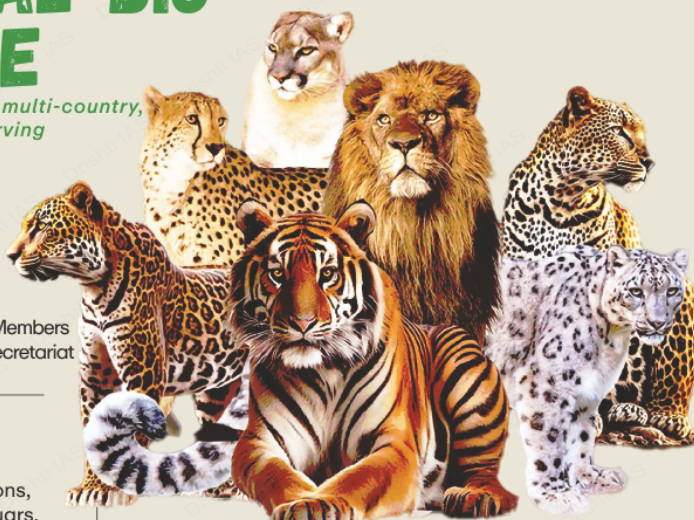
The International Big Cat Alliance is a multi-country, multi-agency coalition aimed at conserving big cat species and their habitats.

Launched by
India (2023)

Headquarters
India

Member states
96 countries

Structure
Consists of Assembly of Members
Standing Committee & Secretariat



FUNCTIONS

- ⌚ Secure the future of big cats (Tigers, Lions, Leopards, Snow Leopards, Pumas, Jaguars, and Cheetahs)
- ⌚ Mitigate the adverse effects of climate change
- ⌚ Advocate for policy initiatives
- ⌚ Attain the United Nations-mandated Sustainable Development Goals

THREATS TO BIG CATS

- ⌚ Poaching
- ⌚ Human-Leopard conflict
- ⌚ Habitat loss & fragmentation
- ⌚ Climate change & Deforestation

Conservation Status of Big Cats

Species	Scientific Name	IUCN Red List	CITES	Indian Wildlife (Protection) Act, 1972
Tigers	<i>Panthera tigris</i>	Endangered	Appendix-I	Schedule-I
Lions	<i>Panthera leo</i>	Vulnerable	Appendix-I	Schedule-I
Leopards	<i>Panthera pardus</i>	Vulnerable	Appendix-I	Schedule-I
Snow Leopards	<i>Panthera uncia</i>	Vulnerable	Appendix-I	Schedule-I
Pumas	<i>Puma concolor</i>	Least Concerned	Appendix II (P. c. Costaricensis and cougar: Appendix-I)	NA
Jaguars	<i>Panthera onca</i>	Near Threatened	Appendix-I	NA
Cheetahs	<i>Acinonyx jubatus</i>	Vulnerable	Appendix-I	Schedule-I

Other Conservation Efforts in India

- Project Tiger (1973)
- Project Snow Leopard (2009)
- Asiatic Lion Reintroduction Project (2004)
- Project Cheetah (2022)



New SC Reservation Categories in Haryana | Haryana | 14 Nov 2024

Why in News?

Recently, the Chief Minister of Haryana implemented **sub-classification within** the [Scheduled Castes](#)

(SC) for reservation in government jobs.

Key Points

- **Supreme Court Ruling on SC Sub-Classification:**
 - On 1st August 2024, the **Supreme Court** ruled that **states have the constitutional authority to create sub-classifications within the Scheduled Castes (SC) category**, acknowledging its social diversity.
 - Following the ruling, the **Haryana government approved** the SC sub-classification in its first cabinet meeting.
- **Sub-Divisions in Haryana:**
 - The **Haryana State Commission for Scheduled Castes** recommended dividing SC reservations into **two categories**:
 - **Deprived Scheduled Castes (DSC):** It includes **36 castes**, such as Dhanaks, Balmikis, Mazhabi Sikhs, and Khatiks, which would receive 50% of the SC reservation quota in jobs due to inadequate representation.
 - **Other Scheduled Castes (OSC):** It includes castes like Chamar, Jatia Chamar, Rehgar, Raigar, Ramdasi, Ravidasi, Jatav, Mochi, and Ramdasia.
- **Educational Quota for DSC in Haryana:**
 - In 2020, Haryana enacted the **Scheduled Castes (Reservation in Admission in Educational Institutions) Act**, reserving **50% of SC seats in higher education institutions** for the **DSC category**.

PDF Reference URL: <https://www.drishtias.com/statepcs/14-11-2024/print>

