



LGBTIQ



LGBTQ+

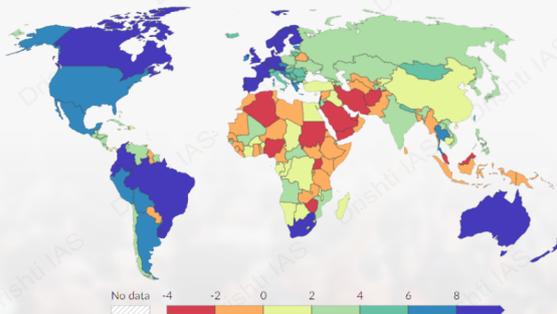
LGBTQ+ refers to a broad category of people, including those who identify as lesbian, gay, bisexual, transgender, intersex, and queer. The terminology used varies widely depending on historical, cultural, and societal contexts.

Discrimination Against LGBTQ+ based on

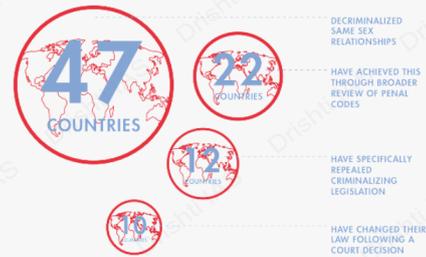
- Sexual orientation
- Gender expression
- Gender identity
- Sex characteristics

State of LGBTQ+ Rights Globally

- LGBT+ rights index, 2019: The index captures to which extent lesbians, gay, bisexual, transgender and other people outside traditional sexuality and gender categories have the same rights as straight and cisgender people. It combines 18 individual policies, such as the legality of same-sex sexual acts, marriage, and gender marker changes. Higher values indicate more rights, negative values regressive policies.



SINCE 1982...



TODAY...



- Pride Month: June
- 11th October: National Coming Out Day

History of LGBTQ+ Rights in India

- 1992: First-ever protests demanding rights for gay individuals
- 1994: An NGO challenged the constitutional validity of Section 377 of IPC. Dismissed in 2001
- 1999: India's first pride parade (Also South Asia's first)
- 2009: Naz Foundation vs. Govt. of NCT Delhi Case (In Delhi HC) - Treating gay sex between consenting adults as a crime gross violation of the fundamental right to privacy
- 2013: Suresh Kumar Koushal vs. Naz Foundation- SC overturned Delhi HC ruling
- 2015: A private member's bill in Lok Sabha seeking decriminalizing homosexuality was introduced
- 2017: Justice K. S. Puttaswamy vs. Union of India (UoI)- SC ruled privacy a fundamental right
- 2018: Navtej Singh Johar vs. UoI- SC ruled Section 377 unconstitutional
- 2019: Transgender Persons (Protection of Rights) Act- To provide protection of rights of transgender persons and their welfare.

Present status of Same-Sex Marriage

- 2023: Supriyo vs. UoI- SC refused to grant legal status to same-sex marriage and denied same-sex marriage as a fundamental right



Drishti IAS

Worker Productivity and Economic Growth

For Prelims: Worker Productivity and Economic Growth, Labor Productivity, [Second World War](#), Make in India, Startup India.

For Mains: Worker Productivity and Economic Growth, Indian Economy and issues relating to planning, mobilization of resources, growth, development and employment.

Source: [TH](#)

Why in News?

Recently, one of the Industry Leaders, has sparked a debate over **Worker Productivity and Economic Growth** by urging young Indians to [work 70 hours per week](#).

- He cited Japan and Germany as examples of countries that grew because their citizens worked harder and for longer hours to rebuild their nations in the aftermath of the [Second World War](#).

What is Worker Productivity?

▪ About:

- The only conceptual difference between the Worker Productivity and Labor Productivity is that the 'work' in worker productivity describes **mental activities while the 'work' in labour productivity is mostly associated with manual activities**.
- Productivity of an activity is usually measured as the quantum of **output value per unit of labour (time) cost at a micro level**.
- At a **macro level**, it is measured in terms of the labor-output ratio or change in Net Domestic Product (NDP) per worker in each sector (where working hours are assumed to be 8 hours per day).

▪ Measuring Intellectual Worker Productivity:

- In certain sectors, particularly those involving intellectual labor, evaluating the value of output can be inherently challenging.
 - As a result, **worker productivity is often approximated** based on worker income, which can create **complications when attempting to correlate increased working hours** with higher productivity, particularly if workers don't receive fair compensation for their additional efforts.

▪ Role of Skill in Productivity:

- Productivity is not just about time, **it's about skill**. By investing in education, **training, health**, and other aspects of Human Capital, workers can become more efficient and create more value in the same amount of time.
- So, working fewer hours **doesn't necessarily reduce output**; it can actually **improve workers' quality of life**.
 - The economy can still grow, even if **nominal wages remain the same**, as long as workers become more skilled and productive.

Is There a Link Between Worker Productivity and Economic Growth?

- While an increase in productivity made through any sector is likely to affect the value added and

the accumulation or growth in the economy, the **relationship between the two is quite complex.**

- During the period 1980 to 2015, India's **Gross Domestic Product (GDP)** expanded significantly, indicating **robust economic growth**. However, this economic growth did not uniformly benefit all segments of society.
 - In 1980, India's GDP was about USD 200 billion, which by 2015 exceeded USD 2,000 billion.
 - However, when looking at income distribution, the **middle-income group's share in the national income decreased from 48% to 29%**, and the low-income group's share dropped from 23% to 14%, during 1980-2015.
 - In contrast, the **top 10% income group saw their share increase from 30% to 58%**, indicating a growing Income Gap in the country during this period.
- This income inequality and skewed **distribution of prosperity among different income groups** is not explained by productivity but by poor labor laws, hereditary transfer of wealth, and exorbitant pay packages.

What are the Government Schemes to Improve Productivity and Efficiency in India?

