



# ENSURE IAS

## Current Affairs Total (CAT)

### January 2024



7900-44-7900

| [www.ensureias.com](http://www.ensureias.com)



# INDEX

## A. POLITY & GOVERNANCE

1. TRIBUNALS CANNOT DIRECT GOVT. TO FRAME POLICY: SC	3
2. SC CANCELS RELEASE OF CONVICTS IN BILKIS BANO CASE	4
3. RULE OF LAW IS NECESSARY: SC	5
4. HIT-AND-RUN LAW CONTROVERSY	6
5. WEBSITE BLOCKING BY THE GOVERNMENT	8
6. STATE OF JUDICIARY REPORT 2023	9
7. VIJAY RAGHAVAN COMMITTEE: TO DETERMINE INDIA'S DEFENCE TECHNOLOGY ROADMAP	10
8. LARGE HINDU TEMPLE EXISTED UNDER THE GYAN VAPI MOSQUE: ASI REPORT	11
9. ALL INDIA SURVEY ON HIGHER EDUCATION (AISHE) 2021-2022	12
10. ANNUAL STATUS OF EDUCATION REPORT 2023	13
11. BHISHM CUBE	15
12. SWACHH SURVEKSHAN AWARDS 2023	15
13. ATAL SETU: INDIA'S LONGEST SEA BRIDGE	17
14. NEW SOLAR POWER SCHEME FOR PVTGS UNDER PM JANMAN	18
15. MPLADS E-SAKSHI MOBILE APP LAUNCHED	20

## B. INTERNATIONAL RELATIONS

1. FRENCH PRESIDENT VISITED INDIA	21
2. INDIA-MYANMAR BORDER FREE MOVEMENT REGIME	23
3. BANGLADESH ELECTIONS	24
4. PRESIDENTIAL ELECTIONS IN TAIWAN	25
5. MALDIVES GOVT. SUSPENDS 3 MINISTERS	26
6. ANGOLA EXITS OPEC	27
7. SOUTH AFRICA FILES CASE AGAINST ISRAEL	28
8. INDIA AND SAUDI ARABIA SIGNED HAJ AGREEMENT FOR 2024	30
9. 19 <sup>th</sup> NAM SUMMIT IN UGANDA	31
10. INDIA-NEPAL RELATIONS	33
11. HENLEY PASSPORT INDEX 2024	35

## C. SECURITY

1. 1 <sup>st</sup> INDIA-MADE DRISHTI 10 STARLINER DRONE	36
2. MARITIME PIRACY	36

3. PUP TENTS FOR TROOPS ON LAC	38
4. US-INDIA DEAL OF MQ -9B SKY GUARDIAN DRONES	38
5. EXERCISES/ OPERATIONS IN NEWS	40

## D. ECONOMY

1. CENTRE FOR THE FOURTH INDUSTRIAL REVOLUTION	41
2. FUTURE OF GROWTH REPORT 2024	42
3. INDIA'S 1 <sup>ST</sup> NATIONAL HIGHWAY STEEL SLAG ROAD	42
4. 1 <sup>ST</sup> SUBMARINE OPTIC FIBER CABLE CONNECTIVITY TO LAKSHADWEEP	43
5. INDIA'S GNPA RATIO DECREASES: RBI	45
6. RISE IN INDIA'S PROCESSED FOOD EXPORTS	46
7. RBI PUBLISHED 2023 LIST OF D-SIBS	47
8. MULTIDIMENSIONAL POVERTY	47
9. WORLD'S 4 <sup>TH</sup> LARGEST STOCK MARKET : INDIA	49
10. 4 <sup>TH</sup> STATES' STARTUP RANKING	49
11. NEW RULES AND REGULATIONS OF UPI: RBI	50
12. NATIONAL MONETISATION PIPELINE (NMP)	52
13. GLOBAL RISKS REPORT 2024	53
14. CORRUPTION INDEX: INDIA RANKS 93 AMONG 180 NATIONS	54
15. WORLD BANK'S GLOBAL ECONOMIC PROSPECTS REPORT	55
16. EXTENSION OF PIDF SCHEME	56
17. RBI PERMITS LENDING, BORROWING IN G-SEC57	58
18. INDIAN IRON ORE MARKET	58
19. PETROLEUM EXPLORATION & PRODUCTION	58
20. DIGITAL TRADE FOR DEVELOPMENT REPORT	60

## E. SCIENCE & TECHNOLOGY

1. INDIA TO BECOME A FULL MEMBER OF THE SKA OBSERVATORY	62
2. IN A 1st, SpaceX TO LAUNCH GSAT-20 SATELLITE63	
3. INDIA'S 1ST MULTI-WAVELENGTH ASTRONOMY MISSION: ASTROSAT	64
4. 5th COUNTRY TO LAND ON THE MOON: JAPAN	65
5. NATIONAL DEEP TECH START-UP POLICY	65
6. NEURALINK IMPLANTS BRAIN CHIP IN 1st HUMAN	68

7. INDIA'S 1ST GRAPHENE CENTRE: KERALA	69
8. KERALA'S 1st SILICON-PROVEN KAIRALI AI CHIP	70
9. 'HAVISURE': INDIA'S FIRST 'HEPATITIS A' VACCINE	71
10. NEW TREATMENT REGIMEN FOR LEPROSY	72
11. CAMEROON STARTS WORLD'S 1ST MALARIA VACCINE PROGRAM FOR CHILDREN	73
12. FOR THE FIRST TIME, WHO RECOGNIZES THE ELIMINATION OF TRANS FATS	75
13. WHO'S INTERNATIONAL CLASSIFICATION OF DISEASES 11	75
14. 1st MULTICENTRIC POINT PREVALENCE SURVEY OF ANTIBIOTIC USE	76
15. WORLD'S 2nd BIGGEST TOBACCO PRODUCER: INDIA	77
16. 'BIO-IMAGING BANK' FOR CANCER	78
17. ANEEL: INDIA'S GREEN ENERGY TRANSITION	78

## F. GEOGRAPHY & ENVIRONMENT

1. INDIA'S 1 <sup>ST</sup> HIGH-RESOLUTION LANDSLIDE SUSCEPTIBILITY MAP	79
2. FIRST-EVER SNOW LEOPARD POPULATION ASSESSMENT IN INDIA (SPAI)	81
3. HUMAN-ANIMAL CONFLICT	81
4. AFTER 40 YEARS, CENTRE REVISES RULES ON WILDLIFE TRADE	82
5. WORLD'S LARGEST DEEP-WATER CORAL REEF	82
6. THE ROLE OF E-FUELS IN DECARBONISING TRANSPORT	84
7. UREA GOLD: A SULPHUR COATED UREA	85
8. WETLAND CITY ACCREDITATION UNDER THE RAMSAR CONVENTION	86
9. IEA'S ELECTRICITY REPORT 2024	87
10. 200 <sup>TH</sup> YEAR OF THE 1 <sup>ST</sup> SCIENTIFIC NAMING OF A DINOSAUR: MEGALOSAURUS	88
11. DENMARK LAUNCHES GREEN FUELS ALLIANCE INDIA	88
12. SPECIES IN NEWS	90

## G. SOCIETY AND CULTURE

1. SAPINDA MARRIAGES	91
2. MITAKSHARA LAW	92
3. DENOTIFIED, NOMADIC AND SEMI NOMADIC TRIBES	93
4. BRU REFUGEE	93
5. ALLIANCE FOR GLOBAL GOOD-GENDER EQUITY AND EQUALITY LAUNCH BY INDIA	94
6. PRAKARAM DIWAS 2024	94
7. 75 <sup>TH</sup> REPUBLIC DAY	95
8. RAM MANDIR: CONSECRATION EVENT	99
9. WEST BENGAL NOTIFIED STATE DAY & STATE SONG	102
10. CLASSICAL LANGUAGE STATUS TO 'BANGLA'	102
11. STUDY ON CHILD MARRIAGE IN INDIA: LANCET	103
12. WORLD'S TALLEST STATUE OF BR AMBEDKAR	103
13. AWARDS/PERSONALITIES	103
14. US EXECUTES WITH NITROGEN GAS FOR THE 1 <sup>ST</sup> TIME	107

## H. ETHICS

1. TEACHINGS OF BUDDHA	108
2. GOOD SAMARITANS	109
3. STRAY DOGS	110

## I. Essay

FORESTS ARE THE BEST CASE STUDIES FOR ECONOMIC EXCELLENCE	112
---	-----

## J. SCHEME

1. PRADHAN MANTRI ADI ADARSH GRAM YOJANA (PMAAGY)	114
2. PRADHAN MANTRI GARIB KALYAN ANNA YOJANA (PM-GKAY)	115
3. PRADHAN MANTRI SURYODAYA YOJANA	116
4. PRADHAN MANTRI ANUSUCHIT JAATI ABHYUDAY YOJANA (PM-AJAY)	116

Copyright 2023, by ENSURE IAS . No Part of this publication may be reproduced or distributed in any form or by any means, electronic, mechanical, photocopying, recording or otherwise or stored in database or retrieval system without the prior written permission of publisher. The program listings (if any) may be entered, stored and executed in a computer system, but they may not be reproduced for publication.



## A. POLITY & GOVERNANCE

### 1. TRIBUNALS CANNOT DIRECT GOVT. TO FRAME POLICY: SC

The **Supreme Court** has made it clear that tribunals do not have the authority to direct the government to frame policy.

#### What are Tribunals?

1. Tribunals are like **special courts** that handle specific types of disputes or cases.
2. They are set up to make decisions on certain legal matters **outside the regular court system**. In India, they operate as an **alternative mechanism** to traditional courts.
3. These institutions often work with **specific timeframes** to ensure cases are resolved swiftly, avoiding lengthy legal processes.
4. Also, they are cost-effective and provide decentralized dispute resolution.

#### Salient Features of Tribunals in India:

1. Tribunals are **not strictly bound** by the Civil Procedure Code (CPC) which allows them flexibility in conducting proceedings.
  - CPC is a legal framework that provides rules and procedures governing civil cases which involve disputes about money, property, rights, etc.
2. They make judgements using the **Principles of Natural Justice**. These principles include:
  - a. **Right to Fair Hearing:** Everyone gets a chance to speak and be listened to.
  - b. **Rule against bias:** The person making decisions shouldn't favor anyone and decisions should be based on evidence.
  - c. **Chance to Respond:** Everyone involved can reply to what's said against them.
  - d. **Right to reasons for decisions:** Parties involved have the right to understand why a decision was made. Tribunals typically provide explanations for their rulings, allowing parties to understand the basis for the decision.

3. These bodies usually consist of **experts in specific fields**, allowing them to make informed decisions related to specialized areas. For example - the National Green Tribunal deals with environmental disputes.
4. They are **Quasi-judicial institutions** which means they do not have full-fledged court-like powers but perform functions resembling those of a court.
5. They are **adjudicatory bodies** i.e. they resolve disputes by reviewing evidence & applying laws to reach conclusions.
6. They often serve as **Appellate Authority** where decisions made by lower bodies can be appealed for reconsideration or review.

#### What is the Constitutional Provision for Tribunals?

1. **The 42nd Amendment Act of 1976** introduced **Part XIV-A**, comprising only two articles related to tribunals which are:
  - a. **Article 323A** which allows establishment of an administrative tribunal **by Parliament**. Subsequently, the **Administrative Tribunals Act in 1985** was enacted which empowers the **Central Government** to establish both the **Central Administrative Tribunal** and **state-level administrative tribunals**.
  - b. **Article 323B**, on the other hand, deals with **tribunals for matters other than administrative ones**.

#### Classification of Tribunals In India:

1. **Central Administrative Tribunal (CAT):** It deals with disputes related to the recruitment and service conditions of government employees.
2. **Securities Appellate Tribunals (SATs):** They handle appeals against decisions made by regulatory authorities in the securities market, dealing with matters like stock exchanges and securities laws.
3. **Judicial Appellate Tribunals (JAT):** They hear appeals against decisions made by lower courts or authorities.

4. **National Green Tribunal (NGT):** It specializes in environmental protection and conservation, addressing matters related to environmental laws and regulations.
5. **Foreigners Tribunals:** They deal with cases related to the citizenship status of individuals, especially those suspected of being illegal immigrants.
6. **National Company Law Tribunal (NCLT):** This tribunal handles cases related to company law and proceedings for companies in India.
7. **Telecom Disputes Settlement and Appellate Tribunal (TDSAT):** It deals with disputes and grievances in the telecommunications sector, including matters related to licensing, tariffs and consumer issues.

## 2. SC CANCELS RELEASE OF CONVICTS IN BILKIS BANO CASE

Recently, the Supreme Court cancelled the **remission** granted by the **Gujarat Government** to 11 people in the **Bilkis Bano case** and directed them to return to prison.

### Timeline of Bilkis Bano Case

2002	<b>Sabarmati train</b> was burnt in <b>Godhra</b> leading to widespread Hindu-Muslim <b>riots</b> in Gujarat. Bilkis, her mother, and 3 other women were gang-raped by about 20-30 people during this time period.
2003	Supreme Court ordered a <b>CBI Inquiry</b> into the case.
2004	The people accused of the crime were <b>arrested</b> . Also, the trial was moved from <b>Gujarat to Maharashtra</b> as Bilkis Bano received death threats in Gujarat.
2008	Special <b>CBI Court</b> gave the punishment of <b>life imprisonment</b> to 11 people, who made appeals further to the Bombay High Court.
2017	<b>Bombay High Court</b> said <b>no</b> to their appeals.
2019	<b>Supreme Court</b> upheld the Bombay High Court order and even provided <b>compensation of Rs 50 lakh</b> to Bilkis Bano.

May 2022	One of the 11 convicts <b>applied</b> for <b>Remission</b> and Supreme Court asked the <b>Gujarat government</b> to consider this case as per the state's 1992 remission policy.
August 2022	The Gujarat government <b>released all 11 convicts</b> in the gangrape case under its remission policy.

### What is Remission?

1. Remission means completely ending a punishment earlier than its originally fixed duration.
2. Under **Article 72** and **Article 162**, the **President** and **Governor** are authorized to provide remission to those who have already served a **minimum of 14 years in prison**.
3. The Supreme Court in the '**Laxman Naskar v. Union of India**' case (2000) provided the following conditions for granting remission to state governments:
  - a. If the crime is an individual act and does **not affect society**.
  - b. If the likelihood of that crime getting **repeated** is very low.
  - c. If the person loses the **ability to commit** a crime.
  - d. If keeping the person in **prison serves no purpose**.
  - e. If the **socio-economic situation** of the person's family is not good

### What is the recent judgement of the Supreme Court?

1. Supreme Court **criticized its own judgement** of May 2022.
2. The court said that the Gujarat government could not issue the remission order since the trial happened in Maharashtra. Only the state where the trial occurred should release criminals.
3. In the words of the Supreme Court, "Rule of law must be preserved unmindful of the ripples of the consequences". It means that the fundamental principles and integrity of the legal system should not be compromised at any cost.

### 3. RULE OF LAW IS NECESSARY: SUPREME COURT

Recently, **Justice B.V. Nagarathna** stated that the rule of law is necessary for the existence and flourishing of personal liberty and other fundamental rights.

#### What is the Rule of Law?

1. The Rule of Law is a **principle** that emphasizes that everyone, including individuals and government entities, must follow the same law and be accountable to it.
2. **In ancient times, Aristotle**, a Greek philosopher, argued that **law should be based on reason** and should aim at promoting the well-being of the citizens. In this case, "reason" means **thinking logically and wisely**. Aristotle's ideas laid the groundwork for later discussions on the Rule of Law.
3. **In the 19th century, A.V. Dicey**, a British legal expert, gave a clear and modern definition of the Rule of Law. He **explained 3 main ideas** of the Rule of Law:
  - a. **Supremacy of Law:** There should not be any discretionary power given to any individual. Rather, everyone should be governed by clear and predictable laws. Also, punishment should only be given for the violation of law.
    - i. Discretionary power means having the freedom to make decisions based on personal judgment, without strict rules or specific guidelines.
    - ii. It allows flexibility in decision-making and leads to random use of power.
  - b. **Equality Before the Law:** The law should treat everyone the same, no matter their status, ensuring fairness for all. It ensures that no person is above the law and no special treatment is provided.
  - c. **Predominance of Legal Spirit:** It means that there should be a strong focus on following and upholding the principles of the law. For that to happen, we need an independent judiciary that interprets the laws to protect people's rights and not rely only on a written constitution.

#### Does the Rule of Law Apply in the Context of India?

1. Yes, the Rule of Law applies in the context of India.

2. **Article 13** of the Constitution **defines the term 'law'** and mentions that any law which violates Fundamental Rights can be struck down by the Judiciary. This power shows the ultimate supremacy of the Rule of Law.
3. The **Golden Triangle of Articles 14, 19 and 21** is built on fundamental principles of equality, freedom, and liberty.
  - a. **Article 14** ensures that everyone is equal before the law and is entitled to equal protection of the law. This helps prevent discretion.
  - b. **Article 19** gives us certain freedoms, such as freedom of speech, expression, and movement. It lets us do things as long as we follow the law.
  - c. **Article 21** protects our right to life and personal freedom, ensuring it can't be taken away without a proper legal process.
4. But, there are few exceptions in India's case concerning the Dicey's concept of the Rule of Law:
  - I. **Discretionary Power:** Officials sometimes have the power to make decisions based on their judgment. Such power is needed for the smooth functioning of democracy.

Officials	Discretionary Power	Under Constitutional Article
President	Pardoning Power	Article 72
	Appointment of Prime Minister	Article 75
	Dissolution of Lok Sabha	Article 85
Governor	Pardoning Power	Article 161
	Appointment of Chief Minister	Article 164
	Dissolution of State Legislative Assembly	Article 174
	Governor's Power to Withhold Assent to Bills	Article 200
	Governor recommending the imposition of President's Rule	Article 356

- II. **Immunities:** Some officials enjoy certain immunities to ensure the independence of their roles. For example, the President and Governor cannot be questioned in court for their official actions. They have immunity from criminal charges, and even civil proceedings can only start after giving them prior notice.
- III. **Privileges:** Special rights or advantages are provided to many individuals to ensure the effective functioning of their duties. For example, Diplomats do not have to follow all the laws and rules of the country where they work.

**Which cases have emphasized the Rule of Law in India?**

Cases	Court’s Interpretation or Judgement
<b>Kesavananda Bharati vs State of Kerala (1973)</b>	<b>Rule of Law</b> is part of the <b>Basic Structure</b> of the Constitution and no change or amendment can go against it.
<b>Indira Gandhi vs Raj Narain (1975)</b>	<b>Even the highest authorities</b> such as the Prime Minister are subject to the Rule of Law.
<b>Maneka Gandhi case (1978)</b>	The court emphasized the <b>importance of the rule of law</b> and the prevention of arbitrariness.
<b>D.K. Basu vs State of West Bengal (1996)</b>	<b>Violence in police custody</b> is an attack on <b>human dignity</b> . Therefore, authorities need to follow the Rule of Law to protect human rights.
<b>Som Raj vs State of Haryana (2001)</b>	Any authority exercising discretion should have a <b>good reason</b> behind its actions. The idea is that choices should be based on reasonable grounds.

**4. HIT-AND-RUN LAW CONTROVERSY**

The **Central Government** recently passed a **new Hit-and-Run Bill in Parliament**, which has been **approved by President Draupadi Murmu**.

**What is the Hit and Run Bill?**

- 1. This bill is part of the **Bharatiya Nyaya Sanhita (BNS), 2023**, which aims to replace the old **Indian Penal Code (IPC)** of the **colonial era**.
- 2. The new law has introduced **tough penalties for drivers** who cause serious accidents leading to death and **run away** (i.e. Hit and Run Case) **without informing** a police officer or magistrate. The penalty mentioned in **Section 106 (2)** of the BNS, 2023 includes **a fine and up to 10 years of jail imprisonment**.
- 3. For those **who report immediately**, they **face charges under Section 106(1)** instead, with a **punishment of up to 5 years** for causing **death by rash or negligent acts**.
- 4. However, the passage of this bill has **sparked nationwide protests**, particularly among transporters and commercial drivers, who called it a **“black law”** and have actively opposed its enforcement.

Features	Old Law	New law
<b>1. Hit and Run Case</b>	The old IPC lacked a specific provision for hit-and-run cases. Earlier, <b>Section 304 A of the IPC</b> addressed causing death by a <b>“rash and negligent act.”</b>	<b>Section 106 (2)</b> of the new <b>Bharatiya Nyaya Sanhita</b> outlines the penalties for hit-and-run cases.
<b>2. Penalties</b>	Less severe	Severe
<b>3. Punishment</b>	<b>Two-year punishment</b> and a smaller fine.	<b>Up to 10 years in jail</b> and 7 lakh rupees fine.

**Principle Underlying the Law**

- (a) The law addresses the **moral responsibility** of drivers in hit-and-run incidents.
- (b) It aims to deter **rash and negligent driving** by punishing those who flee without reporting or aiding victims.

**Existing Law**

- (a) The law aligns with existing statutes (laws) like **Section 134 of the Motor Vehicles Act, 1988**, emphasizing prompt and responsible responses from drivers after accidents.
- (b) **Section 134** requires drivers to take reasonable steps to **secure medical attention for the injured** unless impractical due to external factors or furious (angry) mob.
- (c) **Section 161 of the Motor Vehicles (Amendment) Act, 2019**, provides compensation for victims of hit-and-run accidents.
- (d) Compensation for death is **Rs. 2 lakh**, and for grievous (very severe or serious) injury, it is **Rs. 50,000**.
- (e) Unlike **Section 106 (2) of BNS**, this compensation is not recoverable from the drivers in hit-and-run cases.

**Road Accidents in India in 2022:**

<b>Total Road Crash Deaths in India</b>	1.7 lakh
<b>Daily average road crashes in India</b>	462
<b>Increase in road accidents in India</b>	12%
<b>Average deaths per hour due to road accidents in India</b>	19
<b>Increase in road crash deaths in India</b>	9.4%
<b>Percentage of road fatalities on National and State high-ways</b>	More than 50%
<b>Percentage of National and State highways in total road network</b>	Less than 5%
<b>Hit-and-run incidents in India</b>	More than 47,000
<b>Total deaths resulting from hit-and-run incidents in India</b>	Around 50,000
<b>Decrease in global road crash deaths in 2022</b>	5%

**Note:** Despite having only **1% of the world's vehicles**, India accounts for about **10% of crash-related deaths**. This results in an economic loss of **5-7% of its GDP annually**.

<b>Challenges</b>	<b>Solutions</b>
<b>Penalties are excessive</b> , ignoring <b>challenging work conditions</b> like long hours and difficult roads.	Invest in <b>improved road infrastructure, visibility measures, and safety features</b> to reduce accidents.
Transporters argue accidents may result from <b>factors beyond drivers' control</b> , like poor visibility and fear of violence.	Establish a <b>standardized emergency response protocol</b> to ensure <b>prompt reporting</b> without exposing drivers to violence.
Drivers claim <b>unfair blame on them for accidents</b> , irrespective of actual circumstances.	Clarify <b>reporting procedures and evidence requirements</b> for drivers to prove innocence or mitigating factors.
Concerns about <b>potential abuse by law enforcement agencies</b> and the overall harm to the transport industry.	Minor injuries should not be equated with criminal acts; consider alternatives like <b>community service or driving retests</b> .
Section 106(2) lacks <b>differentiation between rash and negligent driving</b> , ignoring contributory factors.	<b>Categorize law based on liabilities and outcomes</b> of accidents, with commensurate punishments.

**Conclusion**

The Bharatiya Nyaya Sanhita is an important law for hit-and-run cases, aiming to decrease the number and severity of road accidents in India. It seeks to provide justice and relief to victims and their families while deterring (preventing or discouraging) and penalizing offenders. However, having the law in place is not sufficient to guarantee road safety and justice. It requires a united effort from all involved parties to tackle the underlying causes and challenges of road safety in India.



## 5. WEBSITE BLOCKING BY THE GOVERNMENT

According to the information obtained by a Right to Information (RTI) request, the number of government orders to block websites has **increased by over 100 times in the last 10 years.**

### What is an RTI request?

1. The right to Information is a legal right under the **Right to Information Act, 2005** given to the citizens of India to ask the government for information about its actions, promoting transparency.
2. When the government gets an RTI request, it usually has to reply within a fixed timeline, either by giving the requested information or explaining why it cannot give that information.

### What is the trend of Website Blocking Orders in India?

Year	2013	2023 (till October)
Website Blocking Orders	62	6,954

### Recent Instances:

1. The Central government has banned **pornographic websites** multiple times, including in 2015, 2018, and 2019.
2. An **internet shutdown** was imposed in **Jammu and Kashmir** in August 2019 when the government changed the special status of Jammu & Kashmir under Article 370.
3. The longest internet shutdown in 2023 took place in **Manipur** amidst human rights violations.

### Under which law does the government block websites or impose internet shutdowns?

1. **Temporary Suspension of Telecom Services (Public Emergency or Public Safety) Rules, 2017:** These rules mention the procedures for temporarily suspending telecom services in the interest of public safety or during emergencies.
2. **Section 144 of the Criminal Procedure Code (CrPC):** It provides local administration the power to issue orders preventing gatherings of people.
3. **Indian Telegraph Act, 1885:** This act provides the legal framework for regulating communication services in India, including phones and the internet.

4. **Information Technology (IT) Act, 2000:** Section 69A of this act is used by the government to issue directions to block websites or remove content in the interest of national security or public order.

### Why does the Government Block Websites?

1. **National Security:** Governments may block websites that could be a threat to the country's safety. For instance, if a website encourages terrorism or violent activities against the country.
2. **Child Protection:** Blocking websites that host or promote child pornography or things not suitable for children is a way to keep children safe.
3. **Identity Theft Prevention:** Blocking websites that try to cheat people and steal their personal information online.
4. **Fake News Control:** Governments may block websites spreading false information to maintain public trust.
5. **Hate Speech Mitigation:** Some websites may promote hatred or discrimination against certain groups of people. Blocking them helps keep a peaceful and respectful online environment.
6. **Protection of Individual Rights:** Stopping websites that look into your private stuff or spy on you helps keep your rights and freedom safe.
7. **Combating Illegal Activities:** Governments might stop certain websites linked to illegal stuff like selling drugs, trafficking people, or dealing with illegal weapons. This is done to stop criminals from doing these things online.

### What are the concerns due to this action?

1. **Freedom of Expression:** Blocking websites limits people's freedom to express themselves online, like sharing their opinions or ideas. It goes against the freedoms provided under Article 19(1)(a) of the constitution.
2. **Secrecy:** It is said that "Caesar's wife should be above suspicion". Governments might block websites without telling people why, and this lack of transparency raises doubts about their integrity. Transparency and free flow of information check corruption and ensure accountability.
3. **Added Expense:** Maintaining systems to block websites can be expensive.

4. **Ease of Doing Business:** Blocking certain websites or complete internet shutdowns can create barriers for entrepreneurs and affect the business environment negatively.
5. **Autonomy:** Adults should have the right to make their own decisions about the content they access.
6. **Tool for Moral Policing:** Blocking websites can be used to control what people think is right or wrong, based on the government’s values.
7. **Oversight:** There is a concern about who ensures that authorities implementing these blocks will not misuse their authority.

- The report highlights that as of September 2023, there is a **pendency of over 5 crore cases**.

**About State of the Judiciary Report**

- a. The “State of the Judiciary: A Report on **Infrastructure, Budgeting, Human Resources**, and ICT” is issued by the Centre for Research and Planning.
- b. It examines the status of **India’s justice delivery system**, specifically focusing on the High Courts and the district judiciary.
- c. Prepared under the leadership of the Hon’ble Chief Justice of India, Dr. Justice D.Y. Chandrachud, the report aligns with the vision to enhance the **efficiency of the judiciary**.

**What is the take of International Institutions and the Indian Judiciary?**

<b>United Nations Human Rights Council (UNHRC)</b>	1. UNHRC General Assembly recognizes access to the Internet as a basic human right.
<b>Faheema Shirin v. State of Kerala (2019)</b>	1. The right to access the Internet is an integral part of the Right to Education and the Right to Privacy. 2. Internet access is crucial for education, privacy, and better opportunities.
<b>Anuradha Bhasin vs Union Of India (2020)</b>	1. Access to the Internet is an integral part of freedom of speech and expression under Article 19(1)(a). 2. Any curbs on the internet have to pass the test of proportionality i.e. it should have a justified purpose and it should be in proportion to the need of the situation. 3. Complete restrictions will be considered on a case-by-case basis by courts.

**Challenges and Solutions:**

Challenges	Solutions
<ul style="list-style-type: none"> <li>• The shortage of courtrooms and residential units highlights the infrastructure gap in judicial infrastructure.</li> </ul>	<ul style="list-style-type: none"> <li>• Need for a Centrally Sponsored Scheme (CSS) for developing infrastructural facilities for the judiciary.</li> </ul>
<ul style="list-style-type: none"> <li>• As against the total sanctioned strength of judges, there is a shortage of around 5,300 judges in the district judiciary.</li> </ul>	<ul style="list-style-type: none"> <li>• There is a need for a dedicated Division Bench for the timely disposal of causes in the High Courts related to recruitment of judges in District Courts.</li> </ul>
<ul style="list-style-type: none"> <li>• Insufficient integration of information and communication technology (ICT) has hampered the judiciary’s ability to adapt to modern legal demands.</li> </ul>	<ul style="list-style-type: none"> <li>• A dedicated IT Cadre in the district court to regularly train judges, staff and lawyers to strengthen the technical workforce.</li> </ul>
<ul style="list-style-type: none"> <li>• Lack of funds is the cause for gaps in the current state of infrastructure in the district judiciary.</li> </ul>	<ul style="list-style-type: none"> <li>• A dedicated bank for infrastructure projects.</li> </ul>

**6. STATE OF JUDICIARY REPORT 2023**

The **Centre for Research and Planning** of the Supreme Court has recently released the ‘**State of the Judiciary**’ report.

## 7. VIJAY RAGHAVAN COMMITTEE: TO DETERMINE INDIA'S DEFENCE TECHNOLOGY ROADMAP

In January 2024, the **Vijay Raghavan Committee**, appointed by the government, submitted a comprehensive report addressing concerns regarding the **Defence Research and Development Organization (DRDO)**.

### Reasons for establishing the Committee: -

- 1. Redefining Departmental Roles:** Tasked with generating recommendations to **review and redefine** the department's role and align it with futuristic technological requirements in the defence domain.
- 2. Evaluation by Parliamentary Committee:** In 2019, the Committee noted that the DRDO's performance fell short of anticipated standards and emphasized the need for significant restructuring.
- 3. Findings from CAG Report:** It criticized the DRDO for categorizing **20 mission mode projects** as 'successful,' despite not accomplishing the intended goals.
- 4. Recommendations from Dr. P. Rama Rao Committee:** Earlier, the DRDO instituted this committee to assess its operations. While the DRDO supported all its recommendations, it did not proceed with implementing the proposal to establish a **Board of Research for Advanced Defence Sciences (BRADS)**

### Current challenges and potential solutions to reform DRDO: -

Challenge	Potential Solution
1. <b>Project delays and budget overages</b>	Implement <b>stricter project management protocols</b> and <b>accountability measures</b> to ensure adherence to timelines and budgets.
2. <b>Lack of synergy with armed forces</b>	Foster <b>closer collaboration between DRDO and the armed forces</b> through joint planning, training, and feedback mechanisms to align priorities and goals.

3. <b>Decommissioning redundant projects and labs</b>	Conduct a <b>thorough review</b> of ongoing projects and facilities to identify and <b>discontinue redundant ones</b> , reallocating resources towards more impactful initiatives.
4. <b>Bureaucratic hurdles in working as a government PSU</b>	<b>Reevaluate the organizational structure</b> and autonomy of DRDO to ensure it functions efficiently without bureaucratic hindrances.
5. <b>Substandard production</b>	<b>Improve quality control measures</b> and invest in training and development programs for DRDO personnel to enhance product quality and reliability.
6. <b>Joint ventures with foreign manufacturers</b>	Continue and <b>expand strategic partnerships</b> with foreign defence firms to leverage their expertise and resources for joint development and production projects.

### Recommendations of Vijay Raghavan Panel:

- 1. Shift the focus back to Research and Development (R&D):** The **9-member panel** suggests that DRDO should return to its core purpose of conducting research and development for defence, rather than getting involved in product management, which is better suited to the private sector.
- 2. Defence Technology Council (DTC):** The committee proposes that the **Defence Technology Council, chaired by the Prime Minister**, should play a central role in identifying suitable players for specific defence technologies and steering the direction of defence technology development.
- 3. Dedicated Department:** The committee **recommends the establishment of a Department of Defence**

**Science, Technology, and Innovation under the Ministry of Defence**, which would act as the **secretariat** for the Defence Technology Council.

- Enhanced PMO Oversight:** The Prime Minister’s Office is expected to increase its involvement in monitoring crucial strategic projects, signaling a heightened level of scrutiny towards DRDO’s performance.
- Engagement with Private Sector:** The transfer of production and further development responsibilities is proposed to be entrusted to specific private entities and public sector undertakings.
- Following DARPA Model:** The Indian government aims to restructure DRDO along the lines of the **US’s Defence Advanced Research Projects Agency (DARPA)**, renowned for its project-based, outsourced research strategy devoid of in-house labs or staff.