- **Skill Development Initiatives:** The government has launched various skill development programs like [Pradhan Mantri Kaushal Vikas Yojana \(PMKVY\)](#), [National Skills Qualifications Framework \(NSQF\)](#) and [Recognition of Prior Learning \(RPL\)](#) to enhance the employability of the workforce.
- **Digital India:** The [Digital India](#) initiative aims to boost efficiency through digitalization and increased access to online services, reducing bureaucracy and enhancing productivity.
- **Make in India:** [Make in India](#) campaign encourages investment in manufacturing and promotes economic growth, creating job opportunities and enhancing productivity.
- **Startup India:** [Startup India](#) fosters entrepreneurship, the government introduced Startup India, offering support and incentives to startups and small businesses.
- **Ease of Doing Business Reforms:** [EoDB](#) reforms aim to simplify regulations, streamline business processes, and make it easier for businesses to operate, thereby increasing productivity.
- **National Industrial Corridor Development:** Developing [Industrial Corridors](#) across the country helps attract investment, create jobs, and stimulate economic growth.
- **Incentives for Research and Innovation:** Programs like [Atal Innovation Mission and Biotechnology Industry Research Assistance Council \(BIRAC\)](#) provide support and incentives for research and innovation.
- **Tax Reforms:** Implementation of the [Goods and Services Tax \(GST\)](#) simplifies taxation and boosts efficiency for businesses.

Does India have Low Worker Productivity?

- India's worker productivity isn't necessarily low, despite income-based misconceptions. The decline in **wage shares and the rise in profits since the 1980s can be attributed to various factors**, including informal employment, labor laws, and unfavorable regulations for workers.
- Kronos, a [global workforce management](#) company, has recognized Indian employees as one of the most hardworking employees in the world.
 - On the contrary, India ranks low in terms of average monthly wages.

Way Forward

- India presents a unique case and any arbitrary comparison **with others would only lead to dubious analytical inferences** and fallacious policy prescriptions.
 - For example, Japan and Germany are **neither comparable in terms of the size and quality of the labour force** nor in terms of the nature of their technological trajectories or their socio-cultural and political structures.
- Enhancing social investments, focusing on exploring domestic consumption potential for increased

productivity with a human centric assessment of development achievements is the **way to a more sustainable and desirable outcome.**

Aquaculture Crop Insurance

For Prelims: Aquaculture Crop Insurance, [Pradhan Mantri Matsya Sampada Yojana \(PMMSY\) scheme](#), Shrimp farming, [Fisheries and Aquaculture Infrastructure Development Fund \(FIDF\)](#), [Blue Revolution](#).

For Mains: Aquaculture Crop Insurance, its Need and Challenges, Major crops cropping patterns in various parts of the country.

Source: [PIB](#)

Why in the News?

Recently, the Ministry of Fisheries, Animal Husbandry & Dairying has discussed the technical challenges in the implementation of the **Aquaculture Crop Insurance scheme for Shrimp and Fish** farming under the [Pradhan Mantri Matsya Sampada Yojana \(PMMSY\) scheme](#).

- To mitigate the risks faced by aqua farmers, [NFDB \(National Fisheries Development Board\)](#), which is the nodal agency for implementation of PMMSY, proposed to implement the Aquaculture Crop Insurance scheme.
- The Scheme aims to provide basic cover for brackish water shrimp and fish on pilot basis for one year in the selected **States of Andhra Pradesh, Bihar, Gujarat, Madhya Pradesh and Odisha.**

What is Aquaculture?

- **About:**
 - The term aquaculture **broadly refers to the cultivation of aquatic organisms** in controlled aquatic environments for any commercial, recreational or public purpose.
 - The breeding, rearing and harvesting of plants and animals takes place in all **types of water environments** including ponds, rivers, lakes, the ocean and man-made “closed” systems on land.
- **Purposes:**
 - Food production for human consumption,
 - Rebuilding of populations of threatened and endangered species,
 - Habitat restoration,
 - Wild stock enhancement,
 - Production of baitfish, and
 - Fish culture for zoos and aquariums.

Note

Shrimp farming is an aquaculture-based activity in marine or freshwater environments to produce **shrimp for human consumption.**

- The estimated brackish water area suitable for undertaking shrimp cultivation in India is around 11.91 lakhs hectare (ha) spread over 10 states and union territories viz; West Bengal, Orissa, Andhra Pradesh, Tamil Nadu, Pondicherry, Kerala, Karnataka, Goa, Maharashtra and Gujarat.

- Of this only around 1.2 lakhs ha are under shrimp farming now and hence a lot of scope exists for entrepreneurs to venture into this field of activity.



What is the Need for Aquaculture Insurance?

- **Aquaculture Insurance:**
 - Aquaculture insurance is a type of insurance specifically **designed to provide coverage and financial protection** to individuals or entities involved in aquaculture, which is the **farming of aquatic organisms**, such as fish, shrimp, and other aquatic species, for commercial purposes.
 - This type of **insurance is tailored to address the unique risks and challenges** faced by aquaculture operations.
- **Need for Aquaculture Insurance:**
 - **Risk Management:**
 - Aquaculture is susceptible to various risks, including diseases, adverse weather conditions, water quality issues, and natural disasters.
 - These risks can **lead to significant financial losses for aquaculture farmers**. Insurance helps manage and mitigate these risks by providing financial compensation in the event of such adverse events.
 - **Investment Protection:**
 - Insurance **safeguards substantial investments in infrastructure**, ensuring that the financial resources **put into the operation are protected** against unforeseen events.
 - **Market Confidence:**
 - The availability of aquaculture insurance **can boost investor and farmer confidence** in the industry and encourage individuals to **invest in aquaculture and expand their operations**.
 - **Sustainability:**
 - Insurance can promote the sustainability of aquaculture operations by providing a **means to recover from unexpected setbacks**, this, in turn, can **encourage responsible and sustainable practices** in aquaculture to reduce risks and insurance premiums.

What are the Challenges in Implementing the Aquaculture Crop Insurance Scheme?

- **Data Collection and Assessment:**
 - Assessing the risks and setting appropriate insurance premiums require accurate and up-to-date data.
 - Gathering such data for aquaculture can be challenging, as it involves **complex environmental and biological factors.**
- **Awareness and Education:**
 - Many fishers and farmers may not fully understand the concept of insurance. Raising awareness and providing education on the benefits and processes of the insurance scheme **is essential for its successful implementation.**
- **Adverse Selection:**
 - There is a risk of adverse selection, where only those at high risk choose to participate in the insurance scheme, leading to unsustainable premium levels. Balancing the participant pool to include a diverse range of risk levels is a challenge.
 - The administration of the insurance scheme, including the timely processing of claims and premium payments, can be operationally complex.

What are the Government Initiatives Related to Aquaculture?

- [Fisheries and Aquaculture Infrastructure Development Fund \(FIDF\)](#)
- [Blue Revolution](#)
- [Extension of Kisan Credit Card \(KCC\)](#)
- [Marine Products Export Development Authority.](#)
- [Seaweed Park](#)

Way Forward

- The Aquaculture Crop Insurance scheme under PMSSY aims to reduce risks for fishers and aquaculture farmers, promote investment, and enhance food security. However, it faces challenges related to data, awareness, adverse selection, and administration.
- The involvement of key stakeholders and the establishment of a governing structure are critical for its successful implementation and sustainability.
- A governing structure is **essential to ensure the successful implementation of the Aquaculture Crop Insurance scheme** for shrimp and fish farming.

UPSC Civil Services Examination Previous Year Question (PYQ)

Mains:

Q. Defining the blue revolution, explain the problems and strategies for pisciculture development in India. (2018)

Q. How do subsidies affect the cropping pattern, crop diversity and economy of farmers? What is the significance of crop insurance, minimum support price and food processing for small and marginal farmers? (2017)

National Security Strategy

For Prelims: [National Security Council Secretariat \(NSCS\)](#), Comprehensive National Security,

For Mains: Need for National Security Strategy amidst rising internal and external security threats in the country.

Source: [IE](#)

Why in News?

After years of deliberations, India has recently started the process of bringing in a [National Security Strategy](#) and the [National Security Council Secretariat \(NSCS\)](#) has started collating inputs from several Central ministries and departments.

What is the National Security Strategy?

- **Understanding National Security Strategy:**
 - A National Security Strategy (NSS) is a comprehensive document that lays out a **country's security objectives and the means** to achieve them.
 - The NSS is a dynamic document that **undergoes periodic updates to adapt to changing circumstances** and emerging challenges.
- **Scope of National Security Strategy:**
 - It addresses a wide range of modern challenges and threats. This includes **not only outdated threats but also newer, modern warfare issues that have become increasingly significant in today's interconnected world.**
 - It encompasses **not only traditional threats**, such as military and defense-related issues, **but also non-traditional ones** like financial and economic security, food and energy security, information warfare, **vulnerabilities in [critical information infrastructure](#), [supply chain disruptions](#), and environmental challenges.**
- **Role of National Security Strategy in India:**
 - By providing a holistic view of India's national security landscape and a roadmap to address aforementioned challenges, the National Security Strategy **will guide critical defense and security reforms**, making it an essential tool in safeguarding the nation's interests.

What is India's Need for National Security Strategy?

- **The Need for a National Security Strategy in India:**
 - A National Security Strategy for India has been a recurring topic in military discussions. However, **despite various attempts, it has yet to be formulated** and implemented due to a lack of a cohesive, whole-of-government effort, and the government has deliberately not made its national security objectives public.
- **Urgency Amid Complex Threats and Geopolitical Uncertainties:**
 - Given the multifaceted nature of emerging threats and the **increased uncertainties in global geopolitics**, there is a pressing need to develop a national security strategy in India.
- **Calls for Revising Existing Directives and the Role of Military Reforms:**
 - Former Army Chief General has emphasized the **outdated nature of the current political direction for the Armed Forces** and the necessity of revising it.
 - The only political direction for the Armed Forces in existence is the Defence Minister's operational Directive of 2009.
 - Experts have underscored that significant military reforms like the **[theaterisation of armed forces](#)** should stem from a **comprehensive national security strategy.**
 - The absence of such a strategy has been likened to attempting military reforms without a clear roadmap.
- **Countries Having National Security Strategy:**
 - **Most developed countries with an advanced military and security infrastructure**

have a National Security Strategy in place, updated from time to time.

- The US, the UK and Russia have published national security strategies.
- **China** also has such a strategy in place, called the Comprehensive National Security, which is closely tied to its governance structure.
- **Pakistan**, too, has brought out a National Security Policy 2022-2026, underlining its national security objectives and priority areas.

Way Forward

▪ Bringing Changes to the National Security Policy:

- **Clarifying the Objectives:** The National Security Strategy in the 21st century shall define what assets are required to be defended and the identity of opponents who seek to overawe the people of a target nation by unfamiliar moves to cause disorientation of people.
- **Setting Priorities:** The national security priorities will require new departments for supporting several frontiers of innovation and technologies; **hydrogen fuel cells, desalination of seawater, thorium for nuclear technology, anti-computer viruses, and new immunity-creating medicines.**
- **Changing the Strategy:** The strategy required for the new national security Strategy will be to **anticipate the enemies in many dimensions and by demonstrative but limited pre-emptive strikes** by developing a strategy of deterrence of the enemy.
 - For India, it will be **China's cyber capability factor** which is the new threat for which it has to devise a new strategy.

▪ Role of Policy Makers:

- The government should carve out a separate budget for **cybersecurity.**
 - Creating a central body of cyber warriors to counter state-sponsored hackers.
- India's talent base in **software development** should be harnessed by providing career opportunities.
- Bootstrapping the **cybersecurity capability programme** in states through central funding.

▪ Defense, Deterrence and Exploitation:

- These are the three main components of any national strategy to combat threats:
 - **Critical information infrastructure** must be defended and individual ministries and private companies must also put procedures in place to honestly report breaches.
 - Deterrence in National Security is a hugely complex issue. For Ex- **Nuclear deterrence is successful** because there is clarity on the capability of adversaries but national security strategy lacks any such clarity.
 - The preparation for a robust strategy will have to start with the **Indian military gathering intelligence, evaluating targets and preparing the specific tools** for ensuring national security in the long term.