**About DRDO**

- DRDO is the research and development arm of the Indian **Ministry of Defence** which was **established in 1958**.
- Its mission is to achieve self-reliance in important defence technologies and systems.
- DRDO has a network of laboratories** across the country working on various defence-related fields, including aeronautics, armaments, electronics, land combat engineering, life sciences, materials, missiles, and naval systems.

**4. Recent projects-**

2016	Successfully tested its first indigenously developed heavy-duty drone, Rustom 2, which is an unmanned armed combat vehicle developed on the lines of the US’s Predator drone.
2018	DRDO also co-developed India’s first nuclear ballistic missile submarine, INS Arihant
2019	DRDO developed India’s first anti-satellite system, making India one of the few countries in the world with this capability.

- DRDO has also developed several ballistic missiles under its **Integrated Guided Missile Development Programme**, including **Prithvi, Trishul, Agni, Akash, and Nag missiles**.

**Conclusion**

The **Vijay Raghavan Committee’s** suggestions pave the way for a transformed DRDO, focusing on research and development while building partnerships with the **private sector**. This supports **India’s vision of self-reliance (Aatmanirbhar Bharat)** and reflects the spirit of **Amrit Kaal**, marking a fresh start in defence technology.

**8. LARGE HINDU TEMPLE EXISTED UNDER THE GYAN VAPI MOSQUE: ASI REPORT**

- According to the Archaeological Survey of India (ASI), a large Hindu temple existed at the site before the construction of the mosque in Gyan Vapi.
- The ASI’s report indicates the mosque contains architectural elements and artefacts that suggest the presence of a Hindu temple prior to the mosque’s construction.
  - These include idols, inscriptions, and temple parts dating from the **12th to the 17th centuries**.

**What is the Dispute?**

- Location and Controversy:** The Gyan Vapi Mosque, located in Varanasi, Uttar Pradesh, is at the centre of a historical and religious dispute. The mosque is believed to stand on the **remains of a demolished Hindu temple**, a claim that has been supported by recent findings from the Archaeological Survey of India (ASI).
- Recent Court Decision:** A court in Varanasi has ruled in **favour of allowing Hindu prayers within the mosque premises**, under the guidance of a priest from the **Shri Kashi Vishwanath Temple Trust**. This decision has sparked different reactions among Hindu and Muslim communities.
- Muslim Group’s Response:** The **Anjuman Intezamia Masjid Committee**, representing the Muslim community, has expressed disagreement with the court’s ruling and intends to appeal the decision.

**Key Discoveries and Implications**

- Discovery of Idols and Inscriptions:** The survey uncovered idols and fragments believed to be part of Hindu deities, along with inscriptions in various languages. These discoveries provide clear evidence of the site’s original Hindu identity.

- Significance of Symbols:** Symbols such as **swastikas** found on the mosque's structure further support claims of the site's Hindu origins.

### Survey Methods and Technological Advances

- Non-Invasive Techniques:** The ASI utilized advanced, non-invasive methods like **Ground-Penetrating Radar (GPR)** and **carbon dating** to explore the mosque complex. These techniques allow for a detailed examination of historical sites without causing physical damage.

### Legal and Religious Implications

- The case is part of a broader debate on religious identity, historical interpretation, and legal rights in India.
- It also tests the **Places of Worship Act, 1991**, which was passed by **PV Narasimha Rao**-led government to keep **Places of worship** unchanged as they were on **August 15, 1947**, except Ayodhya.
- Places of worship are **sacred places** where people practice their religion, like temples, mosques, churches, and other places where individuals come together to worship and express their faith.

## 9. ALL INDIA SURVEY ON HIGHER EDUCATION (AISHE) 2021-2022

In January, 2024 The Ministry of Education, has released All India Survey on Higher Education (AISHE), 2021-22. India, offers a comprehensive overview of the current state of **higher education** in India.

### Key findings of the Report

- The **total enrolment** in higher education has shown a **steady increase**, reaching 4.33 crore in 2021-22.
  - This is a notable rise from 3.42 crore in 2014-15.
  - This growth signifies the expanding accessibility and appeal of higher education in India.
- Female enrolment** has seen a more notable increase than the overall rate, with a **32% rise** since 2014-15.
  - This trend is significant as it points towards greater **gender parity** in higher education, an essential factor for balanced societal development.
- Gross Enrolment Ratio (GER)** is a key indicator of the general level of participation in higher education.

The increase to 28.4 in 2021-22 from 23.7 in 2014-15 suggests that a higher proportion of the eligible age group is now pursuing higher education.

- The female GER exceeding the male GER underscores the successful efforts in bridging the gender gap in education.

### 4. Enrolment of SC, ST, and OBC Students:

- SC and ST Students:** There has been a **remarkable increase** in the enrolment of SC and ST students, which is crucial for the empowerment of these historically marginalized communities.
- OBC Students:** The 45% increase in OBC student enrolment reflects the effectiveness of positive action policies and the broadening of the education base to include diverse social groups.

### 5. Ph.D. Enrolment:

- The substantial increase in Ph.D. enrolment indicates a growing interest in advanced research and academic pursuits.
- The **doubling of female Ph.D. enrolment** is particularly noteworthy, suggesting that more women are engaging in high-level research.

### 6. Minority Student Enrolment:

- The increase in female minority student enrolment is a positive sign of the inclusive nature of higher education, ensuring representation from all segments of society.

### Infrastructure and Faculty Development:

- The establishment of 341 universities and university-level institutions since 2014-15 reflects the government's commitment to expanding higher education infrastructure.
- The **increase in female faculty** members not only promotes gender diversity but also serves as a role model for female students, potentially influencing their academic and career aspirations.

### Conclusion:

The AISHE 2021-2022 report shows significant progress in India's higher education sector, particularly in terms of inclusivity and gender parity. The increased enrolment across different social categories, coupled with the rise in female participation both in students and faculty, marks a positive trend towards a more equitable and diverse

educational landscape. These trends are crucial for India's goal of becoming a knowledge-based economy and for ensuring sustainable and inclusive growth.

### All India Survey on Higher Education (AISHE):

#### 1. Introduction to AISHE:

- a. **Objective:** The main goal is to gather comprehensive data on higher education in India.
- b. **Frequency:** Conducted annually since the academic year 2010-11.
- c. **Authority:** Organized by the Ministry of Education, Government of India.

#### 2. Key Educational Indicators:

- a. **Institution Density:** Indicates how many higher education institutions are available in a specific area. This shows the accessibility of higher education to people in different regions.
- b. **Gross Enrolment Ratio (GER):** This is a critical measure showing the percentage of students in the eligible age group (typically 18-23 years) who are enrolled in higher education. It reflects the overall reach of higher education in the country.
- c. **Pupil-Teacher Ratio:** This ratio shows the number of students for every teacher, indicating the teaching resources' adequacy.
- d. **Gender Parity Index:** A crucial indicator to understand the gender balance in higher education. It compares the number of female students to male students, highlighting the participation of women in higher education.
- e. **Per Student Expenditure:** Reflects the average amount of money spent on each student, which includes teaching, research, and other facilities.

## 10. ANNUAL STATUS OF EDUCATION REPORT 2023

The 18<sup>th</sup> Annual Status of Education Report (ASER) titled 'Beyond Basics' based on a survey led by the Pratham Foundation has been released.

#### Annual Status of Education Report (ASER)

- (a) ASER is an **annual, citizen-led household survey** focusing on the **education of children in rural India**.

- (b) Conducted since **2005**, it is the **largest citizen-led survey** in India, providing estimates of enrolment and basic academic levels nationally, state-wise, and district-wise.
- (c) The survey targeted rural students aged **14 to 18** in 28 districts across 26 states, assessing the foundational reading and arithmetic abilities of **34,745 students**.

#### Key Highlights of the Report

1. **Enrolment Rates:** Overall, **86.8%** of 14-18-year-olds are enrolled in an educational institution.
  - (a) The majority of students in the 14-18 age group are enrolled in **Arts/Humanities streams** (55.7% in Class XI or higher).
  - (b) **Gender differences** in **Science, Technology, Engineering, and Mathematics (STEM) enrolment**, with fewer females (28.1%) compared to males (36.3%).
2. **Vocational Training:** Only **5.6%** are taking **vocational training**. It is more **prevalent among college-level students**. Most of the youths take short-duration courses of **6 months or less**.
3. **Basic Abilities:** About **25%** of the youth **cannot fluently read a Class II level text** in their regional language. Over **50%** of youth **struggle with division problems** (3-digit by 1-digit).
4. **Language and Arithmetic Skills: Females perform better than males** in reading a **Standard II level text** in regional language. **Males** excel in **arithmetic and English reading**.
  - (a) Only **57.3% can read sentences in English**, and 75% understand their meanings.
5. **Foundational Numeracy Skills:** Over **50%** of students **in the 14-18 age group** face difficulties with **basic division problems**. Around **45%** struggle with tasks like **calculating sleep hours** based on bedtime and wake-up time.
6. **Digital Education:** Almost **90% of Indian youth** have access to a smartphone in their household, indicating **widespread digital connectivity**.
  - (a) **Gender Disparities:** Significant **gender gap** in **digital literacy**, with girls being less likely to know how to use a smartphone or computer compared to boys.

- (b) **Online Safety Awareness:** Boys show more familiarity with online safety settings, highlighting the need for targeted efforts to **educate and empower girls** in online safety practices.
  - (c) **Smartphone Usage for Education:** About **two-thirds** of youth use smartphones for educational purposes, such as watching online videos related to studies, solving doubts, or exchanging notes.
- 7. Recommendations for Bridging Educational Gaps:** Government efforts are essential to **address the gap** in foundational literacy and numeracy skills, with a focus on initiatives targeting the **14-18 age group**.
- (a) **National Education Policy (NEP) 2020** recognizes the necessity for **'catch-up' programs** for students who have fallen behind academically.
  - (b) Initiatives are needed to **improve foundational literacy and numeracy skills** among youth, not only for academic performance but also to meet their everyday requirements.

**Challenges and Solutions:**

Challenges	Solutions
<p><b>1. School Infrastructure and Amenities:</b></p> <p>1. Despite improved retention rates, there are concerns about the availability of basic amenities. (Retention rates simply show how many students stay in school over time.)</p> <p>2. While <b>95%</b> of schools have drinking water and toilets, over <b>10%</b> lack electricity.</p> <p>3. <b>Digitization</b> is lacking, with over <b>60%</b> of schools lacking computers and <b>90%</b> without internet access.</p>	<p><b>1. Increased Funding and Resource Allocation:</b> Allocate more funds to education, aiming for the <b>recommended 6% of GDP</b> as per the <b>National Education Policy (NEP) 2020</b>.</p> <p>1. Prioritize funding for infrastructure development, teacher training, and amenities in schools.</p> <p>2. Provide schools with computers and internet access.</p>
<p><b>2. Shift Towards Private Schools:</b></p> <p>1. Over the years, there has been a <b>shift</b> towards private schools.</p> <p>2. There is a decrease in the share of government schools from <b>87%</b> in 2006 to <b>62%</b> in March 2020.</p>	<p><b>2. Addressing Dropout Rates:</b></p> <p>1. Identify and address root causes of student dropouts, including socio-economic factors and quality of education.</p> <p>2. Implement targeted interventions like <b>scholarship programs</b> and mentorship initiatives.</p> <p>3. Build government schools in remote areas to penetrate education and basic amenities for digital education and promote <b>technology integration</b>.</p>
<p><b>3. Shortage of teachers, high student-teacher ratio,</b> and dependence on contractual teachers are major issues. <b>Quality differences</b> are visible between well-funded formal schools and under-resourced informal schools.</p>	<p><b>3. Teacher Recruitment and Training:</b> Recruit and train a sufficient number of qualified teachers to reduce the high student-teacher ratio. Implement <b>continuous professional development programs</b> to improve teaching quality.</p>
<p><b>4. Social Divides:</b> Existence of social divides (caste-class, rural-urban, religious, and gender) impacting education quality.</p>	<p><b>4. Equal Access to Education:</b> Ensure equal access to quality education for all, regardless of socio-economic status, caste, religion, or gender. Conduct sensitization (challenging myths) programs to promote inclusivity and reduce biases among teachers, students, and communities.</p>

- 8. Government Initiatives in Education**
- (a) Sarva Shiksha Abhiyan
  - (b) PRAGYATA
  - (c) Mid-Day Meal Scheme
  - (d) Beti Bachao Beti Padhao
  - (e) PM SHRI Schools
  - (f) National Programme on Technology Enhanced Learning

- (g) **National Education Policy (NEP) 2020:** Introduces changes to the education system, including the use of **mother tongue or local language** up to class 5. It emphasizes comprehensive education frameworks and introduces exams at various levels.

## 11. BHISHM CUBE

Cube-BHISHM mobile hospitals have been deployed in Ayodhya ahead of the ‘Pran Pratishtha’ ceremony.

### What is Cube-BHISHM?

1. BHISHMA stands for ‘**Bharat Health Initiative for Sahyog Hita and Maitri**’.
2. It consists of a set of “mini-cubes” designed for easy airlifting and deployment on any terrain.
  - a) The portable hospital can handle a range of medical emergencies, including bullet, burn, head, spinal, chest injuries, etc.
  - b) It is capable of providing critical medical care to 100 survivors for up to 48 hours
3. It includes a fully equipped operation theatre, mini-ICUs, ventilators, blood-testing equipment, an X-ray machine, cooking station, shelter facility, and power generator.

### Project BHISMA

1. **Launch Date:** Project Bhisma’ was launched in February, 2022.
2. **Objective:** to enhance medical readiness and response capabilities, ensuring a robust healthcare system for emergency situations.
3. **Mobile Hospitals:** Project BHISHM involves the deployment of mobile hospitals known as Arogya Maitri Disaster Management Cube-BHISHM.
4. **Cutting-Edge Technology:** These mobile hospitals are equipped with cutting-edge technology like operation theatre, mini-ICUs, showcasing innovation in medical infrastructure.
5. **Treatment Capacity:** Specifically designed to treat up to 200 casualties, addressing the medical needs of a significant number of individuals during emergencies.
6. **Alignment with Bharat Health Initiative:** The initiative aligns with the broader Bharat Health Initiative, emphasizing cooperation (Sahyog), welfare (Hita), and friendship (Maitri) in healthcare practices.

## 12. SWACHH SURVEKSHAN AWARDS 2023

1. Recently, the Swachh Survekshan Awards 2023 were given away by President Droupadi Murmu.
  - The theme for the year 2023 was - “**Waste to Wealth**”.
  - For 2024, the theme is “**Reduce, Reuse and Recycle**”.

### Swachh Survekshan

1. Swachh Survekshan is the **world’s largest survey** for cleanliness in cities in India, which was started in **2016**.
2. The **Swachh Survekshan awards** are given to cities based on their ranking in the survey which creates a **competition among states** to perform better in cleanliness.
3. It is conducted as part of the Swachh Bharat Mission (Urban).

### What is the Swachh Bharat Mission (Urban)?

1. Swachh Bharat Mission (SBM), also known as Clean India Mission, is a major initiative launched by the Government of India.
2. It was formally launched on **October 2, 2014**, marking Mahatma Gandhi’s Birth anniversary.
3. Phases of the Swachh Bharat Mission include:

Phases	Timeline	Aim
<b>Phase 1</b>	Implemented between 2014 - 2019	<ol style="list-style-type: none"> <li>1. To make India “<b>Open-Defecation Free</b>” (ODF) by constructing toilets before Mahatma Gandhi’s 150th birth anniversary on October 2, 2019.</li> <li>2. Open defecation means people using fields, bushes, forests, riversides, or other open spaces as places for toilets.</li> </ol>



<p><b>Phase 2</b></p>	<p>Being implemented between 2020–21 and 2024–25.</p>	<ol style="list-style-type: none"> <li>To make India <b>Garbage Free</b> and provide access to every citizen for sanitation.</li> <li>“Sanitation” means keeping things clean and healthy, like having clean water, proper waste disposal, and good hygiene practices.</li> <li>Also, it aims to change the behaviour of people to participate in sanitation.</li> </ol>
-----------------------	---	--

4. The mission is divided into 2 parts:

Parts	Implementing Agency
Swachh Bharat Mission (Rural)	Ministry of Jal Shakti
Swachh Bharat Mission (Urban)	Ministry of Housing and Urban Affairs

5. Swachh Bharat Mission (Urban) is implemented with the help of the Quality Council of India which is a non-profit organization. It sets the quality standards for all important areas including education, healthcare, environment protection, governance, social sectors, infrastructure sector, etc.

**How are cities evaluated in the Swachh Survekshan Awards?**

1. **Citizen Feedback:** Citizens are asked about their opinion on the cleanliness in the cities through surveys.

## SWACHH SURVEKSHAN 2023 SURVEY:

### CLEANEST CITIES

(with population of more than 10 lakh):

1. Indore & Surat
2. N/A
3. Navi Mumbai
4. Visakhapatnam
5. Bhopal

### CLEANEST CITIES

(with population less than 1 lakh):

1. Sasvad (Maharashtra)
2. Patan (Gujarat)
3. Lonavala (Maharashtra)
4. Karad (Maharashtra)
5. Panchgani (Maharashtra)

### STATE RANKING (states with more than 100 urban local bodies):

#### TOP 5

1. Maharashtra
2. Madhya Pradesh
3. Chhattisgarh
4. Odisha
5. Telangana

#### BOTTOM 5

23. Tripura
24. Nagaland
25. Rajasthan
26. Mizoram
27. Arunachal Pradesh

Source: Swachh Survekshan survey 2023 | Ministry of Housing and Urban Affairs

- Field Assessment:** Specific sites where garbage is piled up in the city are physically checked.
- Rankings are given based on both of these parameters.

### Rankings of Swachh Survekshan Awards 2023:

- Out of the Bottom 5, **4 states are from North East India**. Hence, there is a need to focus on the North Eastern region for implementing the mission ahead.
- Varanasi and Prayagraj** won the **top two** awards among the **Cleanest Ganga Towns**.
- Indore** has consistently topped the ranking since 2017.

### How did Indore become the cleanest city in India?

- Indore was ranked **25th in 2016** which alarmed the district administration to focus on sanitation.
- They specifically **targeted the indicators** of the Swachh Sarvekshan Survey to bring a positive change in Indore.
- Earlier waste was collected by private entities in Indore. But the decision was taken to give this **task to the municipality**.
- The municipality used the **nudge effect** to make the cleanliness initiatives popular among people.
  - The nudge effect says that people choose to do what is easy and convenient for them, rather than what is right for them.
  - Hence, we should make the right thing easy for people. So, the municipality decided to **directly collect the waste from the doorstep of the citizens**.
- The waste was segregated at the time of collection itself into 2:
  - Wet waste:** It was immediately converted into compost and sold to earn some revenue.
  - Dry waste:** It was treated at a Treatment plant at Devguradia in Indore.
- Special focus was also given to cleaning up old accumulated waste that has been piled up for a long time. Such waste is known as **Legacy Waste**. The municipality treated 13 lakh metric tonnes of waste in just about 6 months.

- One of the major reasons why Indore remains at the top of the ranking is its 5-star rating. The **criteria for a 5-star Rating** under the Swachh Bharat Mission says that **75%** of the waste should be treated at the dumping site itself, which Indore did at its Devguradia plant.
- NGOs** were funded based on how much they promoted the initiative. The promotion involved creating awareness, encouraging waste identification, and rewarding positive behaviors related to cleanliness.
- Some innovative approaches by the Indore Administration include
  - Dustbins for Vehicles:** Distributed 1000 dustbins to car owners for throwing trash responsibly.
  - Oath of Cleanliness:** Encouraged lakhs of people to take an oath to keep their surroundings clean.
  - Penalties:** A fine of Rs. 250 to 500 was imposed on the spot for spitting on roads, urinating in the open or throwing trash.

### 13. ATAL SETU: INDIA'S LONGEST SEA BRIDGE

- In January, 2024 PM Narendra Modi inaugurates **Atal Bihari Vajpayee Sewri-Nhava Sheva Atal Setu** in Navi Mumbai.
- It is also referred to as **Mumbai Trans Harbour Link (MTHL)**.
- It is the longest bridge in India and also the **longest sea bridge** in the country.
- It is a **21.8 Kms long** 6-lane bridge having about **16.5 km** length over the **sea** and about **5.5 km** on the **land**.
  - Earlier, **Dr. Bhupen Hazarika Bridge** was the longest bridge in India, over the **river Brahmaputra**, in Assam. The **9.15 Km long** river bridge.
- It connects Sewri in Mumbai with Nhava Sheva in Raigad district.
- It **will provide faster connectivity** to Mumbai International Airport and Navi Mumbai International Airport and will also reduce the travel time from Mumbai to Pune, Goa and South India.

7. It will also **improve connectivity** between Mumbai Port & Jawaharlal Nehru Port.
8. The project is **financed by** the Japan International Cooperation Agency (**JICA**), covering 80% of the total project cost, while the remaining portion is shared between the **state and central governments**.

## 14. NEW SOLAR POWER SCHEME FOR PVTGS UNDER PM JANMAN

1. In January 2024, The **President** has given approval for a new Solar Power Scheme for villages inhabited by Particularly Vulnerable Tribal Groups (**PVTGs**) under the **PM JANMAN** scheme.
2. It is implemented by the **Ministry of New and Renewable Energy (MNRE)** as part of PM-JANMAN.

### Scope of Coverage

1. The scheme covers electrification in PVTG areas located in 18 States and UT of Andaman & Nicobar Islands.
2. It focuses on **off-grid solar systems** where grid-based electricity supply is not feasible.
3. Additionally, solar lighting provision is included for **1500 Multi-Purpose Centres (MPCs)** in PVTG areas lacking grid electricity.

### Components:

1. **Electrification of 1 lakh PVTG Households through Off-grid Solar Power:**
  - a) **Solar Home Lighting System (SHLS)** provided free of cost for scattered un-electrified Households.
  - b) **Central Financial Assistance (CFA)** covers system cost, transportation, installation, maintenance for 5 years, and taxes.
  - c) Provision of **0.3 kW Solar** off-grid system for each HH.
2. **Solar Mini-Grid:**
  - a) Installed for clusters of households in PVTG habitation/hamlet instead of individual **Solar Home Lighting System (SHLS)**.

- b) MNRE provides **Central Financial Assistance (CFA)** support limited to **Rs. 50,000** per un-electrified household covered under the Mini-Grid.
- c) The developer is responsible for operating and maintaining the Mini-Grid for a minimum of **5 years**.

### 3. Solarisation of Multi-Purpose Centers (MPCs):

- a) Installation of solar street lighting and provision of lighting in 1500 MPCs where grid electricity is unavailable.
- b) Each MPC receives **Rs. 1 lakh for solarisation**.

4. **Implementation Agency:** The **respective DISCOM** in the PVTG area serves as the implementing agency for the Scheme.

### Understanding the PM-JANMAN scheme

#### 1. About

- a) The **Ministry of Tribal Affairs** launched the **Pradhan Mantri-Janjati Adivasi Nyaya Maha Abhiyan (PM-JANMAN)** Scheme.
- b) It focuses on **uplifting Particularly Vulnerable Tribal Groups (PVTGs)** and integrating them into the mainstream

#### 2. Implementation:

- a) Executed by the Ministry of Tribal Affairs in collaboration with state governments and PVTG communities.
- b) Comprises both Central Sector and Centrally Sponsored Schemes.

#### 3. Critical Interventions:

- a) Managed by 9 line Ministries.
- b) Aims to implement existing schemes in villages inhabited by PVTGs.

4. **Scope:** The mission's primary scope is to comprehensively enhance the living conditions of PVTG (Particularly Vulnerable Tribal Group) households and habitations by ensuring they have access to essential amenities and services. **This includes:**

Priority	Description
a) <b>Safe Housing</b>	Ensuring secure and habitable housing for PVTG households, providing protection from environmental challenges and fostering a sense of security.
b) <b>Clean Drinking Water &amp; Sanitation</b>	Guaranteeing access to clean drinking water and proper sanitation facilities to reduce health risks and improve overall well-being.
c) <b>Education</b>	Enhancing access to quality education for PVTG children, empowering them with knowledge and skills for a better future
d) <b>Healthcare &amp; Nutrition</b>	Providing easy access to healthcare services and nutrition programs for improved overall health outcomes in PVTG communities.
e) <b>Road &amp; Telecom Connectivity</b>	Establishing road infrastructure, electricity, and telecom connectivity to enhance economic opportunities and access to information in PVTG habitations.
f) <b>Sustainable Livelihood Opportunities</b>	Promoting sustainable livelihood options to empower PVTG communities economically and reduce reliance on marginal resources.

**5. Critical Interventions:** - The mission aims to cover all eligible PVTG beneficiaries and PVTG habitations through 11 critical interventions through 9 Ministries including MoTA.

**6. Expected Impact:**

- Enhancing the quality of life and well-being of PVTGs.
- Addressing multiple forms of discrimination and exclusion.
- Recognizing and valuing their unique contributions to national and global development.

**7. Challenges in Implementation of PM- JANMAN Scheme with their respective solutions:**

Challenges	Solutions
1. Data inaccuracy	<ol style="list-style-type: none"> <li>Conduct regular and comprehensive census surveys</li> <li>Implement transparent data collection processes</li> <li>Ensure timely and accurate reporting of data</li> </ol>
2. Lack of transparency	<ol style="list-style-type: none"> <li>Ensure results of baseline surveys are made public</li> <li>Foster transparency in project implementation</li> <li>Engage stakeholders through open communication</li> </ol>
3. Lack of accountability	<ol style="list-style-type: none"> <li>Define clear roles and responsibilities</li> <li>Establish mechanisms for monitoring and evaluation</li> <li>Hold responsible parties accountable for outcomes</li> </ol>
4. Loss of ecological diversity	<ol style="list-style-type: none"> <li>Conduct environmental impact assessments</li> <li>Implement sustainable development practices</li> <li>Preserve and protect natural habitats and resources</li> </ol>
5. Loss of cultural heritage	<ol style="list-style-type: none"> <li>Incorporate traditional knowledge and practices</li> <li>Promote cultural preservation and education</li> <li>Empower communities to safeguard their heritage</li> </ol>
6. Lack of autonomy	<ol style="list-style-type: none"> <li>Ensure participation of PVTGs in decision-making</li> <li>Respect and protect indigenous rights and autonomy</li> <li>Promote self-governance and community empowerment</li> </ol>

### Who are Particularly Vulnerable Tribal Groups (PVTGs)?

<b>Definition</b>	PVTGs were originally designated as <b>Primitive Tribal Groups (PTGs)</b> in 1973 by the <b>Dhebar Commission</b> and were renamed by the Government of India in 2006.
<b>Characteristics</b>	<ol style="list-style-type: none"> <li>1. Preservation of pre-agricultural practices,</li> <li>2. Hunting and gathering practices,</li> <li>3. Decreasing or stagnant population growth, and</li> <li>4. Relatively low levels of literacy in contrast to other tribal groups.</li> </ol>
<b>Population</b>	There are <b>75 PVTGs</b> spread across <b>18 states and 1 Union Territory (Andaman and Nicobar Islands)</b> , totaling approximately 27.6 lakh individuals as per the 2011 Census.
<b>Distribution</b>	<b>Odisha</b> (15) has the <b>highest number</b> of PVTGs, followed by <b>Andhra Pradesh</b> (12).

#### Other Initiatives for PVTGs:

1. **Janjatiya Gaurav Divas:** A celebration recognizing the cultural heritage and contributions of tribal communities.
2. **Viksit Bharat Sankalp Yatra:** A developmental journey focusing on uplifting marginalized communities, including PVTGs.
3. **PM PVTG Mission:** A mission aimed at addressing the specific needs and challenges faced by PVTGs, ensuring their holistic development and integration into society.

### 15. MPLADS E-SAKSHI MOBILE APP LAUNCHED

In January 2024, MPLADS (Member of Parliament Local Area Development Scheme (MPLADS) e-SAKSHI Mobile Application was launched by Ministry of Statistics and Programme Implementation (MoSPI).

- That allows MPs to propose, track, and oversee projects under MPLAD Scheme.

#### About e-SAKSHI Application:

1. Facilitates the revised fund flow procedure under the **Members of Parliament Local Area Development Scheme (MPLADS) Scheme**.
2. Aims to revolutionize the engagement and management of development projects by Members of Parliament (MPs) in their constituencies.
3. Offers **convenience and accessibility**, enabling MPs to propose, track, and oversee projects conveniently.
4. Provides **real-time access** to project information, enhancing decision-making and responsiveness.
5. **Streamlines communication** between MPs and relevant authorities, fostering efficient exchange of information.
6. **Promotes transparency** by providing instant updates on project status and progress.
7. Includes features for **budget management**, allowing MPs to monitor expenditures effectively.

#### Key points about the MPLAD Scheme:

1. Introduced in **1993**, fully funded by the Government of India.
2. Funds are released as grants-in-aid directly to district authorities.
3. Funds are **non-lapsable**, ensuring entitlement **carries forward** to subsequent years.
4. Annual entitlement per MP/constituency is **5 crore rupees**.
5. MPs recommend works; district authorities sanction, execute, and complete them.
6. **Lok Sabha** Members recommend works in their constituencies; **Rajya Sabha** Members recommend works **anywhere** in their state.
7. **Nominated** Members of Parliament can recommend works **nationwide**.
8. MPLADS projects can be implemented in areas affected by various natural calamities and hazards.



## B. INTERNATIONAL RELATIONS

### 1. FRENCH PRESIDENT VISITED INDIA

French President Emmanuel Macron visited India as the Chief Guest for India's 75th Republic Day. This visit marks President Macron's **2nd State Visit** and the **6th French leader visit** as a Republic Day Guest of Honour.

**A state visit** is a formal visit by the head of state of one country to the head of state of another country. The host country's head of state invites the visiting head of state. The purpose of a state visit is to confirm the good relationship between the two countries

#### Republic Day Guest of Honour:

Every year, a head of state or government of another country is invited as the state guest of honor for the Republic day celebrations in New Delhi. The guest country is often chosen on the basis of strategic, economic and political interests.

### India-France Joint Statement on the State Visit of French President

1. The visit strengthens the **25-year strategic partnership** between both nations.
2. This visit came after Indian Prime Minister Modi visited France as the Guest of Honour for the **Bastille Day Parade**, and it celebrated their long-term partnership based on common values like democracy.
  - a. **14 July** is a special day in France called National Day. It is also called Bastille Day. This day marks the anniversary of the **Storming of the Bastille in 1789**, which was an important event during the **French Revolution**.
  - b. In July 2023, India's Prime Minister, Shri Narendra Modi, was invited to France as the Guest of Honour for the Bastille Day Parade. During the parade, a group of 269 members from the **Indian Armed Forces** marched with the French forces.
3. **Who Came and What Happened:** President Macron came with important ministers and business people. The **French military took part in India's Republic Day parade**.
4. **Focus on Climate Change:** They paid attention to climate problems, protecting nature, and pollution. They **supported the UAE's leadership** in the upcoming COP28 and India's plan to host COP33 in 2028.
5. **Defense Working Together:** India and France agreed to work together to manufacture military equipment, focusing on advanced technologies like **robotics, AI, and cyber defense**.
  - a. France has emerged as an important defense partner of India (**2nd largest defense exporter after Russia**). India bought **36 Rafale aircrafts** from France.
  - b. **Airbus-TATA Helicopter Deal:** In a major boost to 'Make in India', Airbus and Tata Group announced a deal to jointly manufacture and assemble the H125 single-engine helicopter.
  - c. **New Procurements:** India announced plans to buy **26 Rafale-M fighter jets** and **3 additional Scorpene-class submarines** for its navy.
6. **Space Work Together:** They celebrated a 60-year space partnership, focusing on making satellites and space technology. ISRO and CNES (French Space Agency) have collaborated on space missions such as the recent launch of **GSAT-24 satellite**.
7. **Digital Work:** France introduced the Unified Payment Interface (**UPI**) at the **Eiffel Tower** which shows technological cooperation between 2 countries.
8. **Nuclear Energy:** When nuclear energy is used to generate electricity, we call it **civil nuclear use**. France has helped India in developing the **Jaitapur Nuclear Power Project**, Small Modular Reactors (**SMR**) and Advanced Modular Reactors for generating electricity.
9. **Renewable Energy:** They worked together in the International Solar Alliance (**ISA**) and supported creating a Solar Academy in **Senegal** (a country in West Africa).
10. **Science and Innovation:** They declared **2026 as the India-France Year of Innovation** and discussed working together in areas like energy and health.

**11. Consular Services:** India established its Consulate in **Marseille (in France)** and France did the same in **Hyderabad to provide consular services** for citizens of both countries.

- a. Consular services are the assistance provided by a country's embassy or consulate to its citizens abroad, like issuing passports and helping in emergencies.

**12. Young Professional Scheme:** France agreed to allow young Indian professionals aged 18-35 to study or work in France.

- a. **"Professionals"** are individuals who are highly skilled and trained in a specific field or occupation such as doctors, lawyers, engineers, teachers, etc. France also extended visa facilities for Indian students pursuing Master's degrees in France.