UPSC Civil Services Examination Previous Year Question (PYQ)

Prelims:

Q. In the Constitution of India, promotion of international peace and security is included in the (2014)

- (a) Preamble to the Constitution
- (b) Directive Principles of State Policy
- (c) Fundamental Duties
- (d) Ninth Schedule

Ans: (b)

Direct Listing on Foreign Exchanges

For Prelims: Direct Listing, Depository Receipt, [Initial Public Offering \(IPO\)](#)

For Mains: Foreign Exchanges in India, Capital Market, Growth & Development

[Source: IE](#)

Why in News?

The Indian government has permitted certain **Indian companies to directly list on foreign stock exchanges** to access global capital.

- This provision, effective since 30th October 2023, was introduced through the [Companies \(Amendment\) Act, 2020](#).
- It allows certain classes of domestic public companies to list their securities on foreign stock exchanges, including the [GIFT International Financial Services Centre \(IFSC\)](#) in Ahmedabad, Gujrat, with exemptions from certain procedural requirements (such as prospectus, share capital, beneficial ownership requirements, and failure to distribute dividends).

Note

- An IFSC is a financial centre that caters to customers outside the jurisdiction of the domestic economy.
- The IFSC in India is regulated by the **International Financial Services Centres Authority (IFSCA)**, a statutory authority that was established under the [International Financial Services Centres Authority Act, 2019](#).
 - It is headquartered at GIFT City, Gandhinagar in Gujarat.
- At present, the GIFT IFSC is the maiden IFSC in India.
- In IFSC, all transactions must be in **foreign currency (except INR)**. However, administrative and statutory expenses can be conducted in INR.

What is Direct Listing?

- Direct listing is a process by which a company can **list its shares on a foreign stock exchange** without issuing new shares or raising capital from investors.
- Direct listing is different from the **traditional initial public offering (IPO)**, where a company sells a portion of its shares to the public and raises funds from investors.
- Direct listing is also different from the **depository receipt (DR) route**, where a company issues its shares to a custodian bank, which then issues DRs to foreign investors.
 - DRs are negotiable certificates that represent the **underlying shares of the company and trade on a foreign exchange**.
- Direct listing allows a company to access a larger and more diverse pool of investors, enhance its visibility and brand value, and improve its corporate governance and compliance standards.

How do Indian Companies Currently List on Foreign Exchanges?

- Currently, Indian companies list on foreign bourses using depository receipts, including **American Depository Receipts (ADRs)** and **Global Depository Receipts (GDRs)**.

- To list on foreign stock exchanges, Indian companies entrust their shares to an **Indian custodian, who then issues depository receipts (DRs)** to foreign investors.
- Between **2008 and 2018, 109 companies raised over Rs 51,000 crore** through ADRs/GDRs.
- However, after 2018, no Indian companies pursued overseas listings through this route.

Note

- ADR refers to a negotiable certificate issued by a **U.S. depository bank** representing a specified number of shares, usually one share of a foreign company's stock.
- GDRs is a certificate issued by a depository bank that represents shares in a **foreign company** and deposits them in an account. GDRs are mostly traded on the European markets.

What are the Benefits of Direct Foreign Listing?

- Access to a **larger and more liquid market**, which can increase the demand and valuation of their shares.
- Ability to reach out to a wider and more sophisticated **investor base**, which can enhance their reputation and credibility.
 - **Startups and unicorns may benefit** from this avenue of raising funds and increasing their global profile.
- Savings on the **costs and time involved in the IPO or DR process**, such as underwriting fees, listing fees, legal fees, etc.
- Avoidance of the **dilution of ownership and control** that comes with issuing new shares or DRs.
- Exposure to the best practices and regulations of the foreign jurisdiction can improve their governance and transparency.

What are the Challenges Involved in Direct Foreign Listing?

- **Compliance** with the laws and rules of the **foreign jurisdiction**, which may be different from or more stringent than those in India.
- Challenges in direct foreign listings include **valuation issues**, as global investors may **not offer the same valuations as in India**, potentially impacting the company's market perception and pricing.
- Exposure to the **currency fluctuations and market volatility** of the foreign exchange can affect their share price and returns.
 - Potential conflicts or disputes with the existing shareholders, regulators, or tax authorities in India or abroad.
- Clarity is needed on which classes of public companies can use this route, the classes of securities that can be listed, the foreign jurisdictions and permitted stock exchanges for listing, and the exemptions offered to such companies in terms of procedural compliances.

UPSC Civil Services Examination Previous Year Question (PYQ)

Q. Which of the following is issued by registered foreign portfolio investors to overseas investors who want to be part of the Indian stock market without registering themselves directly? (2019)

- (a) Certificate of Deposit
- (b) Commercial Paper
- (c) Promissory Note
- (d) Participatory Note

Ans: (d)

Q. With reference to the Indian economy, consider the following statements: (2020)

1. 'Commercial Paper' is a short-term unsecured promissory note.
2. 'Certificate of Deposit' is a long-term instrument issued by the Reserve Bank of India to a corporation.
3. 'Call Money' is a short-term finance used for interbank transactions.
4. 'Zero-Coupon Bonds' are the interest bearing short-term bonds issued by the Scheduled Commercial Banks to corporations.

Which of the statements given above is/are correct?

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

Ans: (c)

Critical Evaluation of Elephant Corridor Report 2023

For Prelims: [Elephant Corridors](#), [Electrocution](#), Project Elephant, [Wild Life \(Protection\) Act, 1972](#), [Environment \(Protection\) Act, 1986](#), Elephant Reserves.

For Mains: Issues arising out of Design and Implementation of Government Policies and Interventions, Major Takeaways from Elephant Corridors of India, 2023 Report.

Source: [DTE](#)

Why in News?

Several discrepancies have been identified in the recently published [“Elephant Corridors of India, 2023”](#) report by the central government.

What are the Major Discrepancies Observed in the Elephant Corridors of India 2023 Report?

- **Corridor Definition Inconsistencies:** Critics argue that the **initial significance of corridors has been diluted**, as there is a trend to label any area where elephants move as corridors.
 - This has led to the **classification of landscapes and habitats as corridors in the report** and the subsequent surge in the number of elephant corridors.
- **North and Northeast Corridor Discrepancies:** Critics argue that while certain areas in **West Bengal are suitable for elephants** due to small forest patches, most regions elephants traverse in South Bengal are dominated by [agriculture](#).
 - The **report proposes linking these areas to other elephant landscapes**, a departure from the original intent of a corridor.
 - Expansive corridors might escalate human-elephant conflicts.
- **Dangers to Elephants:** Critics argue that the **expansion of elephant ranges** has also led to increased incidents of elephant deaths due to [electrocution](#) and falling into wells.

What are the Project Elephant Directives on Elephant Corridors?

- In **2005-06**, [Project Elephant](#) issued directives to states regarding elephant corridors. It stated that **corridors in forest areas should adhere to the rules outlined in the [Wild Life \(Protection\) Act, 1972](#)**.
 - Meanwhile, areas with revenue and private lands were instructed to comply with the [Environment \(Protection\) Act, 1986](#) as eco-sensitive areas, potentially prohibiting red-category industries.

ELEPHANT

Drishti IAS

4 Main Species of Elephant

Species	Found in	IUCN Red List Status	Habitat
Indian	Asia	EN (CITES - Appendix I, WPA - Schedule I)	Subtropical broadleaf forest, tropical broadleaf moist forest, dry forest, grassland
Sumatran	Asia	CR	Broadleaf moist tropical forests
Savanna (Bush)	Africa	EN	All sub-Saharan Africa except for Central Africa's dense tropical forest
Forest	Africa	CR	Dense Tropical Forests

Indian Elephant (*Elephas maximus*)

Largest Land Mammal on Asian Continent
National Heritage Animal of India

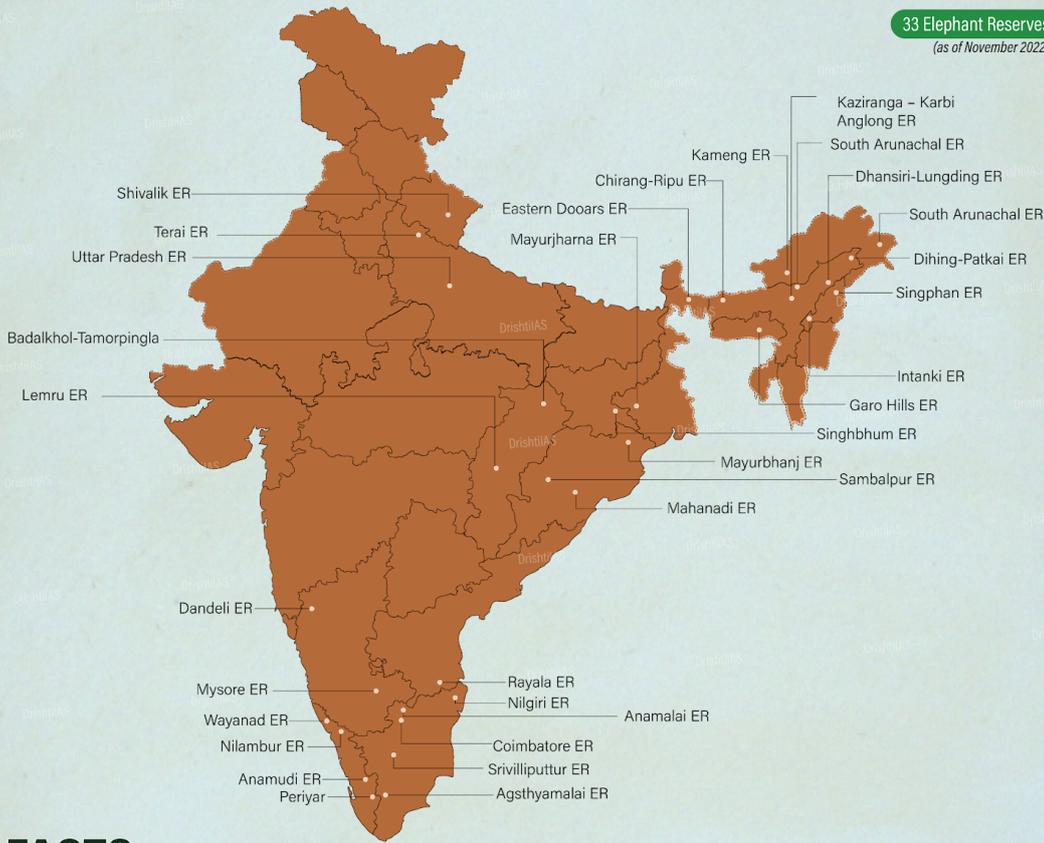
- **Top 5 Indian States by Maximum Elephant Population:** (As per elephant census 2017)
 - Karnataka > Assam > Kerala > Tamil Nadu > Odisha
- **Social Structure:**
 - Female elephants are more social than males; form herd (generally 5-7)
 - Led by the oldest female, the 'matriarch'
 - Males usually live alone
- **Threats:**
 - Habitat Fragmentation
 - Poaching for Ivory
 - Human-Elephant Conflict
 - Mistreatment in Captivity
- **Conservation Efforts:**
 - Gaj Sookhna App (2022)
 - Gaj Yatra (2017)
 - Hathi Mere Sathi campaign (2011)
 - National Elephant Corridor project (2005)
 - Monitoring the Illegal Killing of Elephants (MIKE) Programme (2003)
 - Project Elephant (1992)

What are Elephant Corridors?

- **About:**
 - Elephant corridors are **strips of land** that enable elephant movement between two or more friendly habitats.
- **Major Takeaways from Elephant Corridors of India, 2023 Report:**
 - The report highlighted a **surge of 62 new corridors**, marking a 40% increase since 2010, now **totalling 150 corridors across the nation**.
 - **West Bengal** has the highest number of elephant corridors, totaling 26, constituting **17% of the total corridors**.
 - The **East central region contributes 35% (52 corridors)**, and the **North East region** follows as the **second-largest with 32% (48 corridors)**.
 - **Southern India** registered 32 elephant corridors, representing 21% of the total, while **northern India** has the lowest count of 18 corridors, amounting to 12%.
 - Elephants have expanded their ranges in the **Vidarbha region of Maharashtra** and southern Maharashtra bordering Karnataka.
 - Their presence has also increased in areas such as **Madhya Pradesh within the Sanjay Tiger Reserves and Bandhavgarh**, along with expanded ranges in northern Andhra Pradesh, allowing movement from Odisha.