## India-France bilateral relationship:

### Historical Background

1. Despite France's colonial presence in India, the two countries have transitioned into a partnership recognizing India's growth and global stance.
2. India and France started talking and working together in **1948**, soon after India became independent. They have always had a good and friendly relationship, based on respect and understanding for each other.
3. In **1998**, they decided to make their bond stronger by forming a Strategic Partnership focusing on defense, civil nuclear issues, and space. Now, they also work together on maritime security, cyber security, and climate change.
4. **Shared Values and Cooperation:** Their partnership is based on common democratic values, belief in working together internationally, and strong cultural and people-to-people ties.
5. **Indian Diaspora's Role:** The Indian community in France, through political organizations, addresses issues of discrimination, reflecting a mutual cultural exchange.

### Recent Developments:

1. **2023 Milestones:** Marked 25 years of their partnership. The Prime Minister of India visited France, attended the French National Day, and set a future plan called **'Horizon 2047'**. A big Indian cultural festival, **'Namaste France'**, was also held.

## Key Areas of Cooperation

### 1. Defense/Strategic Partnership:

Defense and industrial cooperation are key parts of the India-France strategic partnership. India has agreements with over 35 countries, but its **1998 agreement with France is special**. The partnership includes **nuclear technology, space, defense, cyber security, intelligence, and fighting terrorism**. France supports India's **'Make in India'** program and defense manufacturing. They are helping the Indian Navy with a project to build submarines. The Indian Air Force is getting **36 Rafale Fighter Jets from France**, which helped during the Galway Valley conflict with China. France also supports India's bid for a permanent seat at the United Nations Security Council.

**A. Bilateral joint military exercises:** Army Exercise-**Shakti**, Naval Exercise-**Varuna**, Air Force Exercise-**Garuda**

### 2. Maritime Cooperation:

In 2016, both nations signed an agreement to boost commercial shipping. Recognizing the importance of the **Indian Ocean Region (IOR)**, both sides have signed the **'Mutual Logistics Support Agreement'**, which would enable the navies of both the nations to operate from each other's naval bases in the IOR in areas like **Djibouti, Abu Dhabi, Reunion Islands, Mauritius, Oman, and Seychelles**.

### 3. Economic Cooperation:

Trade between India and France is increasing. France is one of the top foreign investors in India. Many French companies operate in India. An agreement with the European Union could further increase trade. Post-Brexit, France is trying to attract Indian companies that used to operate in Britain.

### 4. Energy Cooperation:

India and France have a **'Civil Nuclear cooperation agreement'**. They are working on nuclear energy projects and launched the **'International Solar Alliance'** in 2015.

### 5. Cooperation on Counterterrorism:

After the Paris bombings, both countries have worked closely to fight global terrorism. France supports India's proposal for a Comprehensive Convention on International Terrorism at the United Nations.

They are also working together against **bio-terrorism** threats.

- A. A **biological attack**, or **bio-terrorism**, is the intentional release of viruses, bacteria, or other germs that can sicken or kill people, livestock, or crops.

### Challenges and Opportunities

1. One of the main challenges in the India-France relationship is the trade imbalance, with India exporting less to France than it imports.
2. Another challenge is the perception that French companies are not as responsive to the Indian market as their American or Chinese counterparts.

Overall, the India-France bilateral relationship is strong and growing. The two countries share a common interest in promoting stability and prosperity in the Indo-Pacific region. However, there are also many opportunities for further cooperation between the two countries, such as in the areas of infrastructure development, smart cities, and renewable energy.

## 2. INDIA-MYANMAR BORDER FREE MOVEMENT REGIME

1. In January 2024, the central government announced that it would abolish the Free Movement Regime (FMR) due to the ongoing ethnic conflict in Manipur.
2. The FMR is also being reconsidered due to insurgency, smuggling, drug trade and the increasing migration of Myanmar nationals following the 2021 political instability.

### 1. Detailed Background and Start of FMR:

- a. **How the Border Came to Be:** Back in 1826, the British rulers drew the line separating India and Myanmar, splitting some ethnic communities into two different countries.
- b. **Beginning of FMR in 2018:** India started the FMR to strengthen its relationship with Myanmar and help local economies grow. This was part of India's policy to connect more with eastern neighbours.
- c. **Why FMR was Introduced:** The idea was to make life easier for tribes living near the border, so they could cross it for doing business, getting medical treatment, or education without needing a visa.

### 2. Understanding Conflicts and Movement of People:

- a. **Fighting in Manipur:** The arrival of Kuki-Chin people from Myanmar into Manipur has caused more tension and fights between the local Meiteis and Kukis.
- b. **People Seeking Safety After 2021:** After Myanmar's military took control in 2021, lots of people from Myanmar fled to safer places in nearby Indian states, like Manipur and Mizoram.

### 3. Safety Concerns and Actions by the Indian Government:

- a. **India's Recent Decision:** Considering the safety worries, the Indian government wants to fence the entire border to prevent illegal activities.
- b. **Rethinking the FMR:** This plan also involves reconsidering the FMR because of issues like people crossing illegally, drug smuggling, and fears of rebel support.

### 4. Problems in Managing the Border:

- a. **Challenging Geography:** The border area is full of forests and hills, making it tough to watch over and put-up fences.
- b. **Misuse by Rebels:** Certain groups are known to use this open border area to smuggle weapons and drugs.

### 5. How Changes Can Affect Local People and the Economy:

- a. **Impact on Local Lives:** Changing the FMR rules might create problems for local tribes, who depend on crossing the border for work and living.
- b. **Importance of Border Trade:** The area around the border has a history of trade and it is very important for the local economy.

### 6. Looking at International Relations:

- a. **Friendship Between India and Myanmar:** The FMR has been a key part of maintaining good relations between the two countries.
- b. **Effects on Regional Peace:** How India and Myanmar handle the FMR and border issues plays a big role in the peace and security of the region, and in India's relations with other countries.

### 7. Views of Experts and Future Plans:

- a. **Balancing Act Required:** Experts say, it's important to find a way to keep the border



safe without causing too much trouble for local communities.

- b. **Improving FMR Rules:** They suggest making better rules for the FMR instead of completely stopping it.

#### 8. Recent Happenings and Data:

- a. **Drug Problems and Arrests in Manipur:** Recently, there has been a lot of drug smuggling and related arrests in Manipur.
- b. **Dealing with Illegal Immigrants:** The Indian government is working on identifying and sending back people, who have come into the country illegally from Myanmar.

#### Conclusion:

The situation at the India-Myanmar border, especially about the FMR, involves many layers, including historical, community, economic, and security aspects. While there's a clear need to improve border security, it's also crucial to think about the local people's needs and India's larger goals in how it interacts with other countries. A careful, well-thought-out approach is necessary to address these different issues.

### 3. BANGLADESH ELECTIONS

#### Context:

- Recently, General Elections were held in Bangladesh and Prime Minister **Sheikh Hasina** and her party, **Awami League**, have been re-elected.

#### How Elections are carried out in Bangladesh?

- Bangladesh has a **parliamentary democracy**. They hold general elections to choose members of the **Jatiya Sangsad** (National Parliament), which has **only one house**. In contrast, the Indian Parliament has two houses – the Lok Sabha and the Rajya Sabha.
- The electoral system is based on a **first-past-the-post system**, where the candidate who gets the maximum votes in each constituency wins a seat in the parliament.
- Out of the total 350 seats, **50 are reserved for women**. They are elected by the **Proportional Representation System** in which the number of seats a political party gets depends on the percentage of votes that party receives in an election. For example - if a party gets 50% votes, then 50% of the 50 reserved seats (i.e. 25) are provided to women members from that party.

- Similar to India, Bangladesh has **multiple political parties** participating in elections. However, since the 1990s, **2 parties** have been the main competitors:

#### 1. Awami League led by Sheikh Hasina

- It was formed in 1949 as an alternative to the Muslim League in East Pakistan.
- After the liberation of Bangladesh in 1971, Sheikh Mujibur Rehman from Awami Party emerged as a popular leader.
- He and his family were murdered but 2 of his daughters (one of them being Sheikh Hasina) survived.
- This party has been in power for 4 terms.

#### 2. Bangladesh Nationalist Party led by Khalida Zia

- It was formed in 1978 by Ziaur Rahman who was later killed.
- His wife Khalida Zia has been leading the party since then.
- This party has been in power for 2 terms.

#### Why Bangladesh Elections are controversial?

- Elections in Bangladesh have **historically been controversial** as the Ruling party or leaders were accused of using their position to influence the election results.
- To address these issues, a **caretaker government system** was established in **1990**. Its task was to monitor the election process to ensure fairness and impartiality. All elections in 1996, 2001, and 2008 were conducted under this system.
- However, this system was **abolished in 2011**, as it was concentrating power in the hands of unelected individuals. This goes against the principle of Parliamentary Democracy, where elected members enjoy power and are responsible to the people.
- Awami League led by Sheikh Hasina was the major player in the abolition of the caretaker system. However, the opposition parties claimed that it was done to manipulate elections and suppress opposition.
- The **Bangladesh Nationalist Party** led by Khalida Zia has **boycotted** the General Elections since 2014 and campaigned last year to restart the caretaker system.

## Why Bangladesh is important to India?

- Strategic Location:** India shares its longest land border with Bangladesh (around 4,000 Km). Indian states which share the border with Bangladesh include West Bengal, Assam, Meghalaya, Tripura and Mizoram. It makes Bangladesh important for the region's stability and security.
- Economic Ties:** Bangladesh has become the 2nd-largest economy in South Asia, replacing Pakistan. It is India's biggest trading partner in South Asia.
- Connectivity and Regional Cooperation:** Bangladesh is key to India's plans to connect with South-East Asia and develop the landlocked Northeast. It is a key player in regional groups like BIMSTEC (Bay of Bengal Initiative) and BBIN (Bangladesh, Bhutan, India, Nepal). India and Bangladesh share 54 common rivers paving the way for Inland Waterway connectivity.
- China Factor:** China's growing influence and involvement in the region affect how India and Bangladesh interact. Bangladesh has been carefully managing its relations with both India and China.
- USA Factor:** Historically Bangladesh does not have good relations with the USA. The USA had even supported Pakistan during the 1971 Bangladesh Liberation War. Also, the Biden Administration repeatedly raises the issue of Human Rights violations in Bangladesh.

## What are India's interests in the Bangladesh Elections?

- Sheikh Hasina** is a **strong ally of India**, with ties dating back to the 1970s, when India supported Bangladesh's liberation movement led by her father, **Mujibur Rahman**.
- Her **4 terms** as Prime Minister strengthened India-Bangladesh relations, resolving issues and supporting India's security.
- On the other hand, **Khaleda Zia's party, BNP**, is less favoured by India.
- During her tenure, Bangladesh had become a ground for terrorists who had **anti-India agendas**.
- Terrorist groups**, backed by Pakistan's Inter-Services Intelligence (ISI), operated from Bangladesh, raising security concerns for Northeast India and the Bangladesh border.

## 4. PRESIDENTIAL ELECTIONS IN TAIWAN

In January 2024, Presidential elections were held in Taiwan.

### About Taiwan

- Taiwan is an **island** located in East Asia and it is separated from China by **Taiwan Strait**.
- A strait is a narrow passage of water that connects two larger bodies of water. Taiwan Strait connects the **East China Sea** and the **South China Sea**.
- The island is relatively autonomous and governs itself.

<b>Capital</b>	Taipei
<b>Population</b>	Over 23 million people

### What is the Historical Background of Taiwan?

- China claims Taiwan as its territory** and wants to reunite it with mainland China.
- This claim dates back to Chinese records from 3<sup>rd</sup> century AD, when the Emperor of China had sent its forces and claimed Taiwan as part of its territory.

Period	Taiwan's Status
<b>Till 1683</b>	Taiwan was <b>controlled</b> by various countries, including the Dutch East India Company.
<b>1683–1895</b>	Taiwan was under the Rule of the <b>Qing Dynasty</b> .
<b>1895–1945</b>	Taiwan was given to Japan as it won the <b>1st Sino-Japanese War</b> . Hence, it remained under the <b>Japanese Rule</b> .
<b>1945</b>	Taiwan was returned to <b>China</b> .
<b>1949</b>	The <b>civil war</b> between the Chinese Nationalist Party (Kuomintang or KMT) and the Chinese Communist Party (CCP) <b>ended</b> .

### What is a Civil War?

- A civil war is a fight within one country between different groups that want control.
- In the case of China, civil war continued for a very long time from **1927 and 1949**.
- KMT wanted to introduce **Liberal democracy** like Western countries, whereas CCP wanted to establish a **Communist state** like the USSR.

- In 1949, the members of the KMT ran away to Taiwan and the CCP took the control of entire China. CCP even claimed sovereignty over Taiwan. Sovereignty refers to the supreme and absolute authority a state has over its territory and people.
- CCP said that one day they will re-unite Taiwan into mainland China. For this, they are even ready to make use of military force.
- On the other hand, KMT led Taiwan want to establish a constitutional democracy. It also has an armed force of around 3 lakh personnel. It seeks international recognition as an independent and sovereign country.

### What are China's Concerns regarding Taiwan?

- The present President of Taiwan has given hints of **formal independence** of Taiwan.
- The growing **ties** of Taiwan **with the United States** add to the tension.
- Although, the USA officially recognise China and not Taiwan, it sells weapons to Taiwan.
- Taiwan is part of the '**first island chain**'. The "first island chain" is a term that refers to a line of important islands off the eastern coast of Asia, including places like Japan, Taiwan, and the Philippines which are friendly to the USA.
- Taiwan is the **Hub of Semiconductor Industry**. The semiconductor chips developed by the Taiwanese company TSMC are considered the best in the world. Even the USA is dependent on these chips.

### What is the Role of the United States of America?

- The U.S. initially supported Taiwan's Nationalists i.e. KMT in 1949.
- However, it changed its stance in 1979 and recognised mainland China as the real China but it does not mean that the USA left Taiwan rather, it has maintained **strategic ambiguity** with Taiwan.

### What is Strategic Ambiguity?

- It means the USA doesn't clearly say whether it would defend Taiwan, if there's a conflict with China.
- In 1979, USA passed **the Taiwan Relations Act** which allowed the U.S. to support Taiwan militarily.
- It treats Taiwan as a democratic partner, which can counter China's influence in the region.

### What are India's Interests in Taiwan?

- India shares **common interests** with Taiwan, including trade and strategic concerns regarding China's aggression.
- Both countries value democracy, freedom, and human rights.
- India also has an interest in **technology** exchange, which can help in its digital transformation, tourism, education, and people-to-people contacts with Taiwan.

### What has been India's Stand regarding Taiwan?

- India and Taiwan have **friendly relations since 1995** through the **India-Taiwan Association (ITA)**. They handle things like business, tourism, and passport paperwork together.
- India says that any issues between Taiwan and China should be peacefully solved through dialogue, which aligns with **Article 51** of the Constitution of India. **Article 51 says that India should work towards maintaining peace and security in the world.**

## 5. MALDIVES GOVT. SUSPENDS 3 MINISTERS

- In January 2023, the government of the Maldives **suspended 3 deputy ministers** after they used social media to make disrespectful remarks about **Prime Minister of INDIA**.
- This situation began with a series of posts on X by the Indian PM, aimed at promoting tourism in the Lakshadweep islands.
- Following PM Modi's post, several well-known Maldivian social media users **made offensive and derogatory** comments.
  - The 3 Maldivian ministers were among those who made these remarks.
- These comments were directed not only at the Indian PM but also at Indians in general.

#### PM's Lakshadweep Visit

**Projects Inaugurated:** Over Rs 1150 crore worth of developments in **Technology, Energy, Water Resources, Healthcare, and Education.**

#### Key developments:-

- Kochi-Lakshadweep Islands Submarine Optical Fiber Connection.**
- Low Temperature Thermal Desalination (**LTTD**) plant at **Kadmat.**

3. Functional Household Tap Connections (**FHTC**) in **Agatti and Minicoy Islands**.
4. Solar power plant at **Kavaratti**.
5. Foundation for **Primary Health Care facility renovation** and model Anganwadi Centres.

### The Maldives' political landscape has seen a notable shift towards China, impacting its relationship with India.

1. **Change in Leadership:** Mohamed Muizzu, seen as pro-China, won the presidency, signaling a shift in the Maldives' foreign policy.
  - a. This victory is seen as a boost for China and indicates tension in the Indian Ocean region
2. **"India Out" Campaign:** Muizzu campaigned on a platform that included removing Indian military personnel stationed in the Maldives.
3. **New Agreements with China:** During Muizzu's first state visit to Beijing, the Maldives and China signed several agreements. This emphasizing China's role in Maldives' economic and infrastructure development
4. **In December 2023**, on the sidelines of the **COP28** climate summit, the President Muizzu said that India's government has agreed to withdraw its soldiers from the Maldives

#### India-Maldives Relations:

1. **Historic Connections:** Both nations share deep-rooted connections in terms of culture, language, and business. **India** was one of the **1<sup>st</sup> to recognize Maldives as a country** when it became independent in 1965.
2. **Location and Importance:** Maldives is near India's west coast and lies on important sea routes in the Indian Ocean, making it very important to India.
3. **Security Ties:** In Maldives' foreign relations, India plays a key role, especially in security. India is considered an important protector in this region.
4. **India's Help in Crises:** India's quick help during the 1988 coup attempt, the 2004 Tsunami, and the 2014 water shortage in Male has made the relationship stronger.
5. **Development Works:** India is part of many projects in Maldives, including in health, education, and building work, Like, development of airports at Hanimaadhoo and Gan Island, an island connectivity project called **Greater Male Connectivity Project**.

6. **Tourism:** Maldives is a favorite place for Indian tourists, with more and more Indians visiting recently.
7. **Education and Training:** India offers many scholarships and training chances to students and professionals from Maldives.

These points show the wide-ranging and evolving partnership between India and the Maldives, covering strategic, economic, development, and cultural areas.

**Conclusion:** PM Modi's visit marks significant strides in Lakshadweep's development and highlights India's commitment to enhancing infrastructure in its remote areas. The subsequent diplomatic incident with Maldives stressed the sensitivities in regional politics and the importance of maintaining respectful international relations.

## 6. ANGOLA EXITS OPEC

1. Angola, Africa's second largest oil producer, exits from OPEC (Organization of the Petroleum Exporting Countries) following its disagreements concerning the production targets.
2. Angola, which joined OPEC in 2007, produces about 1.1 million barrels per day, compared with 28 million bpd for the whole group.

#### Background

1. OPEC and allied nations decided to slash oil production in 2024 to prop up volatile global prices.
2. As a result, OPEC decided to reduce Angola's oil output target.
3. **Angola's stands:** Decision of slashing oil production goes against its policy of avoiding decline and respecting contracts.

#### Impact of the Decision

1. Number of OPEC members was reduced from 13 to 12, with Angola's departure.
2. Departure raises concerns regarding the unity of the organizations and results in a drop in the international oil prices.
  - Post announcement, prices already felt by more than 1%.
3. Divergence in the supply chain might escalate the existing geopolitical tensions, impacting oil shipping routes.

## About OPEC

1. The OPEC is a **permanent, intergovernmental organization** of the oil producing nations.
2. **Headquarters:** Vienna, Austria.
3. Origin can be traced back to the **Baghdad Conference in 1960**, by Iran, Iraq, Kuwait, Saudi Arabia, and Venezuela.
4. **At present 12 Members** (with Angola's exit)
  - o Algeria, Congo, Equatorial Guinea, Gabon, Iran, Iraq, Kuwait, Libya, Nigeria, Saudi Arabia, United Arab Emirates, and Venezuela.
5. Countries who **already withdraw** from OPEC: Ecuador (in 2020) and Qatar (in 2019) and Indonesia (in 2016).

## 7. SOUTH AFRICA FILES CASE AGAINST ISRAEL

1. Recently, South Africa filed case against Israel in the **International Court of Justice (ICJ)**, alleging misconduct in Gaza.
2. South Africa argued that Israel's military activities in Gaza violated the **'Genocide Convention'**.
3. The 'Genocide Convention' formed the foundation of South Africa's case, emphasizing the importance of safeguarding civilian lives in conflict zones like Gaza.

### About Genocide:

**Definition:** According to the United Nations (UN), genocide refers to the willing and systematic destruction of a specific ethnic, racial, religious, or national group.

### What is the Genocide Convention?

1. **Historical Background:**
  - a) The **Convention on the Prevention and Punishment of the Crime of Genocide** is a document of international law that officially defined the crime of genocide for the first time.
  - b) It was adopted by the **UN General Assembly on December 9, 1948**, marking it as the first human rights treaty passed after the Second World War.
2. **Commitment to Prevention:** Its adoption represented a significant commitment by the international community to ensure that the acts of genocide should never be repeated, emphasizing the principle of **"never again."**

3. **Development of International Law:** The Genocide Convention played a crucial role in shaping international human rights and criminal law, setting a framework for subsequent treaties and legal frameworks.
4. **Features:**
  - a) **State Obligations:** The Convention places the **responsibility on State Parties to prevent and punish genocide**. This includes the making of relevant laws and punishing criminals, irrespective of their official status.
  - b) **Customary International Law:** The obligations mentioned in the Genocide Convention, including the prohibition of genocide and the duty to prevent and punish it, are considered norms of international customary law. Thus, they are **binding on all states, regardless of whether they have ratified the Convention or not**.
  - c) **India's Ratification:** India has ratified the Genocide Convention, affirming its commitment to combating genocide and upholding the principles of international law and human rights.

### Understanding the 'South Africa vs. Israel Case' at ICJ:

1. **South Africa's Allegations against Israel:**
  - a) Accusations of large-scale killing of Palestinians, particularly children, by Israeli forces in Gaza.
  - b) Destruction of Palestinian homes by Israeli forces.
  - c) Blockade on essential supplies such as food, water, and medical assistance to Gaza.
  - d) Measures restricting Palestinian births by targeting essential health services for pregnant women and babies.
1. **Immediate Demands by South Africa:**
  - a) Asked ICJ to interfere immediately to prevent Israel from further actions which as considered as violations under the Genocide Convention.
  - b) Request for **"provisional measures,"** which are emergency orders to stop alleged crimes before the main case proceedings starts.
2. **Israel's Response:**
  - a) Israel condemns South Africa's case and pledges to defend itself at the ICJ.

- b) Israel argues that its actions, including the killing of thousands in Gaza, are in self-defense, emphasizing its right under international humanitarian law.

**3. International Community’s Stance:**

- a) Support from several countries and organizations for South Africa’s lawsuit against Israel.
- b) Countries like **Malaysia, Turkey, Jordan**, and members of the **Organisation of Islamic Cooperation (OIC)** express support in favour of South Africa.
- c) The **European Union remains neutral**, while the **US**, Israel’s primary supporter, **rejects** the genocide allegations but calls for investigation into humanitarian crimes.

**Laws and Regulations in India for Genocide:**

**1. International Conventions:**

- a) **India’s Ratification of UN Convention on Genocide:** India has ratified the UN Convention on Genocide, indicating its commitment to addressing genocide at the international level.
- b) **Signatory to Universal Declaration of Human Rights (UDHR) and Ratification of ICCPR and ICESCR:** India is a signatory to the UDHR and has ratified the International Covenant on Civil and Political Rights (ICCPR) and the International Covenant on Economic, Social, and Cultural Rights (ICESCR), reflecting its commitment to international human rights standards.

**2. Indian Penal Code (IPC):**

- a) IPC provides provisions for the punishment of genocide and related offenses, along with procedures for investigation, prosecution, and punishment.
- b) Genocide is declared as a crime under IPC Section 153B, targeting actions promoting enmity between different groups based on religion, race, place of birth, residence, language, etc., with the intent to incite riots or violence.

**3. Constitutional Provisions:**

- a) Indian Constitution, through **Article 15**, ensures protection against discrimination on the grounds of religion, race, caste, sex, or place of birth.
- b) **Article 21** guarantees the right to life and personal liberty, emphasizing the fundamental rights of individuals.

**4. Statutory Provisions:**

- a) **Establishment of National Human Rights Commission (NHRC):** The National Human Rights Commission (NHRC) was established in 1993 under the Protection of Human Rights Act (PHRA), 1993, to safeguard human rights within the country.
- b) **Creation of State Human Rights Commissions:** The PHRA also enables the establishment of State Human Rights Commissions, promoting the protection of human rights at the state level.

**Difference between International Court of Justice (ICJ) vs. International Criminal Court (ICC)**

Aspect	International Court of Justice (ICJ)	International Criminal Court (ICC)
Establishment	Established by the United Nations Charter in 1945.	Established by the Rome Statute in 1998.
Location	The Hague, Netherlands.	The Hague, Netherlands.
Membership	Open to all UN member states.	Currently, 123 states are parties to the Rome Statute.
Jurisdiction	Deals with disputes between UN Member states.	Prosecutes individuals for genocide, war crimes, and crimes against humanity.
Scope of Cases	Hears cases involving international law, including territorial disputes, state sovereignty, and treaty violations	Prosecutes individuals for the most serious crimes of international concern.
Appeals	No	Yes

Applicability of Decisions	Its decisions are binding on the parties involved in the dispute but have no direct impact on individuals.	Its decisions have direct legal implications for individuals accused of crimes within its jurisdiction.
Role in International Law	Contributes to the development and clarification of international law through its judgments and opinions.	Reinforces international law by holding individuals accountable for grave violations.

### How to Prevent Genocides and War Crimes?

Genocide doesn't occur suddenly or without warning. It's often a result of prior planning, carried out by governments or controlling groups.

In 2004, former UN Secretary-General **Kofi Annan** presented a **five-point strategy** to prevent genocide:"

#### 1. Prevent Armed Conflict:

- a) Address root causes such as hatred, intolerance, racism, and discrimination to reduce the likelihood of genocide, as it often occurs during war.
- b) Critical prevention strategies include addressing inequalities.

#### 2. Protect Civilians:

- a) Prioritize civilian protection when conflict prevention efforts fail.
- b) UN peacekeepers' mandates have expanded to physically shield threatened civilians.

#### 3. Judicial Action:

- a) Hold criminals accountable through judicial proceedings to restrict future genocides.
- b) Fighting crime establishes an expectation that criminals will face consequences, contributing to prevention.

#### 4. Appoint Special Advisers:

- a) Special Advisers on the Prevention of Genocide to collect information on potential genocide risks and related crimes.

#### 5. Hard Actions, including via Military Force:

- a) If peaceful methods fail and national authorities cannot protect populations from mass atrocities, collective action may be necessary.
- b) The UN Security Council, in accordance with the UN Charter, may authorize timely and decisive collective action, including military action.

### Conclusion:

Legal proceedings, such as those initiated by South Africa against Israel in the ICJ, starts global debate on allegations of genocide.

The outcome is crucial not only for resolving crises like Gaza but also for testing the integrity of the international legal framework. The ICJ's decisions will shape perceptions of the "rules-based international order."

## 8. INDIA AND SAUDI ARABIA SIGNED HAJ AGREEMENT FOR 2024

1. In January 2024, the Indian government finalized a **Bilateral Haj Agreement for the year 2024** with the **Kingdom of Saudi Arabia (KSA)**, a significant step in facilitating the annual Haj pilgrimage.
  - **Quota Allocation:** The agreement sets a total quota of 1,75,025 pilgrims from India for Haj 2024, with 1,40,020 seats allocated for the **Haj Committee of India** and 35,005 for Haj Group Operators.
  - **Support for Women Pilgrims:** The agreement acknowledges and supports the Indian government's initiative to encourage the participation of women pilgrims without a **Mehram (male companion)**.

### Key Highlights of the Haj Pilgrimage

1. **Sacred Obligation:** Hajj is a sacred pilgrimage to the holy city of **Mecca in Saudi Arabia**, mandatory for every adult Muslim at least once in their lifetime, forming one of the five pillars of Islam.
2. **Timing and Duration:** It occurs during **Dhu'al-Hijjah**, the final month of the Islamic calendar, spanning five to six days.
3. **Symbolic Garments:** Pilgrims wear simple white garments (**Ihram**) symbolizing equality and purity.
4. **Rituals:**
  - a) **Tawaf:** Pilgrims circle the Kaaba seven times, touching or kissing the Black Stone, representing spiritual significance.
  - b) **Standing at Arafat:** Pilgrims gather at Arafat, praying and asking for forgiveness from God.

- c) **Stoning of the Devil (Rami):** Pilgrims throw stones at pillars symbolizing Satan, recalling Prophet Ibrahim's resistance to temptation.
  - d) **Sacrifice (Qurbani):** Pilgrims offer the ritual sacrifice of an animal, honoring Ibrahim's willingness to sacrifice his son.
5. **Kaaba and Masjid al-Haram:**
- a) The Kaaba, a black cubic structure at the heart of the Masjid al-Haram, serves as the focal point of pilgrimage.
  - b) Pilgrims face the Kaaba during prayers, underscoring a sense of unity and a shared orientation of worship.
6. **Haj Pilgrimage for Indian Pilgrims**
- a) **Facilitation Authorities:** Haj pilgrimage for Indian pilgrims is facilitated either through the **Haj Committee of India (HCoI) or through Haj Group Organisers (HGOs)** approved by the Ministry of Minority Affairs.
  - b) **Nodal Ministry:** The **Ministry of Minority Affairs** oversees the organization of Haj pilgrimage in India.
  - c) **Haj Committee of India (HCI):**
    - i. **Establishment:** Established in 2002 under the Haj Committee Act, 2002.
    - ii. **Coordination:** The Consulate General of India (CGI) in Jeddah, Saudi Arabia, coordinates all arrangements for HCI pilgrims in Saudi Arabia.

### Essential Tenets of Islam:

The core principles of Islam, known as the Five Pillars, form the cornerstone of a Muslim's faith and conduct. They serve as obligatory acts of worship and moral guidelines, shaping the spiritual and ethical aspects of a Muslim's life. The Five Pillars are as follows:

1. **Shahada (Declaration of Faith):**
  - a) **Meaning:** Affirming the belief in the oneness of God (Allah) and the prophethood of Muhammad.
  - b) **Significance:** Central to Islamic doctrine, it emphasizes monotheism and acknowledges Muhammad as the final messenger of God.
2. **Salah (Prayer):**
  - a) **Meaning:** Observing ritual prayers five times a day, facing the Kaaba in Mecca.

- b) **Significance:** Demonstrates devotion, humility, and continual connection with Allah. The prayers are performed at specific intervals: Fajr (pre-dawn), Dhuhr (midday), Asr (afternoon), Maghrib (sunset), and Isha (night).

### 3. Zakat (Charity):

- a) **Meaning:** Contributing a portion of one's wealth (typically 2.5%) to support the less fortunate, such as the poor and needy.
- b) **Significance:** Encourages social responsibility, equity, and compassion. Zakat serves as a means of wealth redistribution and aid for those in need.

### 4. Sawm (Fasting during Ramadan):

- a) **Meaning:** Abstaining from food, drink, and other physical needs from dawn to sunset throughout the month of Ramadan.
- b) **Significance:** Fosters self-discipline, spiritual contemplation, empathy, and a deepening of faith. Ramadan is a period of heightened spiritual awareness and self-reflection.

### 5. Hajj (Pilgrimage to Mecca):

- a) **Meaning:** Undertaking a pilgrimage to the sacred city of Mecca, at least once in a lifetime, for those who are financially and physically capable.
- b) **Significance:** Symbolizes unity among Muslims globally. The pilgrimage involves rituals that commemorate the actions of Prophet Ibrahim and his family, reflecting submission to the will of Allah.

These Five Pillars provide Muslims with a comprehensive framework for worship, ethical conduct, and communal engagement. Adhering to these principles is fundamental to fulfilling religious obligations and nurturing a steadfast Islamic identity.

## 9. 19<sup>th</sup> NAM SUMMIT IN UGANDA

1. In January, 2024 Ugandan President Yoweri Museveni, who hosted the 19<sup>th</sup> Summit of the Non-Aligned Movement (NAM) in Kampala, expressed his regret over the expulsion of Indians by Idi Amin in the 1970s.
  - a. **Idi Amin Dada Oumee** was a Ugandan **military officer** and **politician** who served as the **3<sup>rd</sup> president** of Uganda from 1971 to 1979.



2. He praised the achievements of the Indian diaspora in Uganda and lauded **India's role in the global south**.
  - a. The **Global South** refer to map (countries often characterized as **developing, less developed, or underdeveloped**, primarily located in Africa, Asia, and Latin America).
  - b. These nations typically experience higher levels of **poverty, income inequality**, and challenging living conditions compared to the wealthier nations of the Global North.
  - c. The "**Global North**" is richer nations that are located mostly in **North America and Europe**.

### Uganda's Role in the 19<sup>th</sup> NAM Summit

1. **Host:** Uganda was selected to host the **19<sup>th</sup> NAM Summit** during a meeting held in **Baku, Azerbaijan (host of the 18<sup>th</sup> NAM summit in 2019)**.
2. **Chairing Term:** Uganda is set to chair the **NAM** for the period of **2024 to 2027**.
3. **Summit Agenda:** A key focus of the summit will be on fostering **global cooperation** and Unity, aiming to address common challenges faced by the member states, such as **economic and environmental issues**.