Elephant Reserves

33 Elephant Reserves
(as of November 2022)



FACTS

- Tamil Nadu and Assam have the highest number (5) of elephant reserves in India.
- The Indian elephant *Elephas maximus* is included in Schedule I of the Indian Wildlife (Protection) Act, 1972 and in Appendix I of CITES.
- Indian Elephant has also been listed in the Appendix I of the Convention of the Migratory Species and as 'Endangered' in the IUCN Red List.
- The elephant was declared the National Heritage Animal of India in 2010.
- MoEFCC provides financial and technical support to major elephant range states in the country through Project Elephant. Project Elephant was launched by the Government of India in the year 1992 as a Centrally Sponsored Scheme.



UPSC Civil Services Examination Previous Year Question (PYQ)

Prelims

Q. With reference to Indian elephants, consider the following statements: (2020)

1. The leader of an elephant group is a female.
2. The maximum gestation period can be 22 months.
3. An elephant can normally go on calving till the age of 40 years only.
4. Among the States in India, the highest elephant population is in Kerala.

Which of the statements given above is/are correct?

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

Rainfall Deficiency in Southern Peninsular India

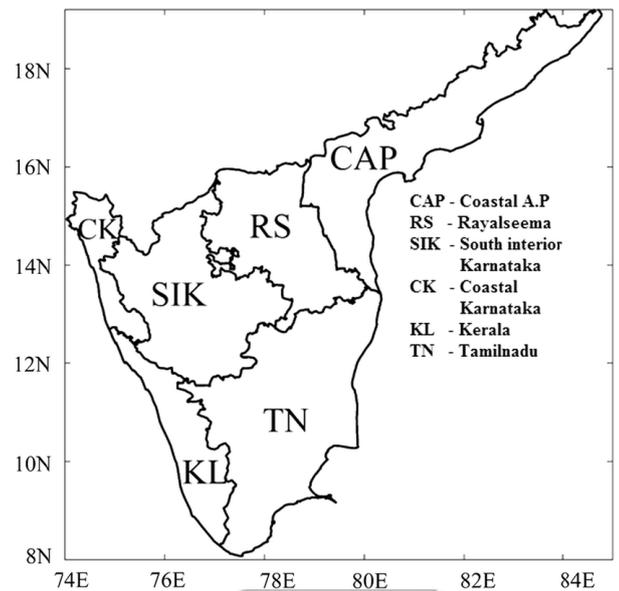
[Source: IE](#)

Why in News?

The [India Meteorological Department \(IMD\)](#) recent analysis regarding the rainfall patterns in Southern peninsular India, spanning 123 years of records, **exposed that the region encountered its sixth driest October in its meteorological history.**

What are the Major Factors Influencing Rainfall Deficiency in Southern Peninsular India ?

- **About:**
 - The Southern Peninsular region encompassing **Kerala, Mahe, South Interior Karnataka, Tamil Nadu, Karaikal, Puducherry, coastal Andhra Pradesh, Yanam and Rayalaseema** received only 74.9mm of rain in October, **which was over 60% below normal.**
- **Factors Influencing Rainfall Deficiency:**
 - **Confluence of [Northeast Monsoon](#) and Cyclone Hamoon:** The commencement of the **northeast monsoon** coincided with the genesis of [Cyclone Hamoon](#), causing a **diversion of moisture away from southern peninsular India.**
 - This altered wind flow patterns and weakened the onset of the northeast monsoon.
 - **El Nino and Indian Ocean Dipole (IOD):** 2023 is an [El Nino year](#) combined with a **positive phase of the [Indian Ocean Dipole \(IOD\)](#).**
 - In such conditions, there is **less rainfall over northern Tamil Nadu** and adjoining areas.
 - Whereas, the southernmost areas of Tamil Nadu and Kerala receive good rainfall in October.



▪ **Cyclone Hamoon:**

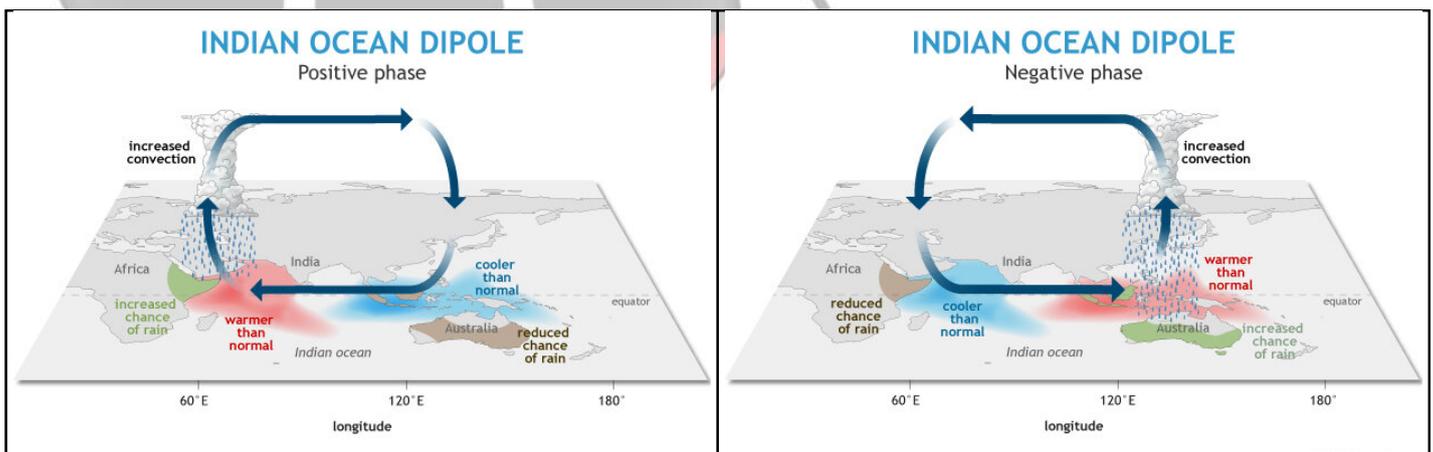
- It was a very severe tropical cyclone that made landfall in Bangladesh on 25th October, 2023.
 - The cyclone formed from a **low-pressure area over the west-central Bay of Bengal.**
- It was **named by Iran**, and the word "Hamoon" is a Persian word that refers to **inland desert lakes or marshlands.**

▪ **El Nino:**

- It is a natural phenomenon that involves a **periodic warming of the surface waters in the equatorial Pacific Ocean.**
 - The word "El Niño" means "Little Boy" in Spanish.
 - It is one of the two phases of a climate pattern called **El Niño-Southern Oscillation (ENSO)**
- Over India, **it has the effect of suppressing the monsoon rainfall.**

▪ **Indian Ocean Dipole (IOD):**

- The **IOD** is an **atmosphere-ocean phenomenon** that occurs in the Indian Ocean.
- It's characterized by a **disparity in sea surface temperatures** between the eastern and western Indian Oceans.



▪ **India Meteorological Department:**

- It was established in 1875.
- It is the **National Meteorological Service** of the country and the principal government agency in **all matters relating to meteorology and allied subjects.**

UPSC Civil Services Examination, Previous Year Question (PYQ)

Prelims

Q. With reference to 'Indian Ocean Dipole (IOD)' sometimes mentioned in the news while forecasting Indian monsoon, which of the following statements is/are correct? (2017)

1. IOD phenomenon is characterized by a difference in sea surface temperature between tropical Western Indian Ocean and tropical Eastern Pacific Ocean.
2. An IOD phenomenon can influence an El Nino's impact on the monsoon.

Select the correct answer using the code given below:

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

Ans: (b)

Devas- ISRO's Antrix Corporation Deal

[Source: IE](#)

Why in News?

The district court of The Hague, Netherlands, rejected India's request to cancel a USD 111 million compensation award to **foreign investors in Devas Multimedia**.

- The payment was awarded by the [United Nations Commission on International Trade Law \(UNCITRAL\) tribunal](#) because a **satellite deal from 2005 with India's ISRO's Antrix Corporation and Devas Multimedia was cancelled in 2011**.
- The Court of Netherlands refused to overturn the award, finding the Indian government liable for improperly terminating the deal.

What is the Case of the Devas-Antrix Deal?

- **The 2005 Devas-ISRO Satellite Deal:**
 - In 2005, [Antrix Corporation](#), the commercial arm of the Indian Space Research Organisation (ISRO), entered a satellite deal with **Devas Multimedia, a Bengaluru start-up**.
 - The deal involved leasing the **S-band on ISRO satellites, GSAT-6 and GSAT-6A**, for 12 years to provide digital multimedia services.

Note

- The S-band is a designation for a part of the **microwave band of the electromagnetic spectrum**.
- The S-band is used for Satellite communication, Radar, Supplying vital real-time data, and High resilience to rain fade and other environmental interference.

- The S-band is used by the shipping, aviation, and space industries. The S-band spectrum is also extremely valuable for mobile broadband services.
- **GSAT-6 and GSAT-6A are high-power S-band communication satellites.**

- **Cancellation of the Satellite Deal:**
 - In 2011, the Indian government abruptly cancelled the deal, citing **national security reasons**.
 - The decision was taken in the midst of the **2G scam** and allegations that the Devas deal involved the handing over of a communication spectrum valued at nearly Rs 2 lakh crore for a pittance.
- **Legal Battles and Compensation Awards:**
 - Foreign investors in Devas Multimedia, pursued compensation through international tribunals.
 - In 2015, the **International Chamber of Commerce (ICC)** arbitration tribunal, awarded Devas Multimedia USD 1.2 billion in compensation.
 - Deutsche Telekom received USD 101 million from the [Permanent Court of Arbitration in Geneva](#).
 - In 2020, three Mauritius-based investors were granted USD 111 million by UNCITRAL.
 - Due to the Indian Government not paying the compensation, Devas filed an appeal in the US and EU to liquidate assets of Indian **Public Sector Undertaking (PSUs) for recovery of penalty**.
- **Indian Government's Challenge:**
 - In 2022, the Indian government challenged the compensation awards, citing a [Supreme Court of India](#) order that upheld **Devas Multimedia's liquidation on fraud charges**.
 - The [Enforcement Directorate](#) and the [Central Bureau of Investigation](#) are currently pursuing cases of [money laundering and corruption](#) in India against Devas and its officials.
- **The Hague District Court's Rejection:**
 - The district court in Hague rejected India's plea to set aside the compensation awards.
 - It ruled that charges of deceit, fraud, and corruption had already been addressed and dismissed during earlier legal proceedings.
 - The Supreme Court of India's judgment was deemed to hold no independent significance.

International Chamber of Commerce (ICC)

- ICC is the world's largest business organization working to promote international trade and responsible business conduct.
- It has been helping to resolve difficulties in international commercial and business disputes to support trade and investment since 1923.
- ICC headquarters is in Paris, France.

Zika Virus

[Source: HT](#)

Why in News?

Recently, the **Karnataka State Health Department** issued an alert following [Zika virus detection](#) in mosquito samples from **Talakayalabetta, Chikkaballapura village**.

- The **Zika virus**, a **mosquito-borne flavivirus**, and its impacts on public health have been a matter of significant concern.

What is Zika Virus?

- **About:** The **Zika virus**, a [mosquito-borne flavivirus](#), that is primarily spread by Aedes mosquitoes, particularly *Aedes aegypti*.
 - Also, it can also be **transmitted from mother to fetus during pregnancy, as well as through sexual contact, transfusion of blood** and blood products.
 - The Zika virus has an [RNA genome](#), and thus a very high potential to accumulate mutations.
 - Genomic studies have suggested that the Zika virus has two lineages: **African and Asian**.
- **History:** Discovered in 1947 in the **Zika forest in Uganda** from infected monkeys, the **first human cases were recorded in 1952 in Uganda and Tanzania**.
 - Outbreaks have occurred across Africa, the Americas, Asia, and the Pacific since 2007.
 - Notable outbreaks have occurred in Indian states like **Kerala and Karnataka** in recent years.
- **Symptoms:** Often asymptomatic; when present, **common symptoms include fever, joint pain, muscle pain**, and headache lasting 2-7 days.
- **Association with Other Conditions:** Linked with **Guillain-Barre syndrome, neuropathy, and myelitis** in adults and children.
 - Also, the **interaction between Zika and dengue viruses significantly impacts disease severity**.
 - Exposure to one can worsen the impact of the other, posing challenges in vaccine development and public health management.
- **Complications:** Infection during pregnancy causes **congenital malformations, such as microcephaly** and other associated conditions.