### Non-Aligned Movement (NAM):

1. **Foundation:** NAM was established during the **Cold War** as a coalition of countries that chose not to align with any major power bloc, such as the USA or USSR.
  - a. Drawing on the principles agreed at the **Bandung Conference in 1955**, the **NAM** was **established in 1961 in Belgrade**, through the initiative of the President of Yugoslavia, President of **Egypt**, Prime Minister of **India** Jawaharlal Nehru, President of **Indonesia** and President of **Ghana**.
  - b. The **Cold War** was a period of **geopolitical tension** between the **United States** and the **Soviet Union** and their respective allies from **1947 to 1991**. The term "cold war" refers to a state of conflict between nations that does not involve direct military action. Instead, it is pursued through economic and political actions, propaganda.
2. **Evolution Post-Cold War:** The focus of NAM shifted to encompass broader issues like economic development, cultural exchange, and fostering a sense of collective self-reliance among member nations.

3. **Membership Diversity:** With **120** member states, NAM represents a wide range of cultures and regions, making it a truly global movement.
  - a. **Observers in NAM:** The movement includes 18 observer countries and 10 international organizations, extending its influence beyond its member states.
4. **Core Purpose:** The main aim is to advocate policies of non-alignment, encouraging **mutual respect** among nations and promoting peaceful coexistence.
  - a. **Shift in Focus Since the Cold War:** Initially focused on maintaining neutrality during the Cold War, NAM now prioritizes South-South cooperation, addressing development issues, and tackling global challenges like climate change and economic differences.

### India's Participation and Contributions

1. **Representation by EAM Dr. S Jaishankar:** The External Affairs Minister of India represents the nation, showing India's ongoing commitment to the principles of NAM.
2. **India's Historical Role in NAM:** As one of the founding members, India has been actively involved in the Non-Aligned Movement since its inception and hosted the **7<sup>th</sup> NAM Summit** in New Delhi in **1983**.
3. **Engagement with Africa:** India's participation also enhances its strategic focus on **Africa**, exemplified by initiatives like opening the National Forensic Sciences University (**NFSU**) and **IIT Madras** campuses in **Uganda** and **Tanzania**, respectively.

### Key Meetings and Events Surrounding the Summit

1. **Additional Events in Uganda:** Following the NAM summit, Uganda also hosted significant events like the **3<sup>rd</sup> South Summits**.
  - a. This was the **1<sup>st</sup> time** that the **South Summit** was held in **Africa**. The previous two summits were held in Havana, Cuba, in 2000, and in Doha, Qatar, in 2005, respectively

### India-Uganda Relations: A Historical and Multifaceted Partnership:

1. **Historical Background:**
  - a. Indians arrived in Uganda in the late 19<sup>th</sup> century, mainly as traders and laborers.

- b. **Both** nations **experienced British colonization**, sharing similar struggles for independence.

## 2. Political Relations:

- a. **Post-Independence Era:** Formal diplomatic relations established post Uganda's independence.
- b. **Idi Amin's Regime:** Strained relations due to the expulsion of Indians.
- c. **Post-Amin Era:** Renewed diplomatic efforts, welcoming back the Indian community.

## 3. Economic and Commercial Ties:

- a. **Trade:** Growing trade relations with India exporting pharmaceuticals, machinery, and textiles to Uganda.
- b. **Investment:** Significant Indian investment in Ugandan industries like steel, banking, and IT.
- c. **Development Assistance:** India's aid in infrastructure projects and skill development in Uganda.

## 4. Cultural and People-to-People Links:

- a. **Indian Diaspora:** Plays a crucial role in Uganda's socio-economic development.
- b. **Cultural Exchange:** Regular cultural events promoting mutual understanding and appreciation.

## 5. Challenges and Future Prospects:

- a. **Economic Dependency:** Addressing the imbalance in trade.
- b. **Political Instability:** Navigating changes in the political landscape.
- c. **Future Cooperation:** Exploring new areas of partnership like technology, education, and sustainable development.

## India's Strategic Interests in Participating in NAM

1. **Diplomatic Engagement Goals:** India's involvement in the NAM Summit aligns with its broader foreign policy objectives of maintaining **strategic autonomy**, advocating for the interests of the **Global South**, and strengthening its ties with African countries.
2. **Focus on Capacity Building:** India's engagement in Africa, particularly in areas like education and forensic science, is part of a larger strategy to develop long-term partnerships based on mutual growth and development.

## 10. INDIA-NEPAL RELATIONS

In January 2024, during the **7<sup>th</sup> Meeting of the India-Nepal Joint Commission** held in Kathmandu.

### Key outcomes from the India-Nepal Joint Commission meeting:

Both nations inked several key agreements and reviewed all aspects of bilateral relations including connectivity, infrastructure development, economic partnership, trade, transit, investment, power, water resources, culture, tourism, sports, health and education.

1. **Power Export Agreement:** Nepal and India signed a long-term agreement for the export of 10,000 MW of power to India for the next 10 years.
2. **Cooperation in Renewable Energy:** The Nepal Electricity Authority and India's National Thermal Power Corporation Limited (NTPC) also signed an MoU for cooperation in renewable energy.
3. **Inauguration of Cross-Border Transmission Lines:** Inauguration of **3 cross-border transmission lines** which was completed with the help of India (**132 kV Raxaul-Parwanipur, 132 kV Kushaha-Kataiya and New Nautanwa-Mainahiya lines**).
4. **Financial Aid for Reconstruction:** India will provide 10 billion rupees to Nepal for reconstruction of earthquake hit areas of **Jajarkot and Rukum West**.
5. **Satellite Cooperation Agreement:** An agreement for the launch of **Nepal's Munal satellite** was formalized between the Nepal Academy of Science and Technology and NewSpace India Limited (NSIL) under the Indian Space Research Organisation.

### Major Areas of Cooperation Between India and Nepal

1. **About the relationship:**
  - a. India and Nepal share **close and friendly relations** characterized by **age-old historical and cultural linkages, open border and deep-rooted people-to-people contacts**.
  - b. Nepal shares a border of over **1850 km with five Indian states** – Sikkim, West Bengal, Bihar, Uttar Pradesh and Uttarakhand.

- c. The **India-Nepal Treaty of Peace and Friendship of 1950** forms the bedrock of India-Nepal relations.
2. **Defence and security cooperation:**
    - a. Since 1950, India and Nepal have been awarding honorary rank of General to each other’s Army Chief.
    - b. India assists Nepal army in its modernization through training and joint military exercise (**Surya Kiran**).
  3. **Trade and economic cooperation:**
    - a. India is **Nepal’s largest trade partner** and the **largest source of foreign investments**.
  4. **Connectivity and developmental cooperation:**
    - a. Line of credit of \$680 million by India to fund three major transmission corridors in **Nepal-Bheri Corridor, Nijgadh-Inaruwa Corridor and Gandak-Nepalgunj Corridor**.
    - b. Twin Integrated Check Posts (ICPs) in **Rupaidiha in India and Nepalgunj in Nepal** in 2023.
    - c. Establishing cross-border rail links at **Raxaul-Kathmandu, Jogbani-Biratnagar and Jaynagar-Bardibas**.
    - d. **Revised treaty of transit** that would provide Nepal access to inland waterways of India.
    - e. Some of the **High Impact Community Development Projects (HICDPs)** include Fateh Bal Eye Hospital in Nepalgunj, Rapti Cold Storage Building in Lamahi Bazar and Rehabilitated Small Hydro Power Plant in Jumla District.
  5. **Energy and Hydropower cooperation:**
    - a. India and Nepal have had a **Power Exchange Agreement since 1971** for meeting the power requirements in the border areas.
    - b. Construction of **Motihari-Amlekhgunj oil pipeline**.
    - c. India and Nepal have had long-standing and fruitful hydropower cooperation: **Phukot Karnali Hydroelectric Project, West Seti and Seti River (SR6) projects (1,200 MW), Lower Arun Hydroelectric Project, etc**
  6. **Water sharing cooperation:**
    - a. **The Koshi Agreement and Gandak Agreement** were the initial significant agreements fostering India-Nepal cooperation in the water resources sector.
    - b. Another vital pact, the **Mahakali Treaty**, ensures the fair utilization of Mahakali River, waters for both countries.
  7. **Multilateral cooperation**
    - a. Multilateral Cooperation as part of **BBIN (Bangladesh, Bhutan, India, and Nepal), BIMSTEC (Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation), and SAARC**. Nepal also joined **India-led International Solar Alliance (ISA)**.
  8. **Cultural Cooperation:**
    - a. Swadesh Darshan scheme has **Buddhist and Ramayana circuits** which connect the religious cities of Lumbini and Janakpur with that of India.
    - b. Strong and deeply rooted people to people connect (**Roti Beti ka Rishta**)

Major challenges in India-Nepal relationship	Solutions
1. <b>Boundary dispute:</b> Kathmandu, in 2020, released a political map that showed 3 Indian territories - <b>Limpiyadhura, Kalapani and Lipulekh</b> - as part of Nepal.	1. <b>Boundary dispute resolution</b> between India and Bangladesh can serve as a model.
2. <b>China’s rising footprints:</b> Increasing China’s role in Nepal’s economy through BRI and other developmental projects and aggravated anti-India sentiment in Nepal’s political sphere.	2. Focus on <b>multimodal connectivity projects</b> like <b>BBIN</b> to counter China’s BRI. India also needs to maintain Sustained engagement and limited interference with Nepal across political spectrum.

<p>3. Trust Gap: Due to India’s slow pace of project implementation and the alleged perception of India’s interference in Nepal’s politics</p>	<p><b>3. Faster and effective implementation of India-led projects</b> in Nepal to bolster positive public sentiment towards India’s delivery.</p>
<p>4. Security concerns: Porous border facilitates arms smuggling, terrorist activities and flow of counterfeit Indian currency, all of which pose serious security risks to India</p>	<p><b>4.</b> It is imperative to <b>engage in cooperative discussions</b> to enhance <b>border transit mechanism. Integrated border control</b>, including cutting-edge sensors, drones, and transportation and intervention tools, <b>requires institutionalised engagement.</b></p>
<p>5. Treaty of Peace and Friendship, 1950: Treaty is “not in tune with time.”</p>	<p><b>5.</b> Revisiting the Friendship treaty is a required step to take the relationship to further heights.</p>

### Conclusion

India and Nepal are increasingly realising the mutual benefits of their partnership and cooperation. They recognise the strategic importance of each other in the evolving global order and have maintained a positive momentum despite certain political challenges. It is only through sustained engagements that both nations can address the mutual suspicions and build trust for greater good of the region.

## 11. HENLEY PASSPORT INDEX 2024

Recently, Henley Passport Index 2024 was released placing India at Rank 85, granting its citizens visa free access to 62 countries.

### Overview of Henley Passport Index:

- The Henley Passport Index is a comprehensive ranking of global passports based on the number of destinations their holders can access **without a prior visa.**
- The index relies on exclusive data from the **International Air Transport Association (IATA)**, the largest and most accurate travel information database.
- Enhanced by research conducted by Henley & Partners, a London-based advisory firm.
- Includes 199 different passports and 227 travel destinations.

### Highlights of Henley Passport Index 2024:

- Top-Ranked Passports:**
  - France, Germany, Italy, Japan, Singapore, and Spain lead as the most powerful passports, offering visa-free entry to 194 global destinations.
  - The top 10 positions are predominantly held by European countries.
- Growth in Accessible Destinations:**
  - The average number of visa-free destinations has almost doubled, rising from 58 in 2006 to 111 in 2024.
- India’s Ranking:**
  - India’s passport is **ranked 85<sup>th</sup>**
  - Granting its citizens visa-free access to **62 countries.**
    - According to Ministry of External Affairs, Govt. of India, **16 countries allow visa-free entry, 40 countries provide visa-on-arrival, and 47 countries offer e-Visa facilities** to Indian passport holders.
    - India provides **e-Visa facilities** to nationals of **171 countries.**
- Lowest Ranked Passports:**
  - Afghanistan (rank 109) holds the lowest spot, with access to only 28 countries without a visa.
  - Syria (rank 108), Iraq (rank 107), and Pakistan (rank 106), follow closely, with limited visa-free access.
- Fastest Climber:**
  - The United Arab Emirates experienced significant growth, climbing to 11th place and offering visa-free access to 183 destinations.



## C. SECURITY

### 1. 1<sup>st</sup> INDIA-MADE DRISHTI 10 STARLINER DRONE

1. The Indian Navy has recently made a significant advancement by acquiring its first indigenous medium-altitude long-endurance (MALE) drone, the Drishti 10 Starliner unmanned aerial vehicle (UAV).
2. Crafted by **Adani Defence and Aerospace** in collaboration with Israeli defence giant Elbit Systems.

#### Indigenous Innovation: Drishti 10 Starliner Drone

1. This UAV is a **tailored version** of the **Hermes 900 Starliner** drones by Elbit Systems, adding a strategic asset to India's military arsenal.
2. **Features and Capabilities:** With 70% of its components being indigenous, the Drishti 10 Starliner showcases India's growing capabilities in defence production. The drone can endure flights for 36 hours and carry a payload of 450 kg, making it suitable for a wide range of missions. Its modular design and ground support mobility enhance its operational adaptability.
3. **Weaponization and Specifications:** The drone is equipped with 3 hard points for load carrying, which allows for potential weaponization. Operating at altitudes of 30,000 feet, it is an all-weather UAV, ensuring versatility across different mission requirements.

#### Naval Challenges and Rising Threats

1. **Geopolitical Context:** The Indian Navy faces challenges such as the strategic maneuvers of China, maintaining the international order at sea, and addressing new tensions in the Arabian Sea, including piracy and regional conflicts.
2. **Naval Response:** In response, the Indian Navy has ramped up surveillance across the Arabian Sea, deploying significant naval assets. This includes the use of P-8I maritime surveillance aircraft, Sea Guardian drones, Dorniers, helicopters, and Coast Guard ships to ensure regional security.

#### Technological Landscape: Future Prospects

1. **DRDO's Contribution:** The Defence Research and Development Organisation (DRDO) is working on the Tapas MALE UAV, which, alongside the Drishti 10 Starliner, represents India's commitment to enhancing its defence technology and preparedness.
2. **Global Collaborations:** India is seeking to further its military capabilities through international partnerships, including the potential acquisition of 31 MQ-9B remotely piloted aircraft systems (RPAS) from the United States. This move aims to bridge technological gaps and provide a versatile platform for diverse military applications.

#### Conclusion

The acquisition of the Drishti 10 Starliner UAV is a testament to India's strides towards achieving autonomy in defence technology and enhancing its naval ISR capabilities. By leveraging indigenous innovation and international collaborations, India is poised to address the complex security challenges in the maritime domain, ensuring peace and stability in the region. This strategic enhancement of naval forces signifies India's commitment to safeguarding its maritime interests and strengthening its position as a key player in the global maritime security landscape.

### 2. MARITIME PIRACY

Indian Navy conducted a mission to release Indian crew members from a ship taken over by Somali pirates in the northern Arabian Sea.

#### Who are Pirates?

1. Pirates are like sea thieves who board ships without permission, usually to steal things or demand money.
2. **Article 101** of the **United Nations Convention on the Law of the Sea (UNCLOS)** defines piracy as any illegal acts of violence, detention, or robbery committed on the high seas or outside the jurisdiction of any state. It may include taking control of ships, kidnapping

passengers or crew members, etc which is considered a serious maritime crime.

3. The “high seas” refer to areas of the ocean that are not under the jurisdiction of any single country and belong to everyone.

**Events going on:**

1. Piracy and Militant activities have increased in the **Red Sea region**, especially after the **Hamas-Israel conflict**.
2. It is being said that these activities are being carried out by a Yemen-led group named **Houthis**.
3. Such activities create challenges for international **trade** and the **security** of people. It is to be noted that the Red Sea accounts for around **12% of the Global Trade**.
4. Indian Navy, in recent times, have been called upon by many ships belonging to countries like Malta, and Gabon for help against such pirates.

**Regions Highly Affected by Piracy:**

Africa	Asia	South America
1. Northwest Africa	1. Red Sea	1. Coastal areas of Brazil
2. Gulf of Guinea	2. Gulf of Aden	2. Gulf of Paria
3. Somalia	3. Indian Ocean	
4. Horn of Africa	4. Indian subcontinent	
	5. Southeast Asia	

**What are the Initiatives Taken to Deal with Maritime Piracy?**

**1. Regional and Global Initiatives:**

<b>UNCLOS (United Nations Convention on the Law of the Sea) (1982)</b>	The treaty was signed in Montego Bay, Jamaica. It defines maritime zones, rights, and responsibilities of nations regarding the use of oceans.
<b>Convention for the Suppression of Unlawful Acts against the Safety of Maritime Navigation (1988)</b>	It aims to prevent unlawful acts such as terrorism and other illegal activities that threaten the safety of ships.

<b>Indian Ocean Rim Association (1997)</b>	It is a regional forum comprising coastal countries bordering the Indian Ocean that cooperate in areas such as maritime safety and security, trade facilitation, disaster risk management, etc
<b>Combined Maritime Forces (2002)</b>	It is a multinational maritime partnership of 39 countries, led by the USA. India is a member of this force.
<b>Operation Atalanta (2008)</b>	EU-led counter-piracy military operation in the Horn of Africa region and in the Western Indian Ocean
<b>International Fusion Centre (2018)</b>	A facility that promotes the sharing of maritime data and intelligence among multiple countries for the Indian ocean region.
<b>Operation Prosperity Guardian (2023)</b>	US-led military operation formed in December 2023 to respond to Houthi-led attacks on shipping in the Red Sea

**2. Indian Initiatives:**

<b>Anti-piracy patrols and surveillance</b>	Indian Navy has kept a close watch on the seas especially the Gulf of Aden since 2008 as it has remained highly affected by pirates.
<b>Coastal Surveillance Network</b>	India has set up radars and started utilising Aerial Drones along the coast to watch for anything suspicious.

<b>National Command Control Communication and Intelligence Network</b>	This is like a high-tech system that helps India quickly handle any problems at sea by using different ways of communication and information.
<b>National Maritime Domain Awareness Project (2014)</b>	It will provide “actionable intelligence” to the Navy for tackling maritime threats. “Actionable intelligence” means having useful, ready-to-use information to make smart decisions or take effective action.
<b>SAGAR Policy (2015)</b>	“SAGAR” stands for Security and Growth for All in the Region. It is India’s maritime doctrine or policy aimed at promoting security and sustainable development in the Indian Ocean region.
<b>Maritime Anti-Piracy Act (2022)</b>	It gives effect to the UNCLOS treaty by penalising piracy on high seas.

### 3. PUP TENTS FOR TROOPS ON LAC

Ongoing standoff with China along the Line of Actual Control (LAC) in extreme cold weather regions like eastern Ladakh, Sikkim, and Siachen Glacier. Indian Army looking to improve troop conditions and safety by acquiring new insulated “pup tents.”

**Key Points:**

1. **New Pup Tents:**
  - a. Accommodate 4 soldiers, compared to 2-3 in current tents.
  - b. Lighter, easier to set up, and better insulated for temperatures as low as -50°C.

- c. Robust design to withstand strong winds and heavy snow.
  - d. Efficient ventilation and cold-resistant materials.
  - e. Easy to carry for patrols and self-contained for quick setup.
2. **Benefits:**
    - a. Improved soldier productivity and safety in high-altitude areas.
    - b. Easier deployment in small posts and for sentries/ observation pairs.
    - c. Enhanced mobility and adaptability.
  3. **Current situation:**
    - a. India invests heavily in border infrastructure and habitats for 55,000 troops.
    - b. Modern habitats with water, electricity, and heating.
    - c. Larger heated tents and Ladakhi shelters for forward locations.
    - d. Emergency purchase of high-altitude winter clothing in 2020.

**Significance:**

1. Upgraded pup tents represent a crucial step in ensuring the well-being and operational effectiveness of Indian troops deployed in harsh LAC conditions.
2. Improved living conditions and mobility can boost morale and preparedness in the face of ongoing border tensions.

### 4. US-INDIA DEAL OF MQ-9B SKY GUARDIAN DRONES

The US State Department recently gave the green light for a potential sale of 31 MQ-9B Sky Guardian drones to India as part of a foreign military transaction.

**Background**

1. During Prime Minister Narendra Modi’s state visit to the US last year (June), India expressed interest in buying 31 MQ-9B Sky Guardian drones.
  - a. Of the 31 MQ-9B Predator drones being acquired
    - i. The Navy is set to receive 15 SeaGuardian drones
    - ii. The Army and The Indian Air Force each allocated eight of the land variant SkyGuardian.

## About MQ-9B Armed Drones?

1. The MQ-9B drone, a model derived from the MQ-9 "Reaper," is an unmanned aerial vehicle (UAV) designed for both remote control and autonomous flying capabilities.
2. These drones operate at high altitudes and have the endurance to stay airborne for extended periods.
3. These are equipped with precision strike missiles for accurately eliminating adversary targets.
4. General Atomics Aeronautical Systems (GA-ASI) designed the drone mainly for use by the United States Air Force (USAF).
5. It's capable of safely integrating into civilian airspace, it provides joint forces and civil authorities with continuous, day-and-night situational awareness in maritime environments.
6. The MQ-9B has two variants
  - a. SkyGuardia
  - b. SeaGuardian
    - i. The Indian Navy has been operating the MQ-9B Sea Guardian since 2020.
7. **Technical Features:**
  - a. The drone has a carrying capacity of up to 5,670 kg and a fuel capacity of 2,721 kg.
  - b. It can operate at altitudes above 40,000 feet.
  - c. With a maximum endurance of 40 hours, the Predator is ideal for extended surveillance missions.
  - d. It is versatile, supporting roles in land and maritime surveillance, anti-submarine and anti-surface warfare, strikes, electronic warfare, and expeditions.
  - e. Features automatic takeoffs and landings, detect and avoid system, anti-spoofing GPS, and encrypted communication links.
8. **Prior Usage:** It deployed an adapted Hellfire missile variant to target and kill al-Qaeda leader Ayman al-Zawahiri in Kabul.

## Need for India

1. **Boosting surveillance and attack capabilities:** The acquisition of these advanced drones aims to enhance India's surveillance capabilities and strengthen its armed forces.
  - a. Particularly due to the current tensions with China in Ladakh and escalating strains with Pakistan.

2. **Indo-Pacific Security:** Address the increasing presence of Chinese submarines and naval ships in the Indian Ocean Region, ensuring the security of crucial maritime communication and trade routes.
3. **Counter Terrorism and Insurgency:** MQ-9B armed drones are sought after to aid India's counter-terrorism and counter-insurgency efforts in Kashmir and beyond.

## Benefits of Acquiring MQ-9B Armed Drones to India:

1. **Enhance Defense ties with US:** Acquisition will enhance India's defense ties with the United States, a crucial ally in the Indo-Pacific area.
2. **Strengthen India's position in QUAD:** The procurement will reinforce India's position within the Quad, an alliance of democracies that includes the US, Japan, and Australia.
3. **Technology Sharing and Collaboration:** It will also open avenues for India's defense sector through technology sharing and collaborative production, aligning with the Make in India initiative.

## Other Defense Agreements between India and US

1. India and US have four foundational defense agreements:
  - a. **Basic Exchange and Cooperation Agreement for Geospatial Intelligence (BECA)**
    - i. Allows the two countries to share information related to military and defense including advanced maps and satellite data.
    - ii. India signed the agreement in 2020.
  - b. **General Security of Military Information Agreement (GSOMIA)**
    - i. Enables military forces to exchange intelligence information.
    - ii. India became a signatory in 2002.
    - iii. The Industrial Security Annex (ISA), which extends the GSOMIA, was agreed upon during the 2+2 dialogue in 2019.
1. ISA establishes guidelines for the sharing and safeguarding of classified military data between American and Indian defense sectors.
  - c. **Logistics Exchange Memorandum of Agreement (LEMOA)**



- i. It grants the two nations access to each other's specified military bases for refueling and resupply purposes.
  - ii. India signed the agreement in 2016.
  - iii. It is associated with the Communications and Information Security Memorandum of Agreement.
- d. Communication Compatibility and Security Agreement (COMCASA)**
- i. COMCASA, with a 10-year validity, is designed to establish a legal structure for the USA to transfer high-security communication equipment to India, enhancing the interoperability of their armed forces.
  - ii. India entered into this agreement in 2018.

## 5. EXERCISES/ OPERATIONS IN NEWS

Name	Participants/ Organizer	Brief Description
Sarvashakti	Indian Army	<ul style="list-style-type: none"> <li>▪ A strategic effort launched with the objective of eradicating terrorists accountable for a sequence of attacks targeting Indian troops in the Rajouri and Poonch regions of Jammu &amp; Kashmir.</li> </ul>
Sadbhavna	Indian Army	<ul style="list-style-type: none"> <li>▪ A goodwill practice to address aspirations of people affected by terrorism.</li> <li>▪ Currently adopted in Topa Pir village in Poonch district of Jammu &amp; Kashmir.</li> </ul>
Khanjar	India-Kyrgyzstan	<ul style="list-style-type: none"> <li>▪ 11<sup>th</sup> edition of Joint special forces exercise held at Special Forces Training School in Bakloh, Himachal Pradesh.</li> <li>▪ It is an annual event conducted alternatively in both the countries.</li> </ul>
Cyclone	India-Egypt	<ul style="list-style-type: none"> <li>▪ 2<sup>nd</sup> Edition held at Anshas, Egypt from 22<sup>nd</sup> January to 1<sup>st</sup> February 2024.</li> <li>▪ The 1<sup>st</sup> edition of the exercise was conducted last year in India.</li> </ul>
Desert Knight	India-France-UAE	<ul style="list-style-type: none"> <li>▪ Air Force exercise with focus on enhancing synergy and interoperability between the three Air Forces.</li> <li>▪ The exercise was conducted over the Arabian Sea, with IAF aircraft operating from bases within India.</li> </ul>
Desert Cyclone	India-UAE	<ul style="list-style-type: none"> <li>▪ 1<sup>st</sup> edition of Military Exercise</li> <li>▪ The Exercise was conducted in Mahajan, Rajasthan from 2<sup>nd</sup> to 15<sup>th</sup> January 2024.</li> </ul>
Sea Dragon	India-USA-South Korea-Japan-Australia	<ul style="list-style-type: none"> <li>▪ Naval Exercise held from 10<sup>th</sup> to 22<sup>nd</sup> January 2024 at Guam, USA</li> <li>▪ The Exercise aims to achieve high levels of synergy and coordination between friendly navies, which is based on their shared values and commitment to an open, inclusive Indo Pacific.</li> </ul>
MILAN-24	India-Indonesia-Singapore-Sri Lanka-Thailand	<ul style="list-style-type: none"> <li>▪ Biennial Naval Exercise</li> <li>▪ 12<sup>th</sup> edition of Multilateral Naval Exercise is scheduled from 19-27 Feb 24 in Visakhapatnam, under the aegis of Eastern Naval Command.</li> <li>▪ MILAN, from a regional event, has metamorphosed into a prestigious maritime exercise with participation by about 58 friendly foreign countries across continents in MILAN 2024.</li> </ul>
Ayutthaya	India-Thailand	<ul style="list-style-type: none"> <li>▪ Maiden Maritime Exercise between the Indian Navy (IN) and Royal Thai Navy (RTN)</li> <li>▪ Indigenously built Indian Naval ships Kulish and IN LCU 56 participated in the inaugural edition of the exercise.</li> <li>▪ The Indo-Thai Bilateral Exercise is being named as 'Ex-Ayutthaya', which literally translates to 'The Invincible One' or 'Undefeatable', and symbolizes the significance of two of the oldest cities Ayodhya in India and Ayutthaya in Thailand</li> <li>▪ 36<sup>th</sup> Edition of Coordinated Patrol Conducted along with the maiden bilateral exercise Ayutthaya</li> </ul>



## D. ECONOMY

### 1. CENTRE FOR THE FOURTH INDUSTRIAL REVOLUTION

1. **Telangana** and the **World Economic Forum (WEF)** have agreed to establish a **Centre for the Fourth Industrial Revolution (C4IR Telangana)** in Hyderabad.

a. **C4IR** is a global initiative by WEF to collaborate with various sectors to tackle challenges and opportunities of the **Fourth Industrial Revolution (4IR)**.

- **4IR** refers to the **integration** of AI, robotics, IoT, blockchain, 3D printing, genetic engineering, and other technologies, blurring the lines between the **physical, digital, and biological realms**.

- **Recent examples:** A **pacemaker** with wireless sensors that will dissolve in the human body after completing its job was unveiled by the US researchers.

b. C4IR Telangana will be **WEF's 19th centre globally** and the **2<sup>nd</sup> in India**, following Maharashtra.

c. It will be the **world's 1<sup>st</sup> centre** focusing on **health tech and life sciences**, acting as a '**Life Sciences Hot Spot**' in Asia.

d. The **not-for-profit, autonomous centre** will lead in healthcare policy formulation and implementation.

e. It aims to **promote technologies in genomics, personalized medicine, and healthcare manufacturing**, emphasizing the intersection of life sciences and technology regionally and globally.

f. Leveraging (taking advantage) the state's strengths like talent pool and infrastructure, it will align with government industrial policies.

2. **Other Industrial Revolutions:**

a. **First (1800s):** Utilized water and steam power for mechanization, e.g., Steam engine.

b. **Second (early 1900s):** Employed electric power for mass production, e.g., Electricity.

c. **Third (late 1900s):** Used electronics & IT for production automation, e.g., Computer and Internet.

3. **Concerns associated with 4IR**

- Automation and AI adoption in Industry 4.0 could lead to widespread **job loss** due to job displacement.
- The interconnectedness of Industry 4.0 raises **cybersecurity risks**, threatening privacy for businesses and individuals.
- Advanced AI and automation raise **ethical concerns** regarding accountability, bias, and transparency.
- Disparities in digital infrastructure contribute to a **digital divide** and uneven economic growth across countries.

4. **Status in India**

a. India aims to become a **global manufacturing hub**, focusing on 3D printing, machine learning, data analytics, and IoT for industrial growth.

b. Initiatives like the **Modern Coach Factory (MCF)** in Raebareli, Uttar Pradesh, introduce smart railway coaches equipped with sensors for passenger comfort.

c. The **Smart Advanced Manufacturing and Rapid Transformation Hub (SAMARTH) scheme**, launched in May 2020, aims to raise awareness of 4IR technologies among stakeholders.

d. India announced several 4IR-driven projects, including **Drone Shakti**, to support start-ups facilitating drone services.

e. The **Fourth Industrial Revolution for Sustainable Transformation (FIRST) Cancer Care** model employs 4IR technologies for improved healthcare.

f. The pan-India 3D maps program launched in February 2022 by Genesys International aims to facilitate 4IR-based projects like driverless cars in smart cities.

## 2. FUTURE OF GROWTH REPORT 2024

1. The **Future of Growth Report 2024**, released by the World Economic Forum (WEF), presents a **multidimensional framework for evaluating economic growth** in 107 countries worldwide.
  - a. It **evaluates economic growth** based on four dimensions: **Innovativeness, Inclusiveness, Sustainability, and Resilience**.
  - b. The framework assigns a **score from 0 to 100** to each pillar, with 100 indicating perfection in all aspects.
2. The report categorizes countries into **7 groups**
  - a. **India** is placed among countries following **efficiency-driven growth paths**, slowly **enhancing innovativeness**, inclusiveness, and resilience while maintaining a relatively low environmental impact.
3. **Pillar Description**
  - a. **Innovativeness**: Measures an economy's adaptability to **new technological, social, and institutional changes** for long-term growth improvement. Global innovation average: 45.2.
    - **India scored 40.2.**
  - b. **Inclusiveness**: Measures how well an economy benefits all stakeholders. Global inclusiveness average: 55.9.
    - **India scored 41.7.**
    - **Over 75%** in India lack basic social protection. Wealth share of **top 10%** in India increased from 0.55 (1995) to 0.65 (2021).
  - c. **Sustainability**: Measures if an economy keeps its ecological footprint within environmental limits. Global sustainability average: 46.8.
    - **India scored 56.0.**
    - Current trajectories indicate missing **Paris Agreement targets** (limit global warming to 2°C above pre-industrial levels, and preferably to 1.5°C).
  - d. **Resilience**: Measures how well an economy withstands and recovers from shocks. Global resilience average: 52.8.
    - **India scored 51.2.**
    - Many countries need better preparation for demographic changes.

## India's Perspective

1. **South Asia's economy** grew by an estimated 5.3% in 2023 and is projected to increase by 5.2% in 2024.
2. **India** remains the **fastest-growing** large economy in the world.
3. India's projected growth rate for 2024 is 6.2%.
4. Growth in India is supported by **domestic demand**, as well as expansion in the manufacturing and services sectors.

## 3. INDIA'S 1<sup>ST</sup> NATIONAL HIGHWAY STEEL SLAG ROAD

1. In January 2024, the **1<sup>st</sup> National Highway (NH) steel slag road** section on **NH-66 Mumbai-Goa** was inaugurated.
2. The technology behind this road is developed by the **Council of Scientific and Industrial Research-Central Road Research Institute (CSIR-CRRI)**.
3. **JSW Steel** constructed a **1 km long** four-lane steel slag road section. Around 80,000 tons of **CONARC Steel slag** were converted into **processed steel slag aggregates** (mass) for this project.
  - a. The **CONARC steelmaking process** is a steel-making practice that **combines electrode arc melting** and **oxygen steelmaking**. It uses **electrical and chemical energy** to melt and decarburize in separate shells.
  - b. The **CONARC process uses a raw material feed mix that consists of**: 60% hot metal from iron making units like blast furnaces, 38% solid charge, 2% steel scrap
  - c. **Processed steel slag aggregates** surpass natural aggregates in various mechanical properties and are used in all road layers instead of natural aggregates.
4. CSIR-CRRI has implemented steel slag in road construction projects in **Gujarat, Jharkhand, and Arunachal Pradesh**. Notable, in 2022, Surat got the **country's 1<sup>st</sup> steel slag road** at **Hazira**.
  - a. The **Border Roads Organization (BRO)** has also built a steel slag road in Arunachal Pradesh.
5. **Benefits of Processed Steel Slag in Road Construction**:
  - a. This development supports the **'Waste to Wealth'** initiative.

- This mission will identify, develop, and deploy technologies to treat waste to generate energy, recycle materials, and extract worth.
  - It is one of the nine national missions of the **Prime Minister's Science, Technology, and Innovation Advisory Council (PM-STIAC)**.
- b. It signifies a crucial step towards **sustainable, cost-effective, and eco-friendly highway construction** in India.
  - c. It addresses environmental degradation caused by **waste steel slag and unsustainable mining and quarrying** (process of extracting minerals and natural resources from the earth's surface) of natural aggregates.
  - d. The **bituminous steel slag road** on NH-66 requires **28% less thickness** compared to conventional bituminous roads.
  - e. These roads are approximately **32% more cost-effective** than conventional roads and exhibit better durability.

### WORLD'S 2<sup>ND</sup> LARGEST PRODUCER OF STEEL: INDIA

India has experienced significant growth in the **steel sector**, becoming the **world's 2<sup>nd</sup> largest producer**. The sector is crucial for industries like construction, infrastructure, automobiles, engineering, and defence.

#### Recent Initiatives for Steel Sector Growth

1. **Production Linked Incentive (PLI) Scheme:** Specialty Steel has been included in the PLI Scheme, with a financial outlay of above ₹6000 crore over 5 years.
  - a. This aims to **boost Specialty Steel manufacturing** domestically, attracting investment and promoting technology upgrades.
2. **Green Steel Making:** In line with India's commitments towards **net-zero emissions**, as outlined in COP-26, the Ministry of Steel (MoS) has taken various steps towards decarbonization of the steel sector
  - a. **13 Task Forces**, involving industry, academia, and other stakeholders, have been formed by MoS to discuss and recommend decarbonization strategies.

- b. The **Ministry of New and Renewable Energy (MNRE)** launched a **National Green Mission** for green hydrogen production, involving the steel sector as a stakeholder.
  - c. The steel industry is implementing **Best Available Technologies (BAT)** from global sources in modernization and expansion projects.
3. **Engagement with PM Gati Shakti National Master Plan:** MoS integrated capabilities of **Bhaskaracharya National Institute for Space Applications and Geo-informatics (BISAG-N)** into the **PM Gati Shakti National Master Plan**.
    - a. Geolocations of over 2000 steel units were uploaded to gain insights into steel production facilities.
    - b. This information will assist in planning railway line extension, inland waterways, highways, ports, and gas pipeline connectivity.
  4. **Steel Scrap Recycling Policy (SSRP):** SSRP, notified in 2019, facilitates establishment of metal scrapping centres for scientific processing and recycling of ferrous scrap, including end-of-life vehicles.
  5. **National Infrastructure Pipeline Projects:** MoS actively addresses issues related to **National Infrastructure Pipeline** projects of steel companies with concerned Central/State Government, Ministries/Departments.
  6. **National Steel Policy:** It outlines a roadmap for long-term growth of the Indian steel industry by 2030-31.

### 4. 1<sup>ST</sup> SUBMARINE OPTIC FIBER CABLE CONNECTIVITY TO LAKSHADWEEP

1. The Prime Minister, in January 2024, inaugurated the **Kochi-Lakshadweep Islands Submarine Optical Fibre Connection (KLI-SOFC)** project along with other projects totalling more than Rs 1,150 crore.
  - a. The projects cover a **wide range of sectors** including technology, energy, water resources, healthcare, and education.
  - b. Previously, communication with the Islands relied solely on **satellite medium**, which had limited bandwidth capacity and could not meet growing demands.

- c. This project will ensure **100 times faster Internet** for the people of Lakshadweep.

### About the KLI-SOFC Project

1. Lakshadweep required digital connectivity due to **limited satellite communication bandwidth** and the KLI-SOFC project aims to enhance internet speed, opening new opportunities.

2. It introduces **Submarine Optic Fiber Cable connectivity to Lakshadweep** for the first time.

#### 3. Project Details:

- Funded by the **Department of Telecommunications (DOT)** through the **Universal Services Obligation Fund (USOF)**.
- Completed by **Bharat Sanchar Nigam Limited (BSNL)**.
- Extends submarine cable connectivity from Kochi to 11 Lakshadweep Islands.

#### 4. Importance of this Project:

- The project supports **Digital India** and **National Broadband Mission goals**, facilitating various government e-governance projects in Lakshadweep.
  - The **National Broadband Mission (NBM)** was launched by the **Ministry of Communications** in 2019 to provide universal access to broadband services.
- Boosts **e-governance, tourism, education, health, commerce, and industries** on the islands.
- Enhances **standards of living** and **socio-economic development**.
- Provides **high-speed wireline broadband connectivity** and **5G/4G mobile network technologies**.
- Bandwidth accessible to all **Telecom Service Providers (TSPs)**, strengthening telecom services in Lakshadweep.
- It enhances the potential of developing Lakshadweep as a logistics hub

#### 5. Developments in Lakshadweep Islands:

- Low-Temperature Thermal Desalination (LTTD) Plant at Kadmat:** Produces 1.5 lakh litres of clean drinking water daily.
  - Functional Household Tap Connections (FHTC)** in **Agatti and Minicoy Islands**.

- All households in Agatti and Minicoy have functional tap connections.
- The LTTD is a process under which the warm surface seawater is evaporated at low pressure and the vapour is condensed with the help of cold deep seawater.

- Solar Power Plant at Kavaratti:** First battery-backed solar power project in Lakshadweep.
- Primary Health Care Facility in Kalpeni:** Foundation stone laid for primary health care facility renovation in Kalpeni.
- Model Anganwadi Centres (Nand Ghars):** Five model Anganwadi centres are to be constructed in Androth, Chetlat, Kadmat, Agatti, and Minicoy islands.

#### 6. About the Lakshadweep Islands:

- India's **smallest Union Territory** comprising **36 islands** over 32 km<sup>2</sup> with capital and principal town: **Kavaratti**.
  - Out of these 36, 10 islands (Kavaratti, Agatti, Amini, Kadmat, Kiltan, Chetlat, Bitra, Andrott, Kalpeni, and Minicoy) are inhabited.
  - Southernmost island, Minicoy, is situated close to the busy 9-degree Channel a critical shipping route.
- Islands situated 220 to 440 km from Kochi in the Arabian Sea.
- "Lakshadweep"** means 'a hundred thousand islands' in Malayalam and Sanskrit.
  - Originally named Laccadive, Minicoy, and Amindive, these islands were renamed Lakshadweep in 1973.
- Tropical climate** with an average temperature of 27°C – 32°C. Ship-based tourism closed during monsoons.
- Directly under the control of the Centre through an administrator.
- The entire indigenous population is classified as **Scheduled Tribes** because of their economic and social backwardness. There are no Scheduled Castes in this Union Territory.
- In 2020, the **world's 1<sup>st</sup> sea cucumber conservation reserve** (Dr. KK Mohammed Koya Sea Cucumber Conservation Reserve) established, spanning 239 sq km in the **Cheriyapani Reef**.

## 5. INDIA'S GNPA RATIO DECREASES: RBI

1. The Reserve Bank of India's (RBI) annual **Trend and Progress of Banking in India report** for the financial year 2022-23 revealed a **decrease** in the **Gross Non-Performing Assets (GNPA) ratio** to 3.9 per cent in 2022-23.

a. The **Gross Non-Performing Asset (GNPA) ratio** is calculated by dividing the total gross NPAs by the total assets. A **high GNPA ratio** can indicate that a bank has a **large number of loans that are not being repaid**.

### About NPA

- Non-Performing Assets (NPA)** is a loan or advance that is overdue for interest or principal instalments for **90 days**.
- According to the RBI, an asset becomes non-performing when it stops generating income for the bank.

### Reasons for NPAs

- Defective Lending Process:** Improper selection and **infrequent review** of borrowers' credit profiles in Public Sector Banks (PSBs) can lead to NPAs.
  - Lack of cooperation with financial institutions can result in borrowers defaulting in multiple banks.
- Wilful Defaults:** Some borrowers, despite having the means to repay their loans, choose not to pay which results in loan defaults.
- Industrial Sickness:** Ineffective management, resource inadequacy (deficiency), technological changes, and government policy shifts contribute to industrial sickness, impacting banks financing these industries.
- Regulatory Issues:** Flouting (defying) RBI guidelines and non-compliance with regulatory directives by PSBs can lead to fraud and NPA escalation (rise).
- Frauds by Bankers and Borrowers:** Instances of fraud in the public sector banking system are increasing, though still relatively small compared to overall NPAs.

- Reported fraud cases in the banking sector surged above 14,000 in the first half of the 2023-24 financial year, up from 5,400 cases in the same period last year (2022-23).

### Major steps taken to reduce NPA

- SARFAESI Act, 2002** (Securitisation and Reconstruction of Financial Assets and Enforcement of Security Interest Act, 2002): It allows secured creditors to take possession of collateral, against which a loan had been provided, upon a default in repayment.
- Debt Recovery Tribunals:** Established under the Recovery of Debts and Bankruptcy Act, 1993.
- Insolvency and Bankruptcy Code (IBC), 2016:** For reorganisation and insolvency resolution of corporate persons, partnership firms and individuals in a time-bound manner i.e. within 180 days or the extended period of 90 days.
- National Asset Reconstruction Company (NARCL):** It aims to reduce NPAs of banks, improving financial system stability and efficiency.
  - It is incorporated under the Companies Act 2013 with PSBs holding a majority stake.
- Indradhanush** plan for revamping PSBs, envisaging infusion of capital in PSBs.

### Other Highlights of the Report

- Consolidated balance sheet of Scheduled Commercial Banks **grew by 12%** in 2022-23, the **highest in 9 years**.
- Urban Co-operative Banks (UCBs) saw above **2% expansion** in their combined balance sheets, while Non-Banking Financial Companies (NBFCs) witnessed a **15% growth**.
- Unsecured retail segment's growth rate** surpassed total bank credit growth. NBFCs' **double-digit credit expansion** was fuelled by unsecured loans, growing more than twice as fast as secured loans.
- Total reported **bank fraud declined to a 6-year low** in 2022-23, with the average fraud amount at its lowest in a decade.
- Capital-to-Risk-Weighted Assets Ratio (CRAR)** of SCBs reached 17% by September 2023.

**2. Impact and Solutions:**

Impact	Solutions
Rising NPAs hinder banks from lending for <b>productive activities</b> , slowing down economic growth. This can result in reduced job opportunities and inflation.	Government support through a comprehensive <b>4R strategy</b> - Recognition of NPAs, Resolution of stressed accounts, Recapitalizing PSBs, and Financial Reforms.
Rising NPAs may prompt banks to raise interest rates to cover losses, <b>increasing borrowing costs</b> for individuals and companies.	Strengthen <b>credit monitoring</b> by developing early warning mechanisms and comprehensive MIS for timely detection of problem accounts.
Growing NPAs pose reputational, operational, and business risks for banks, <b>eroding customer trust</b> and affecting financial stability.	Enhance the <b>credit approval process</b> for thorough assessments and periodic reviews.
Courts face mounting backlogs due to <b>inefficient debt recovery systems</b> , causing delays in resolving cases.	Effective implementation of the <b>Debt Recovery Tribunal (DRT)</b> would decrease the pendency of cases in courts.

**6. RISE IN INDIA'S PROCESSED FOOD EXPORTS**

- **India's Food Processing Sector** has become a sunrise industry, attracting approximately Rs 50,000 crore in **FDI investments** over the past nine years.
  - **A sunrise industry** is a **new or relatively new business or sector** that is **expected to grow quickly** and become important in the future.

**What is Food processing?**

1. Food processing is the set of methods and techniques which are used to transform raw ingredients into finished and semi-finished products.
2. According to the Ministry of Food Processing Industries (MoFPI), if any raw product of agriculture, animal husbandry or fisheries is transformed in such a way that
  - a. its original physical properties undergo a change,
  - b. the transformed product is edible and
  - c. has commercial value, then it comes within the domain of Food processing Industry (FPI).

3. Processed foods vary in **nutritional content, taste, texture, and shelf life.**

**Significance of the Food Processing Sector**

1. **Boosts farmer's income** through value addition and waste reduction.
2. **Generates employment** opportunities.
3. Contributes to **earning foreign exchange.**
4. Ensures **food and nutritional security.**

Challenges	Solutions
<b>Lack of Cutting-Edge Infrastructure:</b> Insufficient cold storage, processing facilities, and transportation network.	Encourage government <b>initiatives and incentives</b> for infrastructure development in the food processing sector, especially for SMEs.
<b>Inefficient Supply Chains:</b> Insufficient supply chain infrastructure contributes to wastage, with annual post-harvest losses.	Improve infrastructure to reduce post-harvest losses by investing in better <b>storage, transportation, and distribution facilities.</b>
<b>Lack of Access to Credit:</b> Traditional banks and financial institutions often have strict lending criteria, making it challenging to access funding.	Work towards creating <b>specialized financial institutions</b> or schemes tailored to the needs of SMEs in the food processing industry.
<b>High food wastage:</b> Approximately <b>74 million tonnes</b> of food is lost in India annually.	Implement measures to <b>strengthen supply chains</b> and technology adoption to reduce post-harvest losses and food wastage.

**Initiatives to Promote the Food Processing Sector**

1. **One District One Product (ODOP) initiative:** Provides a distinct identity for small farmers and industries.
2. **Pradhan Mantri Kisan Sampada Yojana (PMKSY):**
  - a) **Mega Food Parks Scheme:** Modern food processing infrastructure based on a cluster approach.

- b) **Integrated Cold Chain:** Promotion of uninterrupted cold chain facilities from farm gate to consumer.
- c) **Scheme for Creation of Infrastructure for Agro Processing Clusters:** Involves Basic Enabling Infrastructure and Core Infrastructure/Common Facilities.
3. **Production Linked Incentive Scheme for Food Processing Industry (PLISFPI):** Aims to support the creation of global food manufacturing champions.
4. **Pradhan Mantri Formalisation of Micro food processing Enterprises (PMFME) Scheme:** Focuses on Basic Enabling Infrastructure and Core Infrastructure/Common Facilities.
5. **100% Foreign Direct Investment (FDI) Approval:** Allowed under the automatic route for the food processing sector.

## 7. RBI PUBLISHED 2023 LIST OF D-SIBS

1. RBI publishes the **2023 list of Domestic Systemically Important Banks (D-SIBs)**.
  - a. D-SIBs are banks that are considered **“too big to fail”**. They are identified as such if their failure could have a serious impact on the financial system or the economy.
  - b. D-SIBs are significant because of their size, cross-jurisdictional activities, complexity, and interconnection.
2. **Declaration/Regulation of D-SIBs:**
  - a. D-SIBs are determined based on the **RBI’s D-SIBs Framework since 2014**, aligned with the **Basel Committee on Banking Supervision’s (BCBS) framework**.
    - The **BCBS is a global standard** setter for bank regulation. The Basel Framework is the full set of standards set by the BCBS.
    - The **Basel III framework** is a voluntary regulatory framework that deals with bank capital adequacy, stress testing, and market liquidity risk.
    - The **Capital Adequacy Ratio** established guidelines for banks by assessing each institution’s capacity to meet its obligations and respond to operational and credit risks.

- **Market liquidity risk** is the loss incurred when a market participant wants to execute a trade or to liquidate a position immediately while not hitting the best price.
- b. Banks are categorized into **5 buckets** according to their systemic importance.
  - c. India’s current D-SIBs include **State Bank of India** (bucket 4), **HDFC Bank** (bucket 2), and **ICICI Bank** (bucket 1).
  - d. D-SIBs must maintain **Additional Common Equity Tier 1 (CET1)** as a percentage of **Risk Weighted Assets (RWAs)**.
    - **Additional Common Equity Tier 1 (AT1)** is a type of instrument that is eligible to be included in the Common Equity Tier 1 (CET1) tier.
    - **RWAs** are a bank’s assets that are **weighted by risk**. They are used to link the minimum amount of capital that banks must have with the risk profile of their lending activities and other assets.
  - e. CET1 requirements vary between buckets, with **Bucket 1 banks** having the **lowest CET1** (0.20%) and **Bucket 5** banks the **highest** (1%).
3. **Regulation for Global Systemically Important Banks (G-SIBs) with Branches in India:**
    - a. **Foreign banks** designated as G-SIBs and operating branches in India must maintain an additional CET1 capital surcharge.
    - b. The **Financial Stability Board (FSB)** releases the list of G-SIBs annually.
      - FSB is an international body that monitors and makes recommendations about the **global financial system**. It was established in 2009 at the G20 Pittsburgh Summit as a successor to the Financial Stability Forum.

## 8. MULTIDIMENSIONAL POVERTY

A report by NITI Aayog showed that the percentage of people living in multidimensional poverty in India dropped **from 29.17% in 2013-14 to 11.28% in 2022-23**. This means about 24.82 crore people are no longer considered poor in these dimensions.



## What is Poverty?

1. Poverty is often measured by how much money a person earns or spends. To find out if someone is poor, we use “**poverty lines,**” which are the least amount of money someone needs to not be considered poor.
2. The **NITI Aayog** calculates the Poverty Line in India based on the data collected by the National Sample Survey Office (**NSSO**).
3. The poverty line in India in 2023 is **1,059.42** Indian Rupees (62 PPP USD) per month in **rural areas** and **1,286** Indian rupees (75 PPP USD) per month in **urban areas**.

## What is the National Multidimensional Poverty Index?

- NITI Aayog manages India’s Multidimensional Poverty Index (MPI) and established the **MPI Coordination Committee** (MPICC) for effective oversight.
- The MPI Coordination Committee (MPICC), **collaborates with key Ministries** to tackle multidimensional poverty across sectors.

## About MPICC

- The MPICC, supported by stakeholders like **NFHS survey implementers** (Ministry of Health and Family Welfare) played a pivotal role in crafting and validating India’s national MPI.
- **Technical partners** such as Oxford Poverty and Human Development Initiative (OPHI) and the United Nations Development Programme (UNDP) contributed to the MPICC’s efforts, ensuring the technical soundness and reliability of the national MPI.
- The MPICC’s composition reflected the multidimensional nature of the index, drawing **expertise from various sectors** to address diverse indicators and sub-indicators effectively.

## What is the Global Multidimensional Poverty Index?

- The MPI is a significant global tool for assessing severe multidimensional poverty in over **100 developing nations**.
- Launched in 2010 by OPHI and the UNDP’s Human Development Report Office, the MPI tracks deprivations in **10 indicators** covering health, education, and living standards, addressing both poverty incidence and intensity.

- This index offers a **comprehensive measure of poverty beyond income**, providing valuable insights into the multifaceted nature of poverty worldwide.

## What Does Multidimensional Poverty Include?

The MPI checks poverty by considering 3 big areas:

1. **Health:** How healthy people are.
2. **Education:** How much schooling do people get.
3. **Standard of Living:** How people live, including their house, what they own, and basic services like water and electricity.

## What’s Special About India’s MPI?

India added two more indicators to the global MPI model:

1. **Maternal Health:** To emphasize the importance of women’s health during pregnancy.
2. **Bank Accounts:** To show the significance of financial inclusion in improving living standards.

## India’s Progress in Reducing Multidimensional Poverty:

### Improvements in All Areas

1. All **12 indicators** used to measure poverty have shown great improvement.
2. **Uttar Pradesh, Bihar, and Madhya Pradesh saw the biggest reduction in poverty.**

### Faster Improvement in Poorer States

1. States that were poorer before have seen a quicker decrease in poverty, helping reduce differences in poverty levels across the country.
2. India is on track to meet the Sustainable Development Goal (SDG) of cutting multidimensional poverty by half well before the 2030 deadline.

## How Was This Achieved?

1. The government has launched many initiatives targeting different aspects of poverty, from health and nutrition to education and living standards.
2. Important programs like **Poshan Abhiyan** and **Anemia Mukh Bharat** have improved healthcare access.
3. The **Targeted Public Distribution System** provides food grains to **over 81.35 crore people**, ensuring food security.
4. Efforts like the **Ujjwala Yojana** for clean cooking fuel, **Saubhagya for electricity access**, **Swachh Bharat Mission for cleanliness**, and **Jal Jeevan Mission**

for water supply have significantly improved living conditions.

5. Financial inclusion and housing have been addressed through the **Pradhan Mantri Jan Dhan Yojana** and **PM Awas Yojana**.

### Impact on National Development

1. The progress in reducing poverty is not just about numbers. It's about real improvements in the lives of millions of Indians.
2. This success shows India's strong commitment to lifting its citizens out of poverty and moving towards becoming a **developed nation by 2047**.

### Conclusion

The government's focused efforts on multidimensional poverty have led to substantial achievements. By addressing health, education, and living standards simultaneously, India has made remarkable strides toward reducing poverty and ensuring a better future for its citizens.

## 9. WORLD'S 4<sup>TH</sup> LARGEST STOCK MARKET : INDIA

1. In January 2024, India **surpasses Hong Kong** to claim the **4<sup>th</sup> spot** in global stock market rankings, data released by **Bloomberg**.
2. The **top 3** global stock markets are the **United States, China, and Japan**.
3. **Stock Market:** The stock market facilitates trading of various securities like stocks, bonds, Exchange-Traded Fund (ETFs), and derivatives by investors.
  - a. **Two main types of stock markets:**
    - **Primary Market:** It is a market where the company sold their **new shares** or bonds for the **first time** through initial public offering (IPO).
    - **Secondary Market:** Trading of **existing securities**, such as equities and bonds among the investors. **Example:** Bombay Stock Exchange.
4. **Significance of Stock Market:**
  - a. **For Businesses:** Provides access to capital, aids in risk diversification, and facilitates business expansion.

- b. **For Investors:** Offers better returns compared to traditional savings instruments, along with tax benefits and capital growth opportunities.
- c. **For Society:** Supports social impact bonds, encourages sustainable investment through green bonds, and contributes to societal development.
  - **Green bonds** are debt securities that governments, companies, and multilateral organizations can issue to raise money for projects that have positive effects on the climate and environment.
- d. **For Economy:** Mobilizes idle savings, encourages entrepreneurship via venture capital (VC) funds, and stimulates economic growth.
  - VC funds are investment funds that manage money from investors who want private equity stakes in startups and small to medium-sized companies. These funds are high-risk/high-return opportunities.

### 5. Issues with Indian Stock Markets:

- a. **High volatility** and investor base hamper liquidity.
- b. Dominance of **government bonds** results in a low standard corporate debt market.

### 6. Regulation of Stock Markets in India:

- a. **Securities and Exchange Board of India (SEBI):** Regulates various market intermediaries such as stock brokers and exchanges. SEBI operates under the **SEBI Act of 1992**.
  - The **Securities and Exchange Board of India (SEBI) Act of 1992** establishes a **statutory body** to protect the interests of investors and regulate the securities market.
- b. **Reserve Bank of India (RBI):** Oversees the **Government Securities market** among other responsibilities.

## 10. 4<sup>TH</sup> STATES' STARTUP RANKING

1. On **National Startup Day** (16<sup>th</sup> January 2024) the results of the 4<sup>th</sup> edition of the States' Startup Ranking 2022 were announced by the Ministry of Commerce and Industry.
  - Notable, this edition was launched in 2022.

2. The States' Startup Ranking is a **periodic capacity-building exercise** created by the Department for Promotion of Industry and Internal Trade (DPIIT) to evaluate all of India's States and UTs on their efforts to build an ecosystem conducive to startup growth.
3. **This edition** saw the **maximum participation** across all editions, of **33 States and Union Territories (UTs)**.
  - a. States and UTs are ranked based on various criteria that support startup growth.
  - b. States and UTs are divided **based on population** Category A (>1 crore) and Category B (<1 crore).

### States Startup Ranking Framework 2022 Results

Category A States (Population more than 1 crore)	
Performance	States/UTs
1. Best performer	Gujarat, Karnataka, Kerala, Tamil Nadu
2. Top Performer	Maharashtra, Odisha, Punjab, Rajasthan, Telangana
3. Leader	Andhra Pradesh, Assam, Madhya Pradesh, Uttar Pradesh, Uttarakhand
4. Aspiring leader	Bihar, Haryana
5. Emerging Ecosystems	Chhattisgarh, Delhi, Jammu and Kashmir
Category B States (Population less than 1 crore)	
1. Best performer	Himachal Pradesh
2. Top Performer	Arunachal Pradesh, Meghalaya
3. Leader	Goa, Manipur, Tripura
4. Aspiring leader	Andaman and Nicobar Islands, Nagaland
5. Emerging Ecosystems	Chandigarh, Dadra and Nagar Haveli, Daman and Diu, Ladakh, Mizoram, Puducherry, Sikkim

### Government's Major Initiatives to Support Startups

1. Funds of Funds (FoF) Scheme
2. Startup India Seed Fund Scheme (SISF)
3. Startup India Investor Connect
4. Multilateral Engagements (Startup20)
5. National Startup Awards

### Importance of Ranking

1. **Competitive Spirit:** Encourages healthy competition among states, leading to better support systems for startups.
2. **Potential for Innovation:** Indicates significant potential for growth and innovation in India's startup sector.
3. **National Development:** Contributes to the national goal of fostering a self-reliant, innovative, and technologically advanced India.

### Conclusion

**Overall Impact:** These rankings and initiatives reflect India's commitment to fostering an environment where startups can thrive and contribute to the economy.

**Future Prospects:** Encourages states to continue improving their **startup ecosystems**, promoting innovation, and contributing to India's goal of becoming self-reliant.

## 11. NEW RULES AND REGULATIONS OF UPI: RBI

1. In Jan 2024, the Reserve Bank of India (RBI) has announced new rules and regulations to enhance the scope of Unified Payments Interface (UPI) payments.
  - a. **Enhancing UPI transaction limit:** The **limit for UPI payments to hospitals and educational institutions** has increased to **Rs 5 lakh** from Rs 1 lakh.
    - Except for certain categories like Capital Markets, Collections, and Insurance, the **general UPI transaction limit remains Rs 1 lakh**, while it's **Rs 2 lakhs** for these **specified categories**.
  - b. The **National Payment Corporation of India (NPCI)** mandates **deactivation of inactive UPI IDs** after one year,
    - Asking users on platforms like Google Pay and PhonePe to verify and maintain their IDs active.
  - c. RBI plans nationwide rollout of **UPI ATMs**, facilitating cash withdrawal through QR code scanning, with Hitachi Payment Services introducing the country's first UPI-ATM in partnership with NPCI.

- d. RBI proposes a 4-hour window for **first-time payments** over ₹2,000 to new recipients, allowing users to reverse or modify transactions for added control and security.

#### About NPCI

NPCI operates **retail payments and settlement** systems in India.

It's an **initiative of RBI and Indian Banks' Association (IBA)** under the provisions of the Payment and Settlement Systems Act, 2007.

Incorporated as a **"Not for Profit" Company** under **Section 8 of the Companies Act 2013**.

NPCI has introduced various payment products including **RuPay card, IMPS, UPI, BHIM, BHIM Aadhaar, Bharat BillPay**, etc.

**RuPay cards** are domestic cards, while Visa or MasterCard are international system cards, and have lower processing fees and times because they use domestic processing for local transactions.

**BHIM** stands for **Bharat Interface for Money**. It's a mobile payment app developed by the NPCI in 2016.

#### About UPI

UPI **consolidates multiple bank accounts into a single mobile application**, offering various banking services like fund transfers.

- Developed by NPCI** in 2016 over the **Immediate Payment Service (IMPS) infrastructure**.
  - Immediate Payment Service (IMPS)** is a service that **allows users to transfer money instantly between banks** in India. It is **available 24/7**, including on bank holidays.
  - IMPS is facilitated by the **National Payment Corporation of India (NPCI)**. It can be used through mobile phones, internet banking, or ATMs.
- It stands as the **most successful real-time payment system globally**, ensuring simplicity, safety, and security in person-to-person (P2P) and person-to-merchant (P2M) transactions in India.

#### New Features of UPI

- Credit Line on UPI**: Now, banks can offer **pre-approved credit lines through UPI**, allowing transactions beyond deposited amounts. Earlier, **only**

**the deposited amount** could be **transacted** through the **UPI System**.

- UPI Lite X**: Enables **offline money transfers** using **Near Field Communication (NFC)** on compatible devices for both sending and receiving funds.
  - NFC** is a set of **wireless technologies** that **allow two electronic devices to communicate** within 4 centimeters of each other. It is a subset of **radio-frequency identification (RFID)**, which uses radio waves to identify things.

**UPI Tap & Pay**: Allows contactless payments at merchants using **NFC-enabled QR codes**, requiring just a **single tap without PIN entry**.

#### 3. Conversational Payments:

- Hello! UPI**: Enables fund transfers through **voice commands**, followed by entering a UPI PIN for transaction completion.
- BillPay Connect**: Customers can pay bills by sending a simple message or giving a missed call.

- Launch of UPI in France
- UPI was officially introduced during India's **Republic Day celebration in Paris, France**.
- Marks a crucial advancement in **globalizing UPI** and promoting digital transactions.
- NPCI's subsidiary, **NPCI International Payments (NIPL)**, has partnered with France's **Lyra Collect** to introduce **UPI** in France and Europe.

#### Initiatives to Promote UPI

- UPI for Secondary Market**: Introduced by NPCI to facilitate equity trading.
- UPI Chalega Campaign**: NPCI's initiative to promote UPI as a safe, instant payment method and educate users about features like UPI LITE for swift low-value transactions.
- MoU between Google India Digital Services and NPCI International Payments**: Expanding UPI use for travellers abroad and easing remittance processes.
- India's UPI in Overseas Markets**: Several countries such as **Oman, UAE, France, Nepal, and Bhutan** have adopted the UPI system for payments.
- UPI 123PAY**: An instant payment system for feature phone users, enabling them to use UPI services securely.

**Benefits of UPI**

Merchants	Banks	Customers	Fintechs/PSPs
<ol style="list-style-type: none"> <li><b>Low cost</b> for accepting payments.</li> <li>Accept payments without needing credit/debit cards, reducing cash handling.</li> <li>Suitable for both <b>physical and online merchants</b>.</li> <li>Provides access to credit.</li> </ol>	<ol style="list-style-type: none"> <li>Requires <b>low investments</b> in branches and Point of Sale (PoS).</li> <li>Inexpensive merchant onboarding.</li> <li>Transaction data aids in understanding customers for better cross-selling/upselling.</li> </ol>	<ol style="list-style-type: none"> <li>Available <b>round-the-clock</b>.</li> <li>Single app for accessing different bank accounts.</li> <li>Offers multiple payment options.</li> <li>Allows raising complaints directly from mobile apps.</li> <li>Provides <b>convenience</b> and ease of use.</li> </ol>	<ol style="list-style-type: none"> <li><b>Open architecture</b> promotes innovation.</li> <li>Collaborations with financial institutions for customer-centric solutions.</li> <li>Opportunity to market innovative credit products.</li> </ol>

**Challenges and solutions**

Challenges	Solutions
Expanding <b>UPI globally</b> requires compliance with various countries’ data protection and financial laws, posing regulatory challenges.	<b>Collaborative efforts</b> with other nations and their financial institutions are needed to establish a uniform regulatory framework.
<b>Cybercriminals</b> can exploit system vulnerabilities or use social engineering to access sensitive information, leading to financial losses.	Collaboration among UPI service providers, banks, and users is crucial to identify and address fraud incidents.
Limited familiarity ( <b>digital divide</b> ) with digital payments among individuals hinders (hamper) UPI adoption and increases the risk of financial fraud.	Training programs and <b>user-friendly guides</b> should be developed to educate people about the <b>UPI ecosystem</b> and address concerns.
The dominance of foreign entities like <b>PhonePe</b> and <b>Google Pay</b> in the Indian fintech sector. As compared to them BHIM UPI holds only 0.22% of the market share.	BHIM UPI must enhance its infrastructure to handle higher transaction volumes and accommodate global users.

**12. NATIONAL MONETISATION PIPELINE (NMP)**

NMP, is a strategic government initiative to lease out various public infrastructure assets to private entities. The goal is to raise funds for new infrastructure development.

**Objectives of NMP**

- Resource Generation:** To raise about Rs **6-lakh** crore by 2025 through leasing core assets.
  - Core Assets** include roads, railways, power, oil & gas and telecom.
- Efficiency Enhancement:** Bringing in private sector expertise to manage and operate public assets more efficiently.
- Funding Infrastructure:** The funds raised will support the National Infrastructure Pipeline (NIP), which aims

to invest Rs **111 trillion** in infrastructure over **six years**.

**Components of NMP**

- Core Asset Focus:** Involves leasing assets in key sectors like roads, railways, power, etc.
- Exclusion of Non-core Assets:** The monetization does not include the sale of non-core assets like land or real estate.
- Integration with State Assets:** Plans to include assets from both central and state governments.

**Why NMP is Needed**

- Cost Overruns:** Many government projects exceed their budget, making them financially unviable.
- Over capitalisation:** Mismanagement in the allocation of resources leads to wasteful expenditure.

- 3. **Coordination Issues:** Lack of cooperation between different government departments slows down project execution.
- 4. **Labour and Governance Challenges:** Reluctance in implementing necessary labour reforms and weak decision-making hampers the success of public infrastructure projects.

**Achievements and Expectations**

- 1. **Mining Sector Success:** Significant revenue generation from coal blocks and other mines, exceeding initial targets.
- 2. **NHAI Contributions:** High earnings through models like Toll Operate Transfer (ToT), securitization, and InvIT.
- 3. **Expectations in Other Sectors:** Power generation, transmission, and railways are expected to contribute significantly in the upcoming fiscal year.

Challenges and Concerns	Solutions
1. <b>People are concerned</b> about paying extra for using assets they funded through taxes.	1. Clear <b>communication</b> about asset monetization processes to build public trust.
2. There's a risk of the government falling into a cycle of building and then monetizing assets.	2. Creating a regulatory environment that encourages <b>private investment</b> and participation.
3. Issues like <b>underutilization</b> in gas pipelines and investor disinterest in certain assets.	3. Revamp of physical space, equipment, human capital, etc.

**Impact on Economy and Development**

- 1. **Economic Boost:** NMP is expected to stimulate the economy by unlocking capital from underutilized assets.
- 2. **Employment Opportunities:** New infrastructure projects can create numerous job opportunities.
- 3. **Improved Infrastructure:** Reinvestment of funds into infrastructure development can significantly improve public services.

**Conclusion**

The NMP is a transformative approach to managing India's public assets. While it offers substantial economic benefits, addressing its challenges effectively will be crucial for its success and public acceptance. It highlights the government's approach to funding infrastructure development and indicates sectors contributing significantly to the Indian economy.

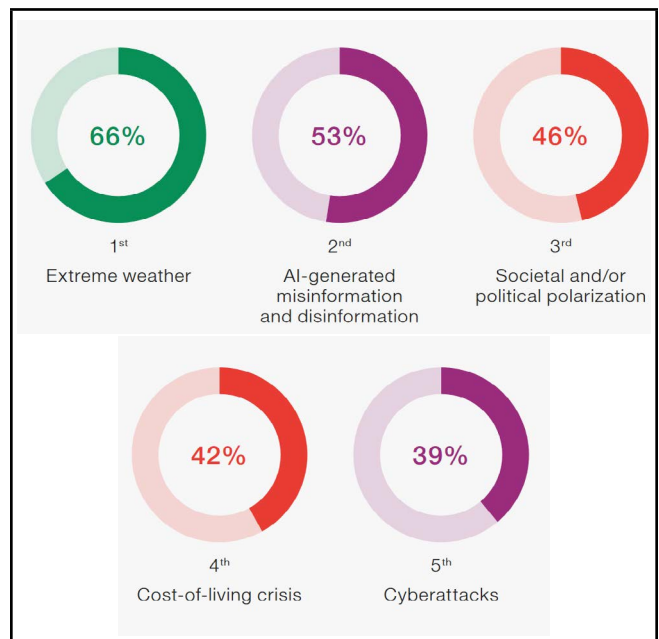
**13 GLOBAL RISKS REPORT 2024**

- 1. In January 2024 the **World Economic Forum (WEF)** released the **19<sup>th</sup> edition** of the **Global Risk Report 2024**.
- 2. It **highlights severe risks expected over the next decade** amid technological change, economic uncertainty, a warming planet, and conflict.

**What is Global Risk?**

- 1. Global risk is defined as the **possibility that something bad may happen** which will affect all countries.
  - 1. For example, failure to mitigate climate change, geoeconomic confrontation, large-scale migration, increasing cybercrime, etc.
- 2. The **Global Risks Report** is an **annual** study published by the World Economic Forum ahead of the **Forum's Annual Meeting in Davos, Switzerland**.

**Current risk landscape**



## Key Highlights

1. **Global Outlook Decline:** Global events in 2023, including **conflicts, extreme weather, and societal discontent**, contribute to a largely negative outlook.
  - (a) **Societal discontent** is the feeling that people have that the deterioration of society is out of control and therefore cannot be stopped.
2. **AI Powered Misinformation and Disinformation: Most severe risks** over the next two years.
  - (a) Rapid advances in technology, especially **Generative AI chatbots** like **ChatGPT**, raise concerns about creating fake content for manipulation.
  - (b) This risk coincides with **elections in several countries**, including the United States, Britain, Indonesia, India, Mexico, and Pakistan in 2024.
3. **Structural Forces Shaping Global Risks:**
  - (a) **Four structural forces** shaping global risks in the next decade are: **Climate change, Demographic Bifurcation** (a structural force refers to changes in demographics), **Technological Acceleration**, and **Geostrategic** (strategy that links geography with war strategies) **shifts**.
  - (b) These forces represent **long-term shifts** contributing to **uncertainty and volatility**.
4. **Environmental risks**, especially extreme weather, dominate the risk landscape across all time frames.
  - (a) **Concerns** include **climate change, biodiversity loss, and critical changes to Earth systems** with potential irreversible consequences.
5. **Economic Strains (stress) and Inequality: The cost-of-living crisis and economic risks** like inflation and economic downturn are significant concerns for 2024.
  - (a) **Economic uncertainty** may disproportionately affect **low and middle-income countries**, leading to **potential digital isolation** (situation where people are unable to access digital media and devices) and worsening (deteriorating) societal and environmental impacts.
6. **Security Risks and Technological Advances: Interstate armed conflict** is a new top risk in the next two years.

(a) Technological advances, especially in artificial intelligence, pose security risks. It enables non-state actors to access disruptive tools, potentially increasing conflict and crime.

7. **Geopolitical Shifts and Governance Challenges:** A deeper divide between global powers, especially between the Global North and South, may lead to challenges in international governance.
  - (a) The growing influence of states in the Global South, combined with geopolitical tensions could reshape security dynamics and impact global risks.

## Recommendations suggested

1. **Use local strategies** with investment and rules to reduce risks. Both **public and private sectors** are important for this.
2. **Prioritizing the future** and focusing on **research and development** through single breakthrough for making the world a safer place.
3. The collective actions of individual citizens, companies, and countries can collectively **impact global risk reduction**.
4. Even in a divided world, **cross-border collaboration** is crucial for major risks.

## 14. CORRUPTION INDEX: INDIA RANKS 93 AMONG 180 NATIONS

In January 2024, Transparency International released Corruption Perception Index (CPI), 2023.

- a. The CPI ranks **180 countries and territories** around the globe by their perceived levels of public sector corruption, scoring on a scale of 0 (**highly corrupt**) to 100 (**very clean**).
- b. Transparency International, founded in 1993 and based in Berlin, Germany, is an independent, non-governmental, and non-profit organization.

**Defining Corruption as per Transparency International's Perspective:**

1. Transparency International defines corruption as the misuse of given power for personal gain.
2. Corruption damages democracy, trust, and economic growth while worsening societal problems like

inequality, poverty, social division, and environmental crises.

### Key Findings from Corruption Perception Index 2023:

#### At Global Level:

- Over two-thirds of countries score below 50 out of 100, which strongly indicates that they have serious corruption problems.
- The global average remains stagnant at 43, with numerous countries showing no improvement or experiencing a decline over the past decade.
- Alarmingly, 23 countries witnessed their lowest scores ever this year, indicating a worsening trend.

Top 3 Countries		Bottom 3 Countries	
Rank	Country	Rank	Country
1	Denmark	180	Somalia
2	Finland	177	Venezuela, Syria, South Sudan
3	New Zealand	176	Yamen

### India's Performance in Corruption Perceptions Index 2023:

- According to CPI, 2024 India ranked **93 (Score 39)**.
  - India shares the 93<sup>rd</sup> spot with Maldives, Kazakhstan, and Lesotho.
- In the Asian region, Singapore ranked at the top, scoring 83 and occupying the fifth slot.
- Compared to our neighboring countries, China secured a score of 42, ranking 76th, while Pakistan achieved a score of 29, placing 133rd.

#### Conclusion

India's rank in CPI demands immediate attention, highlighting the urgent need for combined efforts to combat corruption, improve transparency, and strengthen integrity across all sectors. These actions are crucial for sustainable social and economic development in the country.

## 15. WORLD BANK'S GLOBAL ECONOMIC PROSPECTS REPORT

Recently, the World Bank released the Global Economic Prospects Report. According to report, the **world's economy might not do very well**, by the end of 2024.

### Projection of Global Economic Growth:

- The growth expected in 2024 is the **slowest** we've seen in 30 years, a significant drop from earlier times.
- This reduced growth rate is going to **affect global business activities**, investment flows, and the overall stability of economies. This has a domino effect on employment, people's incomes, and the rates of poverty across the world.

### Impact of Geopolitical Issues:

- Present Conflicts:** Ongoing political conflicts, like the Israel-Hamas crisis, are causing uncertainty in the global markets, influencing trade and investment decisions.
- Potential Risks:** These conflicts can disrupt the normal flow of goods, lead to higher prices for basic items, and make investors worried.

### Comparison to June 2023 Projections:

- Earlier Predictions:** The report from June 2023 had already pointed towards a slowdown, mainly as a result of the COVID-19 pandemic's effects and the pressure of worldwide inflation.
- Critical Elements:** The report highlighted the role of rising interest rates, which were meant to control inflation but ended up slowing down economic growth as well.

### Condition of Different Economies:

- Developing Countries:** These nations are facing challenges like decreased trade, difficult financial situations, and the high cost of borrowing money, which are stopping their growth and development.
- Developed Countries:** Even the more advanced economies are not doing well, as they too are experiencing a reduction in their growth rates compared to previous years.

### Expectations for Economic Expansion:

- Global Growth Prediction:** The growth is expected to slow down to about 2.4% in 2024, continuing the trend of deceleration.
- Developing vs. Developed Countries:** While developing countries are growing at a pace slower than their last decade's average, developed countries are also seeing a downturn in growth.



### Social and Economic Effects on People:

1. **Income and Poverty:** The slow growth is expected to negatively impact income levels, leading to a rise in poverty, particularly in less wealthy and developing nations.
2. **Long-Term Challenges:** A long period of economic downturn could pose serious difficulties to achieving long-term developmental goals.

### Insights from Chief Economist at the World Bank:

1. **Major Challenges:** Chief Economist discusses serious concerns such as high debt levels and limited access to food, especially in poorer countries, which could block progress on global initiatives.
2. **Opportunities for Recovery:** He suggests that with the right and timely policy actions, especially in terms of investments and fiscal strategies, there is a possibility to counteract the negative trends.

### Strategies for Economic Improvement:

1. **Investment Requirements:** The report focuses the need for a substantial increase in investments by developing nations to address climate change and achieve developmental objectives.
2. **Forecasts for Investment Growth:** In the absence of such investments, the growth in per capita investment is likely to remain much lower compared to previous decades.

### Outlook for India

1. As per the **UN Economic Situation and Prospects (WESP) 2024** report, the GDP in South Asia is projected to increase by 5.2% in 2024.
2. About **India**, the report highlights that it is projected to reach **6.2% in 2024**, lower than 2023 estimates.
3. The growth in India is mainly supported by resilient **private consumption** and strong public investment.

### Conclusion:

The 2024 report by the World Bank shows a challenging scenario for the global economy, affecting both developing and advanced nations. It stresses the importance of strategic and well-thought-out interventions, particularly in the areas of investment and

fiscal policies, to navigate these economic difficulties. A thorough understanding of these factors is essential for policymakers, economists, and global stakeholders as they strive for sustained economic growth and development.

## 16. Extension of PIDF Scheme

1. RBI extends **Payments Infrastructure Development Fund (PIDF) Scheme** till 2025.
2. It was **first operationalized in 2021** for three years.
3. **Aims to boost the deployment of payment acceptance infrastructure**, like physical **Point of Sale (PoS) terminals** and **Quick Response (QR) codes**.
  - a. Particularly targets **tier-3 to tier-6 centres, North eastern states, and UTs of J&K and Ladakh**.
  - b. Recently extended to **street vendors** covered under the **PM Street Vendor's AtmaNirbhar Nidhi (PM SVANidhi Scheme)** in **Tier-1 and Tier-2 centres**.
    - **A point-of-sale (POS) terminal** is a hardware device that helps retail businesses process transactions. It can accept card payments, manage inventory, and generate sales reports.
    - **PM SVANidhi Scheme** is a government initiative that provides working capital loans to street vendors.
4. PIDF operates under an **Advisory Council** and is overseen and managed by the **RBI**.
5. **Types of Acceptance Devices Covered:** Physical PoS, mPoS (mobile PoS), GPRS (General Packet Radio Service), PSTN (Public Switched Telephone Network), among others.
  - **mPOS** is a technology that allows merchants to process payments using their mobile devices, such as smartphones or tablets, instead of a cash register or POS terminal.
  - A **public switched telephone network (PSTN)** is a traditional circuit-switched telephone network that connects people through standard phone numbers.
6. **Enhancements Under PM Vishwakarma Scheme**
  - a. **Beneficiaries** of PM Vishwakarma Scheme in all centers now included as merchants under PIDF Scheme.

- b. **Sound Box devices** and **Aadhaar-enabled biometric devices** are now eligible for subsidy claims.
  - c. **Subsidy** for special focus areas is now uniform at **90% of device cost**.
- 7. Other Initiatives Promoting Digital Payments:**
- a. **Aadhar Enabled Payment System** facilitates financial transactions on a **Micro-ATM** using Aadhar.
  - b. **Aadhar Payment Bridge System** simplifies bulk and recurring Government benefits and subsidy payments.
  - c. **Unified Payments Interface** consolidates various banking services and features under one platform.
  - d. **Pradhan Mantri Gramin Digital Saksharta Abhiyan (PMGDISHA)** promotes digital literacy.

## 17. RBI PERMITS LENDING, BORROWING IN G-SEC

1. The Reserve Bank of India (RBI) recently issued directions, known as **RBI (Government Securities Lending) Directions, 2023**, permitting **lending and borrowing of G-Securities (G-Secs)**.
  - a. **Government Securities Lending (GSL):** A GSL transaction involves the lending of eligible government securities by a lender to a borrower for a specified period.
    - **G-Sec** is a tradeable instrument issued by the **Central Government or the State Governments**.
    - They include **short-term Treasury bills (T-Bills)** and **long-term Government bonds or dated securities**.
    - **Central Government** issues **T-Bills and bonds**, while **State Governments** issue bonds known as **State Development Loans (SDLs)**. G-Secs are considered **risk-free** due to minimal default risk.
  - b. G-Secs issued by the Central government, **excluding Treasury Bills (T-Bills)**, are eligible for lending/borrowing.

- c. Both G-Secs issued by the Central Government (including T-Bills) and State Government bonds are eligible as collateral.
- d. G-Secs are auctioned via RBI's electronic platform called **E-Kuber**.
- e. **Other G-Securities**
  - **Cash Management Bills (CMBs)**, introduced in 2010, are **short-term instruments** to manage temporary cash flow mismatches.
  - **CMBs** resemble **T-bills** but have **maturities less than 91 days**.

### 2. Benefits of Permitting Lending and Borrowing of G-Secs:

- a. Permitting lending and borrowing of G-Secs aims to **enhance depth and liquidity** in the G-Sec market, facilitating **efficient price discovery**.
- b. It also aims to encourage wider participation, allowing investors to deploy idle securities, improve portfolio returns, and boost operational efficiency of government bonds by insurers.

**T-Bills:** Zero coupon securities issued at a discount and redeemed at face value at maturity.

**Dated G-Secs:** Securities with fixed or floating coupon rates paid half-yearly on face value.

### 3. Benefits of G-Secs

- a. **Low-risk investments** backed by the Government.
- b. Provide stable income with fixed interest rates.
- c. Securities like State Development Loans (SDLs) and Special Securities offer attractive yields.
  - SDLs are bonds issued by state governments to fund their fiscal deficits. The RBI manages the issuance of these bonds.
- d. Integrating G-Secs in an investment portfolio helps reduce overall risk.
- e. Easily tradable, allowing quick buying and selling.
- f. Used as collateral for borrowing funds in the repo market.

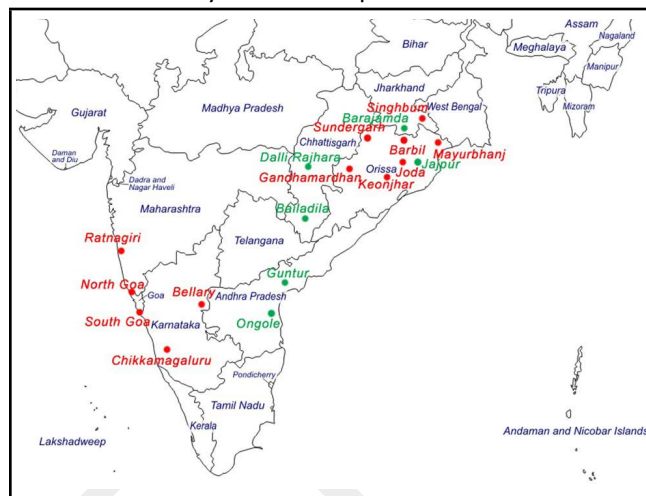
### 4. Initiatives for G-Secs

- a. **RBI Retail Direct Scheme**
- b. **Draft RBI (Bond Forwards) Directions, 2023**
- c. **Scheme for Non-competitive Bidding Facility**

5. Concerns and Solutions:

Concerns	Solutions
RBI's Negotiated Dealing System - Order Matching (NDS-OM) platform fails to enhance <b>retail participation</b> , leading to segmented investor markets.	Issue and trade G-Secs through <b>stock exchanges</b> to promote retail participation and ease of transactions.
Inflows of foreign funds via government bonds may <b>appreciate the rupee</b> .	The <b>RBI absorb foreign inflows</b> to minimise the impact on the rupee-dollar exchange rate.
<b>Limited liquidity</b> in the G-sec market results in distressed sales and losses for sellers.	RBI intervening by <b>buying G-sec</b> will infuse liquidity into the system.
Adverse price changes due to <b>interest rate fluctuations</b> may lead to losses upon selling.	Provide <b>tax exemptions</b> on interest income from G-Secs to stimulate market demand.

- It also aims to **promote ease of doing business** and remove restrictions on the end-use of minerals.
- c. **Differential pricing** of iron ore for various end-users may lead to competition issues.



**Key Recommendation**

- **Discourage export:** Iron ore, a vital national resource, should be conserved.
- **Prioritize** exporting higher value-added products like finished steel to support Atmanirbhar Bharat.
- **Upgrade quality:** Utilize advanced technologies to enhance low-grade iron ore to higher grades.
- **Sustainable mining:** Encourage the adoption of clean technology and transition production processes to sustainable mineral production methods.

**18. INDIAN IRON ORE MARKET**

1. In Jan 2024, the **Competition Commission of India (CCI)** conducted a study on **competition within the iron ore market**.
2. Iron ore mainly consists of **iron oxides** like magnetite and hematite, producing metallic iron (Fe) when heated with a reductant.
3. India shows self-sufficiency in iron ore production, contributing **7% globally** and ranking **4th in production**.
4. **Concerns Highlighted by CCI**
  - a. Recent years witnessed a **rise in iron ore exports**, despite its lower value compared to finished products like steel.
  - b. **Allocation of captive mines** to specific players creates entry barriers in the market.
    - The **Mines and Minerals (Development and Regulation) Amendment Act, 2021**, permits captive mines to sell up to 50% of surplus iron ore openly.

**19. PETROLEUM EXPLORATION & PRODUCTION**

1. Oil and Natural Gas Corporation (ONGC) has started its first crude oil production from its Cluster-2 deep-sea project in the **Krishna-Godavari (KG) basin in the Bay of Bengal**.
2. **Petroleum Basin in India**
  - a. A petroleum basin contains various **rocks and sediments**, crucially including source rocks where oil and gas originate.
  - b. India has **26 sedimentary basins** covering 3.4 million km<sup>2</sup>.

c. **Distribution:**

- **49%** on land
- **12%** in shallow water (up to 400 meters depth)
- **39%** in deepwater areas (up to Exclusive Economic Zone or EEZ).

**Exclusive Economic Zone (EEZ)**

EEZ jurisdiction extends **200 nautical miles** from the coastline, granting the coastal state rights over resource management, exploration, and conservation within its domain, living or non-living.

- d. The **Krishna-Godavari (KG) basin** is a passive margin basin (transition between oceanic and continental lithosphere) in India that covers over 50,000 km<sup>2</sup> in the Krishna and Godavari River basins in Andhra Pradesh.
- e. **Indian Sedimentary Basins:** Basins categorized into three based on **hydrocarbon resource maturity**:
- **Category-I:** Commercially established & producing basins (Total **7 basins**).
  - **Category-II:** Prospectivity (tool that helps allocate exploration resources efficiently) identified (**5 basins**: Kutch, Mahanadi-North East Coast, Andaman-Nicobar, Vindhyan, Saurashtra).
  - **Category-III:** Prospective (**14 basins**: Himalayan Foreland, Ganga, Kerala-Konkan-Lakshadweep, Bengal, Karewa, Spiti-Zaskar, Satpura-South Rewa Damodar, Narmada, Deccan Syncline, Bhima-Kaladgi, Cuddapah, Pranhita-Godavari, Bastar, Chhattisgarh).
- f. **Methods of Extracting Crude Oil:**
- **Offshore** drilling in marine environments like the Arabian Sea or Bay of Bengal.
  - **Onshore** drilling on land across various sedimentary basins in the country.
- g. **ONGC** is India's largest oil and gas **producer** which contributes **72%** of the country's hydrocarbon production.

**Important Facts**

**3rd largest energy and oil consumer** in the World  
**33%** share of Oil and gas in **India's primary energy**  
**85.7%** was the **import dependency** of oil while for **natural gas** it was **48.2%**.

3. **Steps for Enhancing Petroleum Exploration & Production (E&P)**

- The formation of the **Directorate General of Hydrocarbons (DGH)** aims to manage oil and natural gas resources efficiently.
  - Streamlined approval processes via **digitization and standardization on the e-platform**.
  - The **National Data Repository (NDR)**, launched in 2017, facilitates E&P activities by serving as a government data bank.
    - NDR is a government-sponsored data bank that stores, maintains, and reproduces data about E&P. It is part of the **Directorate General of Hydrocarbons** in the **Ministry of Petroleum and Natural Gas**.
  - The NDR is being upgraded to a **cloud-based facility** with virtual data rooms for investors' **24x7 access**.
  - The **India Hydrocarbon Vision 2025** outlines development targets for the sector.
  - 100% FDI through automatic route** for exploration activities, infrastructure related to petroleum products and natural gas marketing, etc.
4. **Significance of Indigenous Petroleum E&P**
- Reduction in Import Bill:** India's crude oil import, accounting for 85%, can be curtailed by increasing indigenous petroleum production.
  - Strategic Importance:** Mitigates vulnerability to global geopolitical uncertainties, supply disruptions, and price fluctuations.
  - Employment Generation:** Creates jobs in exploration, production, refining, and distribution.

5. Challenges and Solutions:

Challenges	Solutions
E&P units require substantial <b>capital investment</b> for expensive equipment and skilled labour.	Need for exposure in the stock market along with tax exemptions.
Advanced <b>drilling technologies</b> are necessary to extract petroleum from complex geological formations.	Collaborate with <b>universities and colleges</b> for research and technology access.
E&P activities pose <b>risks of spills</b> , leaks, and accidents, as seen in events like the recent Ennore oil spill in Tamil Nadu.	Utilise advanced <b>spill control technologies</b> . Conduct comprehensive training on spill prevention and response protocols.
Drilling, pipelines, and infrastructure can lead to <b>habitat loss</b> and harm wildlife.	Implement <b>sustainable E&amp;P practices</b> —partner with biodiversity boards for environmental studies and response planning.
<b>Local communities</b> may be displaced, leading to social and cultural challenges.	Conduct <b>ecological impact assessments</b> for community mitigation.

6. About Hydrocarbon Exploration and Licensing Policy (HELP)

- a. HELP, introduced in 2016, replaced the **New Exploration Licensing Policy (NELP)**.
- b. Provides a **single license for E&P** covering various hydrocarbons like conventional oil and gas, CBM, shale oil, gas hydrates, etc.
- c. Shifted from a **Profit-Sharing Model to a Revenue Sharing Contract model**.
  - A revenue sharing contract (RSC) is an agreement between a contractor and the government in the hydrocarbon industry.
- d. **Open Acreage Licensing Policy (OALP)** allows investors to choose blocks by evaluating **National Data Repository (NDR)** information.
  - OALP is a policy reform introduced in 2016. The policy allows companies to explore hydrocarbons like oil and gas, coal bed methane, and gas hydrate in areas that the government does not notify.

- e. Introduces features like reduced royalty rates, marketing and pricing freedom, and year-round bidding.

**20. DIGITAL TRADE FOR DEVELOPMENT REPORT**

1. A recent report titled **“Digital Trade for Development”** explores opportunities and challenges for developing economies in the digital trade.
  - Digital Trade Involves online transactions for goods and services, whether digital or physical, engaging **consumers, businesses, and governments**.
2. The report is a collaborative effort by the **International Monetary Fund (IMF), Organization for Economic Co-operation and Development (OECD), United Nations Conference on Trade and Development (UNCTAD), World Bank, and World Trade Organization (WTO)**.

**Key Findings**

1. The value of **digitally delivered services** has surged

nearly **four times** since 2005, with an average annual growth rate of 8.1% until 2022.

- a. This growth surpasses (exceeds) that of **goods exports (5.6%)** and other **services exports (4.2%)**.

## 2. Opportunities in Digital Trade:

- a. **Assists developing economies** in minimizing barriers to market entry.
- b. Provides **direct access to global markets**, eliminating traditional intermediaries like wholesalers and retailers.
- c. Offers **cost-effective platforms for MSMEs** (small and medium-sized enterprises).
- d. Empowers women entrepreneurs with **flexible business models**, overcoming socio-cultural barriers.

## 3. Status of Digital Trade in India:

- a. India aims for a **\$1 trillion digital economy by 2025**.
- b. The economic value of digital trade in India (including exports) could **grow 14 times to \$512 billion by 2030** with facilitated cross-border data flows.

## 4. Challenges in Digital Trade:

- a. Approximately **one-third of the world's population lacks online access**, mainly in low- and lower-middle-income economies.
- b. High tariffs on imports of **information and communication technology (ICT)** equipment.
- c. Regulatory challenges include **cross-border data flows, competition, and consumer protection**.

## 5. Government Initiatives:

- a. **Digital India Programme** focuses on e-service delivery and transparency.

- b. **AI for All Strategy** aims to raise awareness about AI.

- i. **NITI Aayog's AI for All** strategy to be the governing **benchmark** for future AI design, development, and deployment in India.

## c. Digital Infrastructure Built on India Stack

includes open Application Programming Interface (APIs) for identity, digital payments, and data.

- i. India Stack is a collection of Application Programming Interfaces (APIs) that provide a **digital infrastructure** for various entities in India, enabling them to develop applications and services.

- d. **Government eMarketplace (GeM)**: GeM has surpassed Rs. 2 Lakh Crore in **Gross Merchandise Value (GMV)** within less than 8 months of the current fiscal year.

- e. **Pandemic Relief Services**: Digital infrastructure, like **COWIN**, played a crucial role during the COVID-19 pandemic, controlling the **world's largest vaccination program**.

## 6. Recommendations from the Report:

- a. Developing economies need increased international financial and technical support for enhanced **connectivity, skills, and regulatory capabilities** in digital trade-related areas.
- b. Initiatives like **WTO-led Aid for Trade, UNCTAD-led eTrade for All, and World Bank-led Digital Advisory and Trade Assistance (DATA) Fund** can provide valuable assistance.
- c. **Global collaboration** is crucial to ensuring that small businesses, women, young entrepreneurs, and consumers globally benefit from the advantages of digital trade.



## E. SCIENCE & TECHNOLOGY

### 1. INDIA TO BECOME A FULL MEMBER OF THE SKA OBSERVATORY

1. In January, 2024, Union cabinet approves Rs 1,250 Cr for India's participation in **Square Kilometer Array (SKA)** Observatory.
2. This initiative aims to construct the world's largest radio telescope, symbolizing a major leap in the advanced areas of scientific research.
3. India's commitment, marked by a financial contribution of Rs 1,250 crore, signifies its dedication to playing an important role in this project.

#### About SKAO:

1. SKAO is an intergovernmental organisation headquartered in United Kingdom.
2. SKAO will consist of one global observatory, operating 2 telescopes, across 3 sites.
3. They will operate as one large unit with objectives of studying the universe and its evolution, origin and evolution of cosmic magnetism, gravitational waves, dark energy, evolution of galaxies.

#### SKAO & India:

1. In 2012 India joined SKAO as an Associate Member and has actively participated in the pre-construction phase of the SKA telescopes.
2. In 2022, the National Centre for Radio Astronomy, Pune and SKAO signed cooperation agreement.

### The Square Kilometer Array (SKA)

1. **Design and Purpose:** Unlike a single gigantic telescope, the SKA will consist of 1000s (thousands) of dish antennas spread across South Africa and Australia, functioning collectively to mimic a radio telescope with an effective collecting area of one square kilometer.
  - This innovative design aims to enhance our capacity to collect radio waves from the cosmos, offering unprecedented insights into the universe.

2. **Construction and Locations:** The project has chosen sparsely populated areas in South Africa and Australia for the installation of approximately 200 and over 130,000 antennas, respectively, to minimize interference from human-made sources.
  - The construction, which began in December 2022, is anticipated to complete its 1<sup>st</sup> phase by the next year.
3. **Capability:** Once operational, the SKA is expected to be between 5 to 60 times more powerful than any existing radio telescope in comparable frequency ranges, promising to revolutionize our understanding of the universe.

### India's Involvement and Benefits

1. **Scientific and Technological Gains:** Although the SKA facilities are located outside India, full membership ensures significant science and technology advantages for the country, akin to its participation in other international mega science projects like LIGO, ITER, and the LHC. India's established prowess in radio astronomy, exemplified by the Giant Meterwave Radio Telescope (GMRT) near Pune, positions it as a key player in advancing global astronomical research.
2. **Preferential Access and Contributions:** As a full member, India will enjoy preferential access to the SKA facilities, allowing Indian scientists to further their research in critical areas of astronomy. This membership model ensures that countries contributing to the construction of the SKA will have priority access, with time allocation roughly proportional to their contribution.
3. **Technological and Intellectual Property:** The SKA's reliance on cutting-edge technology across various domains will generate valuable intellectual property, accessible to all member countries. This presents immense learning opportunities for Indian scientists, academics, and industries, fostering innovation and expanding the country's science and technology base.

## Expansion of India's Science and Technology Base

- 1. National Centre for Radio Astrophysics (NCRA)**  
**Leadership:** The Pune-based NCRA leads India's participation, with collaboration from 22 other institutions, including IITs, IISERs, universities, and private companies. This collaborative effort underscores India's holistic approach to contributing to and benefiting from the SKA project.
- 2. Research Opportunities:** Indian scientists have identified key research areas to explore using the SKA, including the early universe's evolution, galaxy formation, neutron star physics, and solar sciences. More than 150 scientists, researchers, and students from over 30 Indian institutions are actively engaged in SKA-related science activities.

### Conclusion

India's full membership in the SKA project not only marks its commitment to contributing to one of the most ambitious astronomical endeavors of our time but also underscores its strategic position in the global scientific community. By participating in the SKA project, India aims to harness the potential of radio astronomy to unlock the universe's mysteries, paving the way for significant advancements in science and technology.

## 2. IN A 1<sup>st</sup>, SpaceX TO LAUNCH GSAT-20 SATELLITE

- Despite having a successful track record of launching satellites with its own rockets, the Indian Space Research Organisation (ISRO) has opted for **SpaceX's Falcon 9 to launch the GSAT-20 (renamed as GSAT-N2) satellite.**
  - Notable, Falcon 9 is the world's first orbital class reusable rocket
- This decision has raised questions about why India is turning to an American firm for this mission.

### ISRO's Capabilities and Past Achievements

- ISRO has a commendable history of launching over 430 satellites for various global clients through its commercial arm, earning significant foreign exchange.
- Its rockets, including the PSLV and LVM3, are known for their reliability and success in orbiting satellites for foreign governments, academic institutions, and private firms.

### About GSAT-20:

- GSAT-20** is a high-capacity communication satellite, also known as CMS-03 or GSAT-N2.
- It is jointly developed by Indian Space Research Organisation Satellite Centre and Liquid Propulsion Systems Centre.
- It **will operate** in the **Ka-band spectrum** with objectives of providing broadband connectivity and cellular backhaul services covering regions of entire Indian mainland and the island chains of Andaman-Nicobar and Lakshadweep.
- It is funded, owned and operated by NSIL (New Space India Limited).

### Significance of Ka-Band:

- The **Ka-band is part of the microwaves of electromagnetic spectrum** in the frequency ranges of 26 to 40 gigahertz and wavelengths from slightly over 1cm to 7.5 millimeters. It allows high-speed satellite data transfers with wide coverage. As compared to other bands its frequencies enable using smaller satellite antennas which reduces overall costs of establishing the communication system required for good performance.
- One of the most important advantages of using Ka band frequencies is its reuse capability through different spot beams directed at different locations which greatly enhances the coverage footprint and capacity of satellite communication systems. So, the features of high frequency, large bandwidth, reuse of frequencies makes it well suited for contemporary satellite-based communication networks.

### Reasons for Choosing SpaceX

- Payload Capacity Limitations:** GSAT-20's weight exceeds the payload capacity of India's operational rockets, with the GSLV capable of delivering around 2250 kg to GTO and the LVM3 capable of 4000kg, while GSAT-20 weighs 4,700kg.
- Foreign Launch Preferences:** Historically, India has relied on European Ariespace rockets for heavier communication satellites. However, with the Ariane 5's retirement and delays in Ariane 6, SpaceX's Falcon 9 emerges as the viable alternative.



## SpaceX Falcon 9's Advantages

1. **Reusable Rocket Technology:** Falcon 9's reusability offers a cost-effective solution compared to expendable rockets, aligning with the global shift towards sustainable space exploration.

## ISRO's Future Endeavors

1. **Semi-Cryogenic Engine Development:** ISRO is developing a semi-cryogenic engine to enhance the LVM3 rocket's lifting power, aiming for heavier payloads. However, recent setbacks have delayed its operationalisation.
2. **Next Generation Launch Vehicle (NGLV):** ISRO is also working on the NGLV, a partially reusable rocket with ambitions for heavy-lift capabilities and interplanetary missions.

## Conclusion

India's decision to engage SpaceX for the GSAT-20 launch underscores the pragmatic approach towards overcoming current limitations in payload capacity and ensuring timely deployment of critical communication infrastructure. This collaboration highlights the global nature of space exploration and the importance of leveraging international capabilities to achieve ambitious space missions.

## 3. INDIA'S 1<sup>ST</sup> MULTI-WAVELENGTH ASTRONOMY MISSION: ASTROSAT

1. AstroSat, India's pioneering space telescope, has achieved a remarkable scientific breakthrough by measuring X-ray polarisation from Cygnus X-1.
2. marking the first time such a feat has been accomplished.
3. This discovery opens new avenues for understanding the mysterious environments surrounding black holes.

### Black Holes:

Black holes are region in space where gravity is so extreme to prevent the escape of any fast-moving particles even light.

### About AstroSat:

launched in 2015 by PSLV-XL to LEO (Low Earth Orbit), for the scientific objectives to study the universe, to understand the high energy processes in star systems, to detect new X-ray sources in the sky. It enables the simultaneous multi-wavelength observations of various astronomical objects.

## Cygnus X-1: A Brief Overview

1. Cygnus X-1, **discovered in 1964**, is a galactic X-ray source and also is one of the first confirmed black hole in our galaxy, is approximately 6,070 light years away from earth it is one of the most studied objects in its class.
2. Weighing 20 times more than the Sun.
3. Cygnus X-1 forms a binary system with a supergiant star, leading to the creation of an accretion disk from the star's material spiraling into the black hole, which releases soft X-rays.

## The Achievement of AstroSat

1. The observations made by AstroSat's Cadmium Zinc Telluride Imager (CZTI) not only highlight the intensity and energy of X-ray radiations but also show the polarisation characteristics.
2. This crucial data provides insights into the black hole's geometry and other intrinsic properties.

## The Significance of X-ray Polarisation

1. X-ray polarisation refers to the orientation of the oscillating electric field within X-ray radiations.
2. Understanding this orientation, influenced by accelerating charged particles, reveals extensive details about the phenomena occurring in the vicinity of a black hole.
3. Polarisation measurement in X-ray wavelengths is notably challenging, making AstroSat's accomplishment even more significant.

## Insights from the Discovery

1. This study has linked the hard X-ray radiation directly to the black hole jet **for the first time**.
2. The high polarisation observed in the 100-380 keV energy range suggests that the radiation emitted above 100 keV likely originated from the black hole jet.

3. This connection provides crucial insights into the mechanism of radiation production in such cosmic entities.

### Collaborative Effort and Development

1. The achievement is the result of a decade-long effort involving multiple Indian institutions, highlighting the collaborative spirit within the Indian scientific community.
2. The development of the necessary tools to analyze AstroSat data and measure the polarisation of Cygnus X-1's X-ray represents a significant milestone in India's astronomical research.

### Conclusion

AstroSat's detection of polarised high-energy X-rays from Cygnus X-1 not only enhances our understanding of black holes but also demonstrates India's growing capabilities in space science and technology. This discovery propels the global astrophysics community forward, offering new perspectives on the nature of black holes and the processes occurring in their proximity.

## 4. 5<sup>th</sup> COUNTRY TO LAND ON THE MOON: JAPAN

1. In January, 2024 Japanese spacecraft **SLIM (Smart Lander for Investigating Moon)** landed on the moon, making Japan the 5<sup>th</sup> country to reach the lunar (moon) surface.
  - The other 4 countries are **India, United States, Russia, and China.**
2. **Space Agency:** Japanese Aerospace Exploration Agency (JAXA)
3. **Mission Objective:** SLIM's landing location near the Shioli crater offers opportunities to study the moon's origins and analyze its geological composition contributing to humanity's understanding of celestial bodies.
4. **Technological Advancements:** SLIM utilized pinpoint landing technology, demonstrating Japan's advancements in **precision landing techniques**, crucial for future lunar missions.
5. **Auxiliary Probes:** SLIM also carries **2 small autonomous probes, LEV-1 and LEV-2**, aiding in data recording and transmission from the lunar surface.

6. **Future Implications:** The success of SLIM's mission could enhance Japan's standing in the **global space technology landscape** and pave the way for further lunar and planetary exploration endeavors.

### Conclusion

Japan's achievement with SLIM underscores the nation's significance in lunar development and its potential as a key player in future space exploration endeavors.

## 5. NATIONAL DEEP TECH START-UP POLICY

1. In January 2024, the **Principal Scientific Advisor** announced to present the **NATIONAL DEEP TECH START-UP POLICY (NDTSP)** for Union Cabinet approval.
  - This policy is a result of collaborative efforts between the **Department for Promotion of Industry and Internal Trade and the Office of the Principal Scientific Adviser.**
2. During **Interim Budget speech**, the finance minister introduced a **Rs 1 lakh crore fund** intended to provide **long-term, low-cost, or zero-interest loans** for research and development projects.
  - a. **Deep tech**, also known as **deep technology**, refers to a class of startup businesses that develop new offerings based on **tangible engineering innovation** or scientific discoveries and advances.
  - b. Deep tech fields such as **Artificial Intelligence, advanced materials, blockchain, biotechnology, robotics, drones, photonics, and quantum computing** are rapidly transitioning from early research to market applications.
3. **Objectives of the Policy:** to tackle the particular challenges faced by technology startups and furnish them with a favorable platform for global competition and collaboration.
4. **Key Areas of Focus in the NDTSP:**
  - a. **Sustainable Funding:** Creating mechanisms for continuous financial support to nurture the growth of deep tech startups.
  - b. **Intellectual Property Protection:** Establishing a robust yet simplified framework to safeguard intellectual property, thereby encouraging innovation and bolstering startup confidence.

- c. **Tax Incentives:** Providing tax benefits to stimulate investment in research and development within the deep tech sector.
- d. **Supportive Regulations:** Developing regulatory frameworks that foster the growth of deep tech startups while ensuring compliance and safety.
- e. **Quality Standards:** Setting industry benchmarks and certifications to guarantee the excellence and reliability of deep tech products and services.
- f. **Talent Development:** Investing in the training and development of skilled professionals to cultivate a talent pool conducive to innovation in deep tech.
- g. **Collaboration:** Facilitating partnerships between industry, research institutions, and educational establishments to promote knowledge exchange and collaborative efforts.

### What is the importance of Deep tech?

1. Deep tech holds the **potential to tackle complex global issues** such as **climate change, hunger, epidemics, energy access, mobility, and cyber security**.
2. Deep tech encompasses cutting-edge scientific research and technological developments in fields like **artificial intelligence, biotechnology, quantum computing**, and more.
  - Progress in these areas pushes the boundaries of human knowledge and understanding, resulting in breakthroughs that benefit society as a whole.
3. Investment in deep tech fuels economic expansion by promoting **innovation, generating high-value jobs, and encouraging entrepreneurship**.
4. Deep tech facilitates the development of **advanced surveillance systems, biometric identification techniques, and predictive analytics** tools crucial in counterterrorism efforts.

### State of India's Deep Tech Startups

1. **NASSCOM reports** indicate that in 2021 alone, deep-tech startups in India raised USD 2.7 billion in venture funding, constituting over 12% of the nation's entire startup landscape.
2. Over the past decade, India's deep tech ecosystem has witnessed a remarkable growth rate of 53%, placing it on par with established markets like the US, China, Israel, and Europe.

3. Bengaluru leads the charge, hosting 25-30% of India's deep-tech startups. It closely followed by Delhi-NCR (15-20%) and Mumbai (10-12%).
4. India possesses the capacity to make substantial contributions to the progression of deep tech, thereby promoting **early adoption, sharing of intellectual property, fostering indigenous knowledge development**, and cultivating self-sufficiency.

### Government Efforts in building Deep Tech Startup Ecosystem:

#### A. Promotion of Research and Innovation:

1. The government is actively promoting research and innovation in transformative technology domains like **mobility, battery storage, and quantum technology**.
2. Initiatives such as the **National Mission on Transformative Mobility and Battery Storage** and the **National Quantum Mission** exemplify these endeavors.

#### B. Policy and Programme Linkages: - Currently, numerous policies, schemes and initiatives are in place to support the various focus areas within the Indian Deep Tech Startup ecosystem. Here are some examples:-

1. **Tamil Nadu Technology Hub (iTNT Hub):** Located in Chennai, iTNT Hub acts as a central platform linking startups in emerging and deep tech fields.
2. **TIDE 2.0 Scheme:** Supporting tech entrepreneurship in India, the TIDE 2.0 scheme provides financial and technical aid to incubators nurturing ICT startups using emerging technologies. Over 5 years, 51 incubators nationwide will support around 2000 startups, with a total investment of Rs 264 crore.
3. **Next Generation Incubation Scheme (NGIS):** Funded by the Ministry of Electronics and Information Technology (MeitY), NGIS focuses on supporting innovative startups in software product development and embedded electronics. It spans 12 Tier-II locations across India.
4. **Scientific and Useful Profound Research Advancement (SUPRA):** A research grant from Science and Engineering Research Board (SERB), SUPRA supports high-quality proposals challenging existing theories and offering disruptive solutions across disciplines.

**5. Fund for Industrial Research Engagement (FIRE):**

Co-funded by SERB and industry, FIRE accelerates research and innovation in India by supporting impactful projects addressing major national issues.

**6. NECTAR:** NECTAR is an autonomous society under DST, Government of India. It leverages frontier technologies from central scientific departments to address socio-economic challenges in the Northeast region.

**7. National Supercomputing Mission (NSM):**

Launched in 2015, NSM aims to establish India as a global leader in supercomputing, providing advanced facilities to scientists nationwide for research in areas like climate change and healthcare.

**8. National Quantum Mission (NQM):** Initiated in 2023, NQM seeks to position India as a global

leader in quantum technologies, facilitating cutting-edge research and its application in various sectors including healthcare and national security.

**9. International Initiatives:**

**a. Indo-US Joint Working Group on Artificial Intelligence:** Established in 2020 to foster collaboration on AI-powered solutions for various sectors.

**b. Indo-Israel Deep Tech & Life Sciences Mission:** Launched in 2021 to promote collaboration in deep tech and life sciences, generating economic and social benefits.

**c. Indo-Japan Deep Tech & Startups Partnership:** Initiated in 2022 to facilitate collaboration between India and Japan in deep tech and startups, enhancing access to markets, talent, and funding.

**Challenges faced by Deep Tech Policies and their respective solutions:-**

Challenges	Solutions
<p><b>1. High Risk and Long-term Investment:-</b></p> <p>a) Deep tech projects necessitate significant upfront investment in research and development and often require years or even decades to materialize into marketable products.</p> <p>b) This lengthy timeline for returns makes them less appealing to conventional investors who seek shorter-term and lower-risk ventures.</p>	<p>a) Establish dedicated venture funds or investment vehicles specifically tailored for deep tech startups to mitigate risk and provide long-term support.</p> <p>b) Encourage government-backed grants and subsidies for deep tech projects to incentivize investment and reduce financial burden.</p>
<p><b>2. Scarcity of Specialized Talent:-</b></p> <p>a) Deep tech projects rely on highly skilled researchers, engineers, and entrepreneurs, whose expertise is in high demand and short supply.</p> <p>b) Acquiring and retaining such talent pose challenges for deep tech startups, particularly in emerging markets.</p>	<p>a) Develop educational and training programs focusing on deep tech fields to bridge the skill gap and cultivate a pool of qualified professionals.</p> <p>b) Foster partnerships between academia and industry to facilitate knowledge transfer and talent acquisition.</p>
<p><b>3. Market Readiness Obstacles:</b></p> <p>a) Regulatory, ethical, social, or environmental barriers may impede the adoption and scalability of deep tech projects.</p> <p>b) Additionally, educating and convincing potential customers and stakeholders about the feasibility and value of these solutions can be intricate and unfamiliar.</p>	<p>a) Collaborate with regulatory bodies to streamline approval processes and create frameworks that support the adoption of deep tech solutions.</p> <p>b) Launch awareness campaigns and educational initiatives to inform stakeholders about the benefits and feasibility of deep tech innovations.</p>

<p><b>4. Inadequate Research Funding in India</b></p> <p>a) Despite a targeted 2% GDP allocation for research, funding remains insufficient in India, with current R&amp;D spending standing at 0.65% of GDP, well below the global average.</p> <p>b) This shortfall undermines India’s competitiveness with scientifically advanced nations and signals a concerning trend of dwindling support for essential research activities.</p>	<p>a) Advocate for increased government funding for research and development, emphasizing the importance of deep tech in driving innovation and economic growth.</p> <p>b) Promote public-private partnerships to leverage private sector resources and expertise in funding research initiatives.</p>
<p><b>5. Skepticism within the Scientific Community:</b></p> <p>a) Doubts persist within the scientific community regarding the efficacy of relying solely on the private sector for research funding.</p> <p>b) Many argue that government funding remains indispensable, and expectations for private investment may be overly optimistic.</p>	<p>a) Foster open dialogue and collaboration between government, industry, and academia to address concerns and build trust in the effectiveness of private sector involvement in research funding.</p> <p>b) Showcase success stories and case studies highlighting the positive impact of private investment in advancing scientific knowledge and innovation.</p>
<p><b>6. Financial Constraints:</b></p> <p>a) Despite governmental emphasis on innovation, budgetary increments for key departments are modest.</p> <p>b) Departments such as the Council of Scientific and Industrial Research (CSIR) and the Department of Space see only marginal increases, while others face budget reductions.</p>	<p>a) Allocate a larger portion of the national budget to scientific research and development, prioritizing funding for key departments and initiatives</p> <p>b) Implement measures to improve budget allocation efficiency and reduce bureaucratic red tape in the disbursement of funds.</p>
<p><b>7. Bureaucratic Hurdles:</b></p> <p>a) Even when funds are available, bureaucratic delays and obstacles often impede their efficient distribution.</p> <p>b) Complex administrative procedures contribute to interruptions in project funding, hindering the progress of research endeavors.</p>	<p>a) Streamline administrative procedures and create dedicated support structures to facilitate the application and approval process for research funding.</p> <p>b) Provide training and resources to government officials to enhance their understanding of deep tech projects and expedite decision-making processes.</p>

In conclusion, the government’s announcement of a Rs 1 lakh crore fund for R&D, coupled with initiatives to bolster deep-tech capabilities, marks a significant milestone in India’s innovation journey.

However, addressing remaining challenges requires careful attention and concerted efforts from all stakeholders

## 6. NEURALINK IMPLANTS BRAIN CHIP IN 1<sup>ST</sup> HUMAN

In January 2024, **Neuralink** has achieved a significant milestone by successfully **implanting a brain chip** in its **1<sup>st</sup> human patient**.

1. The first product from Neuralink, named **Telepathy**, is designed to benefit individuals who have lost limbs.
2. The company conducted various extensive tests on animals, demonstrating the ability of monkeys to play computer games using their brains.

### About Neuralink:

1. It focuses on developing **brain-computer interfaces (BCIs)** to assist individuals with traumatic injuries in controlling computers **solely through their thoughts**.

- It is established in 2016 by Elon Musk, it aims to enhance human abilities significantly by addressing neurological conditions like **Parkinson's**.

### Brain Implants:

- Brain implants establish a direct connection between the brain and external technology, turning brain signals into commands for devices such as computers, artificial limbs, or robots.
- Functionality:** Electrodes strategically placed to catch brain activity, translating it into actionable commands.

### Applications of Brain Implants:

- Brain-Computer Interfaces (BCI) for Communication:** Individuals with severe motor disabilities could use this to control computers or communicate **directly through thought**, enhancing their ability to interact with the world.
- Medical Treatment:** Effective in treating neurological conditions like **Parkinson's disease and epilepsy**.
- Cognitive Enhancement:** It holds the potential to improve learning, memory, and information processing.
- Mind-Controlled Devices:** It could enable better control of prosthetic limbs or robotic devices, allowing individuals to control objects and perform tasks with greater precision.
- Restoration of Sensory Functions:** It could help restore vision by connecting the brain directly to visual prosthetics. And also it might be used to restore hearing by interfacing with cochlear implants or other auditory devices.

### Challenges:

- Ethical Concerns:** The invasive nature of brain implants raises ethical questions related to privacy, consent, and potential misuse of the technology.
- Opposition from Animal Rights Groups:** Concerns raised by various groups such as the Physicians Committee for Responsible Medicine regarding primate testing.
- Safety and Reliability:** Questions about the safety and reliability of brain implants, necessitating rigorous testing to prevent glitches or malfunctions.

- Privacy and Security:** Potential challenges in data privacy, requiring measures to protect neural information from unauthorized access.
- Technical Hurdles:** Developing a reliable and safe brain-machine interface poses significant technical challenges. Ensuring long-term stability, minimizing the risk of infection, and addressing potential side effects are crucial.
- Regulatory Approval:** Neuralink's technology involves medical and technological innovations that would require regulatory approval. Navigating the regulatory landscape for such novel technologies can be a lengthy and complex process.

**Conclusion:** While Neuralink's advancements show promise, addressing challenges related to ethical concerns, safety, and privacy is crucial for the responsible development and application of brain-computer interface technologies.

## 7. INDIA'S 1<sup>ST</sup> GRAPHENE CENTRE: KERALA

- Recently, MeitY Secretary launched a Centre of Excellence (CoE) in Intelligent Internet of Things (IIoT) Sensors and India's 1<sup>st</sup> graphene centre - India Innovation Centre for Graphene (IICG) in Kerala.
- IICG is a joint venture of the Digital University of Kerala, Centre for Materials for Electronics Technology (C-MET) and Tata Steel Limited funded by MeitY.
- IICG aims to foster Research and development, product innovation and capacity building in the area of Graphene and two-dimensional materials (2DM).
  - It will also support the **Graphene-Aurora program of the MeitY**.
    - This programme aims to fill the gap between Research & Development and commercialization by providing a complete facility to startup and industry.

### India Innovation Centre for Graphene (IICG)

- Establishment:** IICG marks India's premier graphene research hub, formed through the collaboration between the Digital University of Kerala, Centre for Materials for Electronics Technology (C-MET), and Tata Steel Limited, with financial support from MeitY.

- Objectives:** The center is dedicated to advancing research and development, product innovation, and capacity building in graphene and two-dimensional materials (2DM). It supports the MeitY's Graphene-Aurora program, which aims to bridge the gap between research and market by offering comprehensive facilities to startups and industries.

Researchers in Georgia have created the **world's first functional semiconductor** made from graphene and it is also for the first-time graphene has showed **band gap property**.

**About Band Gap:**

Band Gap is a crucial electronic property that allows semiconductors to switch on and off.

**What is Graphene?**

- Origin:** Graphene comes from graphite, the same material used in pencil lead. A tiny piece of graphite, just 1mm thick, can contain up to 3 million layers of graphene.
- Structure:** Graphene is a single layer of carbon atoms tightly bound in a hexagonal (honeycomb) pattern. It is an allotrope of carbon, meaning it's carbon in a different form, just one atom thick.
- Production:** It can be produced by heating specific materials like intercalated graphite, coal tar, or shellac in an inert atmosphere.

**Properties of Graphene**

- Strength:** It's 200 times stronger than steel but 6 times lighter.
- Thermal Conductivity:** With thermal conductivity as high as 5000 W/m/K, graphene is superior to most materials in heat management.
- Electrical Conductivity:** Its electrical conductivity exceeds that of copper, making it ideal for electronic applications.
- Other Notable Properties:** Graphene is also highly transparent, flexible, impermeable to gases, chemically stable, biocompatible, and has a large surface area.

**Applications of Graphene**

Graphene's unique properties have the potential to revolutionize various sectors, including:

- Electronics:** For making faster and more efficient devices.
- Energy Storage:** In the form of batteries and supercapacitors that charge quickly and hold more power.
- Materials Reinforcement:** To improve strength and reduce weight in materials used in aerospace and automotive industries.
- Thermal Management:** Used in electronic devices for better heat dissipation.
- Sensors:** For detecting gases, chemicals, and biological molecules with high sensitivity.
- Biomedical Devices:** In drug delivery systems, biosensors, and imaging devices.
- Water Filtration:** For more efficient water purification, desalination, and filtration processes.
- Coatings and Films:** For anti-corrosion, anti-fogging, and protective applications.

**Conclusion and Future Outlook**

The establishment of the India Innovation Centre for Graphene (IICG) is a significant step toward positioning India as a leader in graphene research. With ongoing research and development, graphene continues to promise breakthroughs in multiple industries, showcasing India's commitment to innovation and strategic use of graphene's transformative potential.

**8. KERALA'S 1<sup>ST</sup> SILICON-PROVEN KAIRALI AI CHIP**

- In January 2024, Digital University Kerala has launched the Kairali AI Chip, a groundbreaking achievement in the field of artificial intelligence (AI).
- This is Kerala's **first silicon-proven AI chip**, designed to enhance technological capabilities across various sectors.

**What is a Kairali AI Chip?**

- The Kairali AI Chip utilizes **edge intelligence (edge AI)**, which **enhances performance and reduces power consumption** for diverse applications.
- Edge AI means** AI operations are performed on local devices instead of relying on centralized data centers, enabling quicker and more efficient data processing while safeguarding user data privacy and security.

**Applications:**

1. **Agriculture:** Facilitates **precision farming** by monitoring crop health and environmental conditions in real-time, leading to better resource management and yield.
2. **Mobile Industry:** Enhances smartphone functionalities, offering features like real-time language translation, improved photo processing, and AI-powered assistants.
3. **Drones and Aerospace:** Improves navigation and decision-making in drones and satellites, essential for environmental monitoring and delivery services.
4. **Automobiles:** Powers autonomous vehicles by processing sensory information in real-time, crucial for safety and efficiency.

**Understanding AI Chips**

1. **About: -**
  - a. AI chips are designed with specialized architecture to support **deep learning** and AI applications, enabling faster, more efficient data analysis and interpretation.
  - b. Deep Learning involves training **Deep Neural Networks (DNNs)** to learn from data, which can then be used to make predictions on new, unseen data.
2. **Functions of AI Chips:** They **simulate human brain activity**, learning from data during a training phase and applying this knowledge to make predictions.
3. **Types of AI Chips:** Application-Specific Integrated Circuits (**ASICs**), Field-Programmable Gate Arrays (**FPGAs**), Central Processing Units (**CPUs**), and **GPUs**.
4. **Benefits of AI Chips:**
  - a. **Faster Computation:** Offers parallel processing capabilities for running sophisticated models and algorithms.

- b. **High Bandwidth Memory:** Provides significantly more bandwidth for efficient AI application performance.

**Differences: Cloud AI vs. Edge AI, and Traditional Chips vs. AI Chips**

**Cloud AI vs. Edge AI:**

1. Cloud AI processes data in **remote servers**, possibly leading to **higher latency and bandwidth requirements**, while Edge AI processes data **locally on devices, reducing latency and bandwidth needs** and enhancing data privacy and security.

**Traditional Chips vs. AI Chips:**

1. Traditional Chips are **general-purpose processors**, whereas AI Chips are optimized for **AI tasks**, offering higher energy efficiency and performance for AI applications but may be less versatile for general computing.

**9. 'HAVISURE': INDIA'S FIRST 'HEPATITIS A' VACCINE**

1. In January 2024, **Havisure-India's first indigenously developed 'Hepatitis A' vaccine launched.**
2. Havisure was **developed by Indian Immunologicals Ltd (IIL)**, a wholly-owned subsidiary of National Dairy Development Board (NDDB).
3. It is a **2-dose vaccine.**
  - The **1<sup>st</sup> dose** given to those above 12 months of age and the **2<sup>nd</sup> dose** is administered at least six months later.
4. The vaccine is advised for routine immunization in children and individuals at risk due to exposure or travel to regions with high hepatitis A prevalence.
  - Additionally, individuals with occupational infection risks and those suffering from chronic liver diseases can also receive Hepatitis A vaccination.

**About HEPATITIS**

How it spreads	Prevention	Treatment
1. Contaminated food or water	<ol style="list-style-type: none"> <li>a. Vaccine</li> <li>b. Practice good hygiene</li> </ol>	<ul style="list-style-type: none"> <li>• <b>NO specific medication available</b></li> <li>• Treated through supportive care (rest, adequate nutrition and fluids) to help relieve symptoms</li> </ul>



2. Through contact with the blood or bodily fluids of an infected person	<ul style="list-style-type: none"> <li>a. Vaccine</li> <li>b. Practice safe sex</li> <li>c. Blood screening</li> </ul>	<ul style="list-style-type: none"> <li>• Combination antiviral therapies (with Tenofovir or Tenofovir plus lamivudine)</li> </ul>
3. Blood-to-blood contact	<ul style="list-style-type: none"> <li>a. Practice safe sex</li> <li>b. Avoid sharing needles, toothbrushes, razors or nail scissors</li> </ul>	<ul style="list-style-type: none"> <li>• Combination therapies with direct acting antivirals (DAAs)</li> </ul>
4. Contact with infected blood (only occurs in people already infected with Hepatitis B)	<ul style="list-style-type: none"> <li>a. Hepatitis B Vaccine</li> <li>b. Avoid sharing needles, toothbrushes, razors or nail scissors</li> </ul>	<ul style="list-style-type: none"> <li>• Interferon (A natural substance that helps the body's immune system fight infection and other diseases)</li> </ul>

### What is Hepatitis A ?

1. It's a viral infection primarily causing liver inflammation.
2. The infection can either be acute (short-term) or chronic (long-term).
3. Transmission occurs through consuming contaminated food or water, or close contact with an infected person.
4. Common symptoms include fever, fatigue, nausea, abdominal pain, and jaundice (yellowing of the skin and eyes).
5. According to WHO, there's no specific treatment for hepatitis A. Recovery from symptoms following infection may be slow, spanning several weeks or months.

### Hepatitis Prevention Initiatives

1. **National Viral Hepatitis Control Program 2019:** A national program with the aim of **eliminating Hepatitis C** in India by 2030.
2. **Mission Indradhanush 2014:** Provides **vaccination against Hepatitis B** along with seven other infections. It contributes to the broader spectrum of **immunization efforts**.

## 10. NEW TREATMENT REGIMEN FOR LEPROSY

1. In January 2024, the **Indian government** has granted approval for a new treatment regimen designed to accelerate the **elimination of leprosy** in the country.
2. This decision, rooted in the latest global scientific

research and supported by the **World Health Organization (WHO)**, aims to shift from a **2-drug regimen to a 3-drug regimen** for **Pauci-Bacillary (PB) leprosy cases**.

### About Leprosy

1. **Cause:** Leprosy, also known as **Hansen's disease**, is a chronic infectious condition caused by the bacteria **Mycobacterium leprae**.
2. **Affects:** It primarily impacts the skin, peripheral nerves, mucosa of the upper respiratory tract, and eyes.
3. **Transmission Mode:** Transmission occurs through droplets from the nose and mouth during close contact with untreated cases.
4. **Treatment:** Leprosy is curable with **multidrug therapy**, consisting of three drugs: **dapsone, rifampicin, and clofazimine**, as recommended by the World Health Organization (WHO).
5. **Classification:** For treatment purposes, leprosy is classified into two types:
  - a. **Pauci-Bacillary (PB):** Fewer visible bacteria, and no signs of advanced disease in biopsies.
  - b. **Multibacillary (MB):** Visible bacteria, and may show signs of more advanced disease in biopsies.

### New Treatment Regimen:

1. **Objective:** The primary objective is to cease the transmission of leprosy at the sub-national level **by 2027**, aligning with the UN's Sustainable Development Goals, accomplishing this three years ahead of schedule.

- Transition from Two to Three Drugs:** The Ministry of Health and Family Welfare has sanctioned a shift from the current two-drug regimen lasting six months to a three-drug regimen specifically designed for Pauci-Bacillary (PB) cases.
- Scientific Basis:** This decision is underpinned by the latest globally accepted scientific research studies and evidence-based practices, ensuring a well-informed and effective approach.
- WHO Endorsement:** The World Health Organization (WHO) has pledged to supply the revised drug regimen starting April 1, 2025, indicating international acknowledgment and support for this strategy.

### Recent Initiatives:

- National Strategic Plan (NSP) & Roadmap for Leprosy (2023-27):** To achieve zero transmission of leprosy by 2027.
- National Leprosy Eradication Programme:** A centrally sponsored scheme operating under the National Health Mission
- Nikusth 2.0 Portal:** An integrated portal designed for the comprehensive management of leprosy cases.
- SLACs (Sparsh Leprosy Awareness Campaigns):** Introduced in 2017 with the aim of promoting awareness about leprosy, SLACs concentrate on tackling challenges linked to the stigma and discrimination surrounding leprosy.

### Leprosy Status in India:

- Leprosy Elimination Status:** India achieved the status of “Leprosy Eliminated” in 2005. However, despite this achievement, the country accounts for **more than half (52%)** of the world’s new leprosy cases.
- Decline in Annual Case Detection Rate:** There has been a notable reduction in the annual case detection rate, decreasing from 8.13 cases per lakh population to 4.56 cases in 2020-21. Subsequently, the rate stabilized at 5.52 cases per lakh in 2021-22.

## 11. CAMEROON STARTS WORLD'S 1<sup>ST</sup> MALARIA VACCINE PROGRAM FOR CHILDREN

- In January 2024, **Cameroon** has achieved a significant milestone by initiating the regular administration of Mosquirix, marking the launch of the **world’s first malaria vaccine program** tailored for children.
  - MOSQUIRIX** is the **first and only approved malaria vaccine**.

### Key Points about Mosquirix:

- Targeted Malaria Strain:** Mosquirix, also known as **RTS, S/AS01**, is an injectable vaccine specifically designed to target **Plasmodium falciparum**, the most prevalent malaria strain in Africa.
- Development and Origin:** Developed by GlaxoSmithKline, a British pharmaceutical company, the vaccine’s development began in 1987.
- Mechanism of Action:**
  - The active components of Mosquirix consist of proteins found on the surface of Plasmodium falciparum parasites.
  - The vaccine’s objective is to stimulate the immune system to defend against the initial stages of malaria.
  - It specifically targets the period when parasites enter the human bloodstream through mosquito bites and infect liver cells.
- Comprehensive Protection:** In addition to targeting malaria, RTS, S/AS01 provides protection against the **Hepatitis B virus**, contributing to a broader immunization scope.
- Effectiveness and Approval:**
  - The vaccine is about **30% effective** in preventing severe cases of malaria in children.
  - The European Union’s drugs regulator approved it in 2015, considering its benefits outweigh potential risks.
  - Rare side effects may include fever, occasionally leading to temporary convulsions.

## Challenges Associated with Mosquirix (RTS, S/ AS01) Vaccine:

1. **Inconvenient Administration:**
  - a. The vaccination process requires **four injections** before a child turns 2.
  - b. The intervals between doses may not align with the routine vaccine schedules for other diseases, posing an inconvenience for parents.
2. **Partial Effectiveness:**
  - a. Clinical testing involving over 10,000 African children (2009-2014) revealed that the vaccine's protection against detectable malaria infections is limited to approximately 40%.
  - b. The vaccine shows only **partial effectiveness** in preventing malaria.
3. **Limited Duration of Protection:**
  - a. The duration of protection offered by the vaccine remains uncertain.
  - b. Previous trials, spanning four years, raise questions about the long-term effectiveness of the vaccine.
4. **Risk of Resistance Development:**
  - a. The vaccine's efficacy is lower against parasite strains with poor genetic matches.
  - b. Concerns exist about the potential evolution of parasite resistance to the vaccine over time, similar to trends observed with drug resistance.

## About Malaria

- 1) **Nature:**
  - a) Malaria is a **mosquito-borne** blood disease caused by **Plasmodium protozoa**.
- 2) **Cause:**
  - a) Life-threatening, it is caused by Plasmodium parasites transmitted through **infected female Anopheles mosquitoes**.
- 3) **Transmission:**
  - a) Parasites multiply in the liver cells, then **attack Red Blood Cells (RBCs)** after transmission via mosquito bites.
  - b) Five parasite species cause Malaria in humans, with Plasmodium falciparum and Plasmodium vivax posing the greatest threat.

- 4) **Distribution:**
  - a) Predominantly found in tropical and subtropical areas of Africa, South America, and Asia.
- 5) **Symptoms:**
  - a) Symptoms include fever and flu-like illness with chills, headache, muscle ache, and fatigue.

## Burden of Malaria:

1. Globally in 2022, there were an estimated 249 million malaria cases and 608 000 malaria deaths in 85 countries.
2. According to the **World Malaria Report 2019, India** represents **3%** of the global malaria burden. Despite being the highest malaria burden country of the SEA region, India showed a reduction in reported malaria cases of 49% and deaths of 50.5% compared with 2017.
3. In 2020, **India contributed 1.7% of malaria cases and 1.2% deaths globally.**

## Countries that Eliminated Malaria:

- 1) Till now, **44 countries** have received WHO certification as malaria-free.
- 2) Among them the recent countries got certified are as follows:-
  - El Salvador (2021), China (2021), Azerbaijan (2023), Tajikistan (2023), Belize (2023), and Cabo Verde (2024).
  - Countries achieving at least 3 consecutive years of zero indigenous malaria cases are eligible to apply for WHO certification of malaria elimination.

## Initiatives to Curb Malaria: Global Initiatives:

1. **Eradication Potential:**
  - a) WHO's '**E-2025 Initiative**' identifies 25 countries with potential malaria eradication by 2025.
  - b) Global technical strategy for malaria 2016-2030 aims to reduce incidence and mortality rates by at least 40% by 2020, 75% by 2025, and 90% by 2030.
2. **High Burden to High Impact (HBHI):**
  - a) WHO's HBHI initiative is implemented in 11 high malaria burden countries, including India.

- b) HBHI started in West Bengal, Jharkhand, Chhattisgarh, and Madhya Pradesh.

### Indian Initiatives:

1. Government of India targets **malaria elimination by 2027**.
2. Malaria Elimination Research Alliance-India (**MERA-India**) by Indian Council of Medical Research (**ICMR**).

## 12. FOR THE FIRST TIME, WHO RECOGNIZES THE ELIMINATION OF TRANS FATS

1. In January 2024, the **World Health Organization (WHO)**, WHO has awarded its first-ever certificates validating progress in eliminating industrially produced trans fatty-acids to five countries.
2. Denmark, Lithuania, Poland, Saudi Arabia, and Thailand have each demonstrated they have a best practice policy for industrially produced trans-fatty acids (iTFA) elimination in effect

### Understanding Trans Fatty Acids

Trans fatty acids (TFA) pose significant health risks, including increased vulnerability to heart attacks and heart disease-related mortality. TFA, found in both industrially produced and naturally occurring forms, offer no known health benefits and are often present in processed foods, such as fried items, cakes, and ready meals.

### Progress in Eliminating Trans Fats

1. Despite WHO's goal to eradicate trans fats from the global food supply **by the end of 2023**, complete success was not achieved.
2. However, they still made a lot of progress. More countries are joining the effort to fight against these fats by making rules that limit or ban them.
3. Currently, **53 countries have strong rules against trans fats**, protecting 3.7 billion people around the world from their harmful effects.

### How Are Countries Fighting Trans Fats?

Countries are using two main ways to fight trans fats:

1. **Limiting Trans Fats:** Some countries have made a rule that says foods cannot have more than **2 grams of trans fats** for every 100 grams of total fats in them.

2. **Banning Bad Ingredients:** Another way is to completely ban the use of **partially hydrogenated oils**, which are a big source of trans fats.

- a. **Partially hydrogenated oils (PHOs)** are vegetable oils that are **solid at room temperature**. They are created by adding hydrogen and a catalyst to vegetable oil

### Looking Ahead

1. Despite the progress, more than half of the people in the world are still at risk because their countries don't have strong rules against trans fats.
2. WHO wants to change this by 2025, aiming to cover countries that are responsible for **90% of the problem with trans fats**. This means even more lives could be saved in the future.

### Conclusion

Imagine eating your favorite snack without worrying about it making your heart sick. That's what WHO is trying to do by getting rid of trans fats. By working together, countries can make food safer for everyone, saving lives and making the world a healthier place.

## 13. WHO'S INTERNATIONAL CLASSIFICATION OF DISEASES 11

1. World Health Organization's (WHO) International Classification of Diseases 11 (ICD-11) now introduced **Module 2 (ICD 11 TM 2)**.
2. **Module 2** of the supplementary chapter on traditional medicine conditions under ICD 11 **is dedicated to Ayurveda, Siddha, and Unani (ASU)** data and terminology.
3. It encompasses more than 500 codes. Infectious diseases like Malaria and lifestyle diseases like chronic insomnia are also included.
4. ICD is the international standard for systematic recording, reporting, analysis, interpretation, and comparison of mortality and morbidity data.
  - a. It also includes a dedicated chapter on traditional medicine.
  - b. Previously, ICD-11 included Module-1 which covers traditional medicine conditions originating

in ancient China, which is now commonly used in Japan, Korea etc.

c. **ICD-11** came into effect in January 2022.

### Significance of ICD-11

1. Provides a list of diagnostics categories to collect and report on traditional medicine conditions in an internationally comparable manner.
2. Link traditional medicine practices with global conventional medicine's norms and standard development.
3. Enable integration of traditional medicine into insurance coverage and reimbursement systems, in line with WHO objectives relating to universal health coverage.

## 14. 1<sup>st</sup> MULTICENTRIC POINT PREVALENCE SURVEY OF ANTIBIOTIC USE

1. Recently, The First **Multicentric Point Prevalence Survey of Antibiotic Use** was released by the National Centre for Disease Control (NCDC) under the Union Health Ministry.
2. The survey has mapped the patients treated across 15 States and 2 Union Territories between November 2021 and April 2022.

### Key Findings

1. **Empirical prescriptions:** 94% of patients surveyed were given antibiotics before medical diagnosis of cause of infection.
2. **Preventive usage:** 55% of patients were prescribed antibiotics for preventive indications, while 45% for therapeutic indications.
3. **Only 8 out of 20 institutes** surveyed have an antibiotic policy in place.
4. **Classification of prescriptions based on AWaRe (Access, Watch, Reserve) groups:** 57% from watch groups, 38% from access group and 2% from reserve group.
  - 3% of the prescription from not recommended group.
5. The high use of watch group antibiotics raises concern as these antibiotics have a higher potential to develop antibiotic resistance.

### Key Fact

1. 1.27 million global deaths in 2019 directly caused by bacterial **antimicrobial resistance (AMR)**
2. AMR among **top 10** public health threats as identified by World Health Organisation.

### About Antimicrobial resistance (AMR)

1. AMR happens when germs like bacteria and fungi develop the ability to defeat the drugs designed to kill them.
2. **Reasons behind increasing incidence of antimicrobial resistance**
  - a. **Overuse and misuse** of antimicrobials among humans and in poultry and farm animals.
  - b. **Poor infection prevention** and control practices in healthcare settings
  - c. **Effluents discharge** from hospitals, industries, and urban settlements
    - Over 75% of administered antibiotics are excreted unmetabolized in urine and faeces and enter into sewage systems and water bodies.
  - d. **Confusion over treatment guidelines.**
    - E.g., the optimal duration of antibiotic therapy for common infections like pneumonia was not established for decades.

### Implications of the Spread of Antimicrobial Resistance

1. **Healthcare Impact:** Increased mortality and morbidity, and prolonged illness because infections caused by resistant microorganisms are often more difficult to treat.
2. **Increased Healthcare Costs:** Longer hospital stays, additional diagnostic tests, and more expensive second-line or third-line antibiotics leads to increased expenditure.
3. **Economic impact:** Working hours lost due to prolonged illness and increase in out-of-pocket expenditure.
4. **Increased risk of outbreaks:** As current medicines become ineffective, infections persist in the body, increasing the risk of spreading to others.

**5. Limited new options for treatment:** There are limited new antibiotics in the research and development pipeline.

### Way forward

- 1. Strict implementations of Drugs and Cosmetics Rules, 1945:** Recently, the Director General of Health Services (DGHS) has urged all pharmacist associations to adhere to the rules and sell antibiotics only with valid prescriptions.
- 2. Defined Antibiotic Use Policy in medical institutes:** It should encourage use of access group antibiotics and keep the consumption of reserve group antibiotics at low levels.
- 3. Robust Immunisation Programmes:** The incidence of bacterial and viral infections can be reduced by the adoption of strategies and programmes on the prevention and control of infectious diseases.
- 4. Curbing the Production and Sale of Poor Quality and Sub-standard Antimicrobials**
- 5. Educational and Awareness Programme:** Strengthen information and resources by involving all stakeholders i.e., policymakers, pharmaceutical industries, medical and veterinary professionals, producers and consumers.

## 15. WORLD'S 2<sup>nd</sup> BIGGEST TOBACCO PRODUCER: INDIA

1. The World Health Organization (WHO) recently published the Global report on **Trends in prevalence of Tobacco use 2000–2030**, shedding light on the worldwide consumption patterns of tobacco.
2. Despite global efforts to control tobacco use, India is **2nd-largest** tobacco producer globally, **after China**.

### Key Findings

1. Over the past 2 decades, there has been a visible decline in tobacco consumption worldwide, with approximately **1 in 5 adults** reported to be tobacco users in 2022, compared to **1 in 3** in 2000.
2. Alarming statistics also reveal that a significant number of adolescents aged **13–15 years** are current tobacco users, with the report estimating around 37 million users in this age group, comprising 25 million boys and 12 million girls.

3. The report reveals that there are approximately **1.25 billion** adult tobacco users globally.
4. Within India, a significant portion of the population engages in tobacco use, with an estimated 267 million adults (**aged 15 and above**) being consumers.
5. Notably, several states in India, including **Gujarat, Andhra Pradesh, Uttar Pradesh, Karnataka, West Bengal, Telangana, and Bihar**, play an important role in tobacco cultivation and production.

### Impact:

1. Tobacco usage claims the lives of over 8 million individuals annually due to associated risks such as **heart disease, lung disorders, and various forms of cancer**.
2. Shockingly, the adverse effects of **tobacco extend beyond smokers**, with an estimated 1.3 million non-smokers who are exposed to second-hand smoke.
3. As per WHO, smoking costs the world's economies more **than US\$ 1 trillion annually** in healthcare expenditure and lost productivity.
4. Furthermore, the cultivation of tobacco contributes to **environmental degradation**, including **deforestation** leading to ecological concerns.

### India's Initiatives:

1. India has implemented various initiatives aimed at control its prevalence, including the National Tobacco Control Programme and the Prohibition of Electronic Cigarettes Act (2019).
2. Additionally, legislative measures such as the Cigarette and Other Tobacco Products Act (2003) and the provision of National Tobacco Quit Line Services.

### Global Initiatives:

1. The WHO Framework Convention on Tobacco Control (**FCTC**), **established in 2003** to combat tobacco use, with **India becoming a signatory to the convention in 2004**.
2. Furthermore, **WHO's MPOWER** measures, focusing on Monitoring tobacco use, protecting people from tobacco smoke, offering help to quit tobacco use, Warning about the dangers of tobacco, enforcing bans on tobacco advertising, promotion, and sponsorship, and Raising taxes on tobacco, provide a comprehensive framework for tobacco control worldwide.

## 16. 'BIO-IMAGING BANK' FOR CANCER

1. Recently, India's Largest Cancer Hospital Tata Memorial Hospital (TMH), Mumbai, introduces an **AI-powered 'Bio-Imaging Bank' (BIB)** for early-stage cancer detection.
2. **Need:** India faces a rising cancer burden with a shortage of specialists, posing challenges in early detection and treatment.
3. **AI Integration:** AI algorithms are trained using data from **60,000** patients to detect unique cancer features in images and aid in diagnosis.
4. **Project Scope:** Initially focusing on **head, neck and lung cancers**, the project involves **training AI** for tasks like screening metastases, biomarker prediction, and therapy response.
5. **Collaboration:** The multi-institutional project is funded by the Department of Biotechnology, involving institutions like IIT-Bombay, AIIMS-New Delhi, and others.
6. **AI's Role in Cancer Detection:** AI mimics human brain processing, **analyzing images** to identify tissue changes and potential malignancies, aiding in early detection.
7. **Implementation:** TMH has reduced radiation exposure for pediatric patients using AI-enhanced CT scans and piloted AI algorithms for thoracic radiology.
8. **Future Prospects:** AI holds potential in treatment approaches, improving therapy outcomes, and enabling swift cancer detection, especially in rural areas.

Despite its benefits, the use of AI in healthcare raises concerns about human radiologist replacement and faces regulatory scrutiny.

## 17. ANEEL: INDIA'S GREEN ENERGY TRANSITION

1. **Clean Core Thorium Energy** (Chicago-based company) has developed ANEEL (named after India's scientist, Dr Anil Kakodkar): a fuel that combines **Thorium** and **High Assay Low Enriched Uranium (HALEU)**.
  - a. ANEEL stands for: **Advanced Nuclear Energy for Enriched Life**
  - b. ANEEL offers a solution to **maximize Thorium utilization** in nuclear reactors.

### Thorium Reserves and Green Energy Potential:

1. India possesses the **world's largest Thorium** reserves, estimated at 1.07 million tonnes, offering vast potential for **green energy** production.
2. Utilizing Thorium could greatly help reach net-zero carbon emissions by 2070.

### Thorium's Challenge and Innovative Solution:

1. Thorium, a fertile material, traditionally requires pairing with **Uranium-235** or **Plutonium-239** for use as fuel.
2. ANEEL, a **fuel blend comprising Thorium** and specially enriched Uranium (**HALEU**), offers a solution, minimizing reliance on precious Uranium resources.

### ANEEL in Existing Reactors:

1. Clean Core's ANEEL fuel **can be utilized in India's Pressurized Heavy-Water Reactors (PHWRs)**, important to the country's nuclear energy sector.
2. India currently **operates 18 PHWR** reactors, with **10 more under construction**, making ANEEL adoption potentially transformative.

### Unique Characteristics of HALEU:

1. HALEU, **enriched to over 5%** but **less than 20%**, is important for advanced nuclear reactor designs.
2. Near-term commercialization plans for ANEEL could broaden the availability of HALEU, **currently limited to Russia and China**.

### Efficiency and Waste Reduction:

1. ANEEL offers enhanced efficiency, with a burn-up of **60,000 MW-days per tonne**, significantly surpassing conventional natural uranium fuel's 7,000 MW-days per tonne in PHWRs.
2. This leads to a notable reduction in nuclear waste volume and operational costs, emphasizing its environmental and economic benefits.

### Global Interest and Collaborations:

1. ANEEL's interest from countries like **Canada** suggests its potential in global clean energy efforts.
2. Collaborations, such as the **Memorandum of Understanding between Clean Core and Canadian Nuclear Laboratories**, highlight ANEEL's international significance in advancing nuclear technology.



## F. GEOGRAPHY & ENVIRONMENT

### 1. INDIA'S 1<sup>ST</sup> HIGH-RESOLUTION LANDSLIDE SUSCEPTIBILITY MAP

1. In January 2024, IIT Delhi created India's first high-resolution landslide susceptibility map.
2. In late 2023, heavy floods and landslides triggered by northeast monsoon rains, led to fatalities, emphasizing the need for a national landslide susceptibility map.

#### What is Landslide Susceptibility Mapping?

1. **Landslide Susceptibility Mapping** is the process of generating maps illustrating regions susceptible to landslides by considering various factors.
2. Utilizing data on **historical landslide** and factors such as **slope steepness, soil composition, and vegetation cover**, a computer model can analyze these elements to forecast areas with a high risk of landslides.

#### National Landslide Susceptibility Map

1. **High-Resolution Mapping:** The map offers high resolution, detailing **susceptibility at 100m resolution**.
  - (a) Identified regions with high susceptibility include parts of the Himalayan foothills, Assam-Meghalaya, and the Western Ghats.
2. **Machine Learning Analysis:** Utilized a machine learning technique called **ensemble learning** for improved accuracy and resilience by merging predictions from multiple models.
  - (a) **Ensemble Machine Learning** involves using **multiple machine learning models together** to average out the impact of any single model.
3. **Factors Considered:** The team gathered data on various factors like soil cover, tree density, proximity to roads or mountains.
  - (a) The use of **GeoSadak**, an online system that has data on the national road network in India, aided in obtaining crucial road network data for remote areas.
4. **Significance:** Its importance lies in supporting policymakers, conducting vulnerability assessments, and developing mitigation strategies.

5. **Future initiatives** involve implementing a '**Landslide Early Warning System**' utilizing the map data, benefiting organizations such as **Geological Survey of India (GSI)** and disaster management authorities.

#### Landslides in India

1. **Definition of Landslide:** A landslide is the **movement of a mass of rock, earth, or debris down a slope**.
2. **Landslide Prone Regions:** Regions with fewer trees, closer to road-building activity, and steeper local slopes are more unstable and prone to landslides.
3. **Causes of Landslides in India**
  - (a) **Natural Causes:**
    - i. Landslides can occur on various terrains due to conditions such as soil type, rock structure, geological factors, drainage, and slope.
    - ii. Natural causes include rainfall, undercutting of slopes from flooding or excavation, earthquakes, and snowmelt.
  - (b) **Anthropogenic Causes:**
    - i. Human activities like overgrazing, terrain cutting, filling, and excessive development contribute to landslides.
    - ii. For instance, land use changes, deforestation, and slope exposure due to a railway project in western Manipur contributed to a deadly landslide in 2022.
4. **Types of Flows**
  - (a) **Debris Flow:** A rapid mass movement involving loose soil, rock, organic matter, and slurry downslope. Commonly caused by intense precipitation or rapid snowmelt.
  - (b) **Earth Flow:** A downslope viscous flow of fine-grained material saturated with water.
  - (c) **Mudflow:** A wet or viscous fluid mass of fine and coarse-grained material flowing rapidly along drainage channels.
  - (d) **Creep:** Slow, steady, downward movement of material under gravity occurring in a large area.



## 5. Overview of Landslides in India

- (a) Over the past 50 years, landslides have increased in magnitude and frequency, attributed to human activities.
- (b) Infrastructure development, like the national initiative **Bharatmala Pariyojana**, has contributed to the rise in landslides.

## 6. ISRO's Landslide Atlas of India Findings:

- a) **Global Standing: India is among the top five landslide-prone countries** globally, with at least one death per 100 sq km reported annually.
- b) **Rainfall Variability Pattern: Primary cause of landslides**, with the Himalayas and the Western Ghats being highly vulnerable.
- c) **Land Area Prone to Landslide:** Excluding snow-covered areas, approximately **12.6% of the country's geographical land area** is prone to landslides.
- d) **Regional Variability: 66.5% of landslides** are reported from the **North-western Himalayas**, 18.8% from the North-eastern Himalayas, and 14.7% from the Western Ghats.
- e) **Landslides in the Himalayas:** The Himalayas witness the most frequent landslide incidents due to their relatively **young age and weak, fragile rock structure**.

## 7. Impacts of Landslides:

- (a) **Economic Impacts:**
  - i. Landslides cause extensive damage to houses, roads, buildings, forests, plantations, and agricultural fields.
  - ii. Himachal Pradesh estimated a cost of damage from flood and landslides at over **Rs 3738 crore** due to torrential rains in 2023.
- (b) **Social Impacts:** Casualties are more likely in areas with **population pressure** settled in landslide-vulnerable regions. In 2022, heavy rain, floods, and landslides claimed **835 lives** in India.
- (c) **Environmental Impact:**
  - i. Landslides lead to **habitat destruction, soil erosion, and water pollution**, altering ecosystems and harming biodiversity.

- ii. Soil displacement contributes to increased erosion, negatively impacting **water quality** and aquatic life.

### Case Study: Joshimath Sinking

1. **Joshimath**, situated on the **Rishikesh-Badrinath National Highway (NH-7)** in Uttarakhand's Chamoli district, is a hilly town.
2. The town is constructed on old landslide deposits, making its slopes susceptible to destabilization from minor triggers. It falls in **Zone V**, indicating the **highest seismic risk** in India's seismic zonation scheme.
3. The area is burdened with structures ignoring the land's load-bearing capacity. Due to land subsidence, **Joshimath** developed cracks.

### Reasons for Joshimath Sinking:

1. **Ancient Landslide Site:** Joshimath is on a deposit of sand and stone, not on the main rock, as per the 1976 Mishra Committee report.
2. **Undercutting by Rivers:** River currents of **Alaknanda** and **Dhauliganga** contribute to landslides. Inadequate drainage systems aggravate the problem.
3. **Geographical Factors:** Scattered rocks covered with old landslide debris have low bearing capacity and high pore pressure, especially during monsoons.
4. **Construction Impact:** Increased construction, hydroelectric projects, and NH widening made slopes highly unstable.
  - The 6-km **Helang-Marwari bypass**, part of the 825-km **Char Dham highway expansion project** by the **Border Roads Organisation (BRO)**, faces scrutiny for weakening slopes and destabilizing the local topography.
  - The **National Thermal Power Corporation's Tapovan Vishnugad hydropower project** worsens the crisis, according to locals.
5. **Land Erosion:** Running streams and sliding along natural streams contribute to city fate.

## 2. FIRST-EVER SNOW LEOPARD POPULATION ASSESSMENT IN INDIA (SPAII)

As per first-ever SPAI India is home to an estimated 718 snow leopards.

### About SPAI

1. It is conducted by the **Wildlife Institute of India (WII)** from 2019 to 2023.
2. It is a **comprehensive scientific exercise** that evaluates the snow leopard population across India.
3. It has covered over 70% of potential snow leopard habitat across the **trans-Himalayan region**.
4. It included UTs like Ladakh and Jammu and Kashmir, as well as states such as Himachal Pradesh, Uttarakhand, Sikkim, and Arunachal Pradesh.
5. The methodology involved a **two-step framework**: evaluating snow leopard spatial distribution and estimating snow leopard abundance using camera traps.

### Key Findings from the SPAI

1. **Population Estimates:** The assessment estimated **718 individuals** of which 477 snow leopards in Ladakh, 124 in Uttarakhand, 51 in Himachal Pradesh, 36 in Arunachal Pradesh, 21 in Sikkim, and 9 in Jammu & Kashmir, totalling 718 individuals in India.
2. **Conservation Efforts:** India has made significant strides in snow leopard conservation, with **34% of their habitat under legal protection** and numerous landscape-level conservation projects initiated.

### Snow Leopard Facts

1. **Scientific Classification:** Snow leopards (**Panthera uncia**) are large carnivores classified as “Vulnerable” and are found in the high mountains of Central and Southern Asia.
2. **Conservation Status:** Previously listed as “Endangered,” snow leopards were reassessed as “Vulnerable” in 2017 due to a lack of data, although their population is still in decline.
3. **Ecological Role:** As apex predators, snow leopards help maintain the balance of their ecosystems and are considered “**Umbrella Species**” for conservation efforts.

### Conservation Initiatives

1. **Project Snow Leopard and Global Snow Leopard & Ecosystem Protection Programme:** These initiatives aim to enhance snow leopard conservation through collaborative landscape management and protection.
2. **Snow Leopard Cell:** A dedicated cell for snow leopard conservation is proposed to be established at WII, focusing on long-term population monitoring and conservation strategy formulation.

### Importance of the SPAI Report

The SPAI report, released by the Union Minister, underscores the importance of snow leopards to India’s biodiversity and highlights the country’s commitment to their conservation. It provides a comprehensive evaluation of snow leopard populations and habitats, offering a foundation for future conservation efforts.

### Conclusion

The Snow Leopard Population Assessment in India marks a significant milestone in the conservation of this vulnerable species. By systematically assessing their populations and habitats, India has laid the groundwork for effective conservation strategies to ensure the survival of snow leopards in the wild.

## 3. HUMAN-ANIMAL CONFLICT

1. Recently, The **Kerala Legislative Assembly** passed a resolution urging the Central government to amend the Wildlife Protection Act to address human-animal conflicts effectively.

### What is Human-Animal Conflict?

1. It occurs when the **interaction between humans and wildlife** leads to negative results, such as loss of property, livelihoods, and even life.
2. The defensive and **revenge killing** may eventually drive these species to extinction.

### Why human-wildlife conflict is increasing?

1. India’s **urbanization**, pushed its large population and economic growth, sacrificing environmental concerns, leading to habitat loss and an increase in invasive species.

- Climate change**, including phenomena like El Nino, disrupts India's agrarian economy.
  - This changes the **cropping patterns** which disrupts ecological balance and pushes wildlife into human settlements.
- The **Wildlife Protection Act of 2022**, which reserves the authority to declare animals as **'vermin'** solely to the central government, contributes to unregulated wildlife growth.

(Note: Vermin are pests or animals that can spread diseases or destroy crops or livestock. For example, mice, rats, and even rabbits when they destroy gardens have been called vermin.)

#### What is CITES?

- It ensures **international trade regulations** for animals and plants.
- Drafted by **IUCN**, it came into force in 1975.
- The secretariat, **administered by UNEP**, is located in Geneva, Switzerland.
- India** became a **signatory** in 1976.
- CITES is **legally binding** but requires additional domestic legislation for enforcement i.e., **not self-executing**.

#### How such conflicts can be avoided?

- The government **empower the Gram Panchayats** by amending the Act to deal with such turbulent animals. And also allows the state government to declare 'vermin' animals.
- There should be **crop insurance** under the Pradhan Mantri-Fasal Bima Yojana (PM-FBY) so that farmers do not get into conflict with animals like elephants.
- To decrease animal migration, the authorities shall ensure the **forest and water resources** within the forest areas.
- Mass awareness**, by recognizing the efforts of an individual can create harmonious relations.

#### 4. AFTER 40 YEARS, CENTRE REVISES RULES ON WILDLIFE TRADE

- The Ministry of Environment, Forest and Climate Change (**MoEFCC**) has introduced new rules called **"Wildlife (Protection) Licensing (Additional Matters for Consideration) Rules, 2024."**
- These rules replace the older version from 1983.

#### Old Rules (1983):

- Under the Wildlife Protection Act (**WPA**) of **1972**, these rules stopped giving licenses for trading animals listed in **Schedule I** or **Part II of Schedule II**.
- Licenses were only given in special cases with the central government's approval.

#### New Rules (2024):

- Now, no license will be given for animals in **Schedule I**, unless the central government is consulted first.
- The Chief Wildlife Warden or an Authorized Officer will give out licenses. They will consider factors like existing licenses and how the license might affect the hunting or trade of the animals in question.

#### Impact of the New Rules:

- There is a concern that these new rules might harm mammals and birds in Schedule II, as some are already at risk, like Bulbuls, Falcons, Turtles, Geckos, Snakes, and Bats.

#### Changes in Wildlife Protection Act:

In 2022, the Wildlife Protection (Amendment) Act made changes to the 1972 act, reducing the number of Schedules from 6 to 4.

- Schedule I:** Animals with the highest protection (e.g., Blackbuck, Sloth Bear, Cheetah, Swamp Deer).
- Schedule II:** Animals with lesser protection (e.g., Nilgai, Indian Flying fox, Andaman Bulbul).
- Schedule III:** Protected Plant species (e.g., Neel Kurinji, Pitcher plant, Tree turmeric).
- Schedule IV:** Specimens listed under the CITES (e.g., River Dolphin, Spider Monkeys).

This highlights the changes in wildlife protection laws in India, focusing on the licensing of trade and protection levels of various species.

#### 5. WORLD'S LARGEST DEEP-WATER CORAL REEF

- In January 2024 Scientists discovered the world's largest deep-sea **Coral Reef Habitat**, located off the **Atlantic coast** of the United States.

**What is a coral reef?**

1. A coral reef is a group of invertebrate animals called **coral** and **polyps** living together in the ocean. These polyps make hard skeletons from **calcium carbonate**, which build up to form the reef's structure.
2. It is a **symbiotic relationship** between coral and zooxanthellae (algae).
3. Coral reefs are home to many different sea creatures like fish, crabs, and shellfish. These reefs are important because they help keep the ocean full of life and protect shores from large, destructive waves.

- a. Examples:** The Great Barrier Reef in Australia (the world's largest tropical coral reef system), and the Belize Barrier Reef in Central America.

**Features of the Deep-Sea Coral Reef:**

1. The reef is approx. **500 km in length**, from Florida to South Carolina. At some points, its width is 110 km.
2. Found in deep parts of the ocean, from 200 to 1,000 meters down, where **sunlight cannot reach**.
3. It is the biggest deep-water coral reef found, but the **Great Barrier Reef is the biggest one in shallow water**.

**Significance and Threats to corals:**

Aspect	Significance	Threats
<b>Biodiversity</b>	Homes to diverse sea creatures.	Pollution from coastal development
<b>Coastal Protection</b>	Natural barriers against waves and storms	Coastal construction and harmful fishing practices
<b>Tourism</b>	Boosts local economies, offers recreational activities	Careless tourism damages reefs and marine life
<b>Fisheries</b>	Essential breeding and nursery grounds for fish	Overfishing and habitat destruction endangers fishes.
<b>Climate Change</b>	Maintains ecological balance	Warmer seas and acidification weaken coral structures. Leads to Coral bleaching.

**Difference Between Deep and Shallow Water Coral Reefs:**

Aspect	Deep Water Coral Reefs	Shallow Water Coral Reefs
<b>Depth Range</b>	Deep, typically 200 - 1,000 meters	Shallow, usually less than 30 meters
<b>Light Availability</b>	Limited to no sunlight penetration	Abundant sunlight penetration
<b>Food</b>	Rely on Photosynthetic algae	Feed on small plankton or available organic material
<b>Coral Growth</b>	Filter food particles for energy	Relies on photosynthesis for energy
<b>Examples</b>	Coral reefs found in deeper oceanic regions	Reefs commonly found near coastlines
<b>Threats</b>	Vulnerable to climate change and human disturbances.	Vulnerable to climate change, pollution, and overfishing, Oil and gas drilling.



## Initiatives to Conserve corals

### 1. Global Initiatives

- a. **International Coral Reef Initiative (ICRI):** A team effort between governments, NGOs, and international groups to save coral reefs worldwide.
- b. **United Nations Sustainable Development Goals (SDGs):** **SDG 14** focuses on protecting oceans, seas, and marine life, including efforts to save and revive coral reefs.

### 2. Indian Initiatives:

- a. **National Coral Reef Research Institute:** Set up to study, track, and protect coral reefs in India.
- b. **Integrated Coastal Zone Management (ICZM) Program:** Using sustainable methods, a plan to safeguard India's coasts and seas, including coral reefs.
- c. **Coral Reef Conservation Programs:** Collaborative projects involving government, scientists, and local people to safeguard Indian coral reefs.

## 6. THE ROLE OF E-FUELS IN DECARBONISING TRANSPORT

The report named 'The Role of E-fuels in Decarbonising Transport' has been prepared by the IEA (International Energy Agency) to assess the role of E-fuel as a promising solution in decarbonising the transport sector.

### What are E-Fuels?

- 1. E-fuels, also known as electrofuels, are synthetic fuels **made from captured carbon dioxide** or carbon monoxide and hydrogen obtained from water electrolysis.
- 2. The process involves using **sustainable electricity** sources to split water molecules and obtain hydrogen, which is then combined with CO<sub>2</sub> under high pressure using a catalyst.
- 3. E-fuels are **climate-neutral** and can be used as a sustainable alternative to fossil fuels in existing infrastructure for vehicles, ships, and airplanes.
- 4. They offer a way to **reduce CO<sub>2</sub> emissions** in the transport and heating sectors while utilizing renewable energy sources.

### Key Points from the IEA Report:

- 1. **10% E-fuels Share by 2030:** The report sets the ambitious target of achieving a 10% share of e-fuels in the aviation and shipping sectors by 2030.
- 2. **Technology Assessment:** The report assesses the emerging e-fuel technologies and evaluates their technological and economic aspects.
- 3. **Cost Reduction:** Emphasis is placed on cost reduction in E-Fuel production, which is necessary for achieving the ambitious 10% target.
- 4. **Resource and Infrastructure Investments:** The report outlines the resources and infrastructure investments essential for achieving the set goal.

### Government's initiatives to promote e-fuels

- 1. **National Green Hydrogen Mission** with a target of 5 MMT annual green hydrogen/ ammonia production by 2030
- 2. Subsidies for petrol and diesel were removed in the early 2010s, and **subsidies for electric vehicles** were introduced in 2019.
- 3. **Import substitution** of around INR 17,500 Cr every year, and Impetus to Research and development to achieve higher efficiency in solar PV modules.

### Challenges and solutions

Challenges	Solutions
1. High Cost of E-fuel Production	1. Pursue economies of scale (means big industries must take the initiative to produce E-Fuels). 2. Increase infrastructure investments.
2. Difficulty in altering current Legislation and Policies	1. Advocate and implement legislation supporting e-fuel