Note

[Guillain-Barre syndrome](#) is a serious autoimmune disorder that affects the peripheral nervous system. The syndrome affects the nerves responsible for muscle movement, pain, temperature, and touch sensations.

- [Microcephaly](#) is a **birth defect in which babies are born with a smaller than usual head** and underdeveloped brain
- **Treatment and Prevention: No specific treatment available.** Symptomatic relief and medical care advised for worsening conditions.
 - **No vaccine available yet;** prevention focused on **mosquito bite protection**, eliminating breeding sites, and public health initiatives to control mosquito populations.
- **Related Indian Government Initiatives:**
 - **National Guidelines for Zika Virus Disease** under [Integrated Disease Surveillance Programme](#)
 - [Rashtriya Bal Swasthya Karyakram \(RBSK\)](#): It aims to improve the quality of life of children and provide comprehensive care to all children in the community.
 - RBSK involves screening of children from birth to 18 years of age for four Ds:
 - Defects at birth
 - Deficiencies
 - Diseases
 - Development delays including disability

Other Viral Diseases

- | | |
|----------------------------|---------------------------------------|
| ▪ Covid-19 | ▪ Measles and Rubella |
| ▪ Dengue | ▪ Influenza |
| ▪ Nipah | ▪ HIV |

- | | |
|--|---|
| <ul style="list-style-type: none">▪ Ebola▪ Yellow fever▪ Hepatitis▪ Japanese Encephalitis▪ Marburg Virus | <ul style="list-style-type: none">▪ Mpox▪ Chickenpox▪ West Nile Virus▪ Polio▪ Norovirus, Rotavirus and Astrovirus |
|--|---|

UPSC Civil Services Examination, Previous Year Question:

Prelims

Consider the following statements: (2017)

1. In tropical regions, Zika virus disease is transmitted by the same mosquito that transmits dengue.
2. Sexual transmission of Zika virus disease is possible.

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: (c)

Rapid Fire Current Affairs

Bharat Atta Sale to Stabilize Rising Wheat Flour Prices

The Indian government has launched the sale of '**Bharat**' brand **Atta (wheat flour)** with a **maximum retail price (MRP) of Rs 27.50 per kilogram** which is lower than the national average price of Rs 35.93 per kg.

- This initiative is part of the government's **ongoing efforts to stabilize the prices** of essential commodities and provide relief to consumers.
- '**Bharat**' **Atta** will be available through various outlets, including [Kendriya Bhandar](#), [National Agricultural Cooperative Marketing Federation of India Limited \(NAFED\)](#), and **National Cooperative Consumer Federation (NCCF)**, ensuring its accessibility to a broader consumer base.
 - NAFED, founded in 1958, is a leading Indian cooperative organization for **agricultural product procurement and marketing**.
 - NCCF is an **apex organization for consumer cooperatives**. It functions under the **Ministry of Consumer Affairs, Food and Public Distribution**.
 - Both NAFED and NCCF are registered under the [Multi-State Co-operative Societies Act, of 2002](#).
- The efforts to stabilize prices of essential commodities have not only benefitted consumers but also supported farmers by ensuring a fair price for their produce.

Read more: [Kendriya Bhandar](#)

Earth's Deep Clues to Moon Formation

Recent research reveals that [Earth's deep interior](#) contains evidence of a massive collision more than **4.46 billion years ago**, shedding light on the [formation of the moon](#) and the planet's evolution.

- A colossal impact created molten rock that later formed the moon by coalescing in space.
 - Two **continent-sized blobs (large, dense regions) within Earth's mantle**, one under **Africa and another under the South Pacific**, are believed to be remnants of this ancient collision.
- These blobs, denser than the surrounding material, may have originated from the collision between **primordial Earth and a Mars-sized object called Theia**.
 - Theia is believed to have collided with young Earth **forming the Moon and leaving material in the lower mantle**.
- Computer simulations support the idea that most of Theia was absorbed into Earth, forming these blobs, while residual debris formed the moon.
 - These blobs are about 2% of Earth's mass, twice the mass of the entire moon.
 - The increased density in the blobs is attributed to their high iron content, similar to moon rocks.

Read more: [Inner Core of the Earth](#)

Krishi 24/7: AI Revolutionizing Agricultural News Monitoring

The collaboration between the **Department of Agriculture and Farmers Welfare (DA&FW)** and the **Wadhvani Institute for Artificial Intelligence (Wadhvani AI)** resulted in the development of Krishi 24/7, a groundbreaking **AI-powered solution designed for automated agricultural news monitoring and analysis**.

- With support from **Google**, this innovation aims to transform the process of identifying and managing agricultural news articles, **ensuring timely alerts and actions to safeguard farmers' interests and foster sustainable agricultural growth**.
 - **Krishi 24/7** scans and translates articles in multiple languages, extracting crucial information.

Read more: [Artificial Intelligence & Agriculture](#)

Timed Out Dismissal in Cricket

Sri Lankan batsman **Angelo Mathews' timed-out dismissal** during a **recent ICC Men's Cricket World Cup 2023** match against Bangladesh stands as a first instance of timed-out dismissal in the **146-year** chronicle of International Cricket.

- As per the **ICC Men's Cricket World Cup 2023 playing conditions**, the incoming batter must be ready to face the next ball within a strict 2-minute time limit.
 - However, the **Marylebone Cricket Club's (MCC) Law 40.1.1** states that following a wicket fall or a batter's retirement, the **new batter must be prepared to face the next ball within 3 minutes**. Failure to do so results in a **'Timed Out' dismissal**.
- The batter argued that the delay was due to a faulty helmet, not an attempt to waste time or gain an advantage.
 - However, the **rules do not account for last-minute equipment malfunctions**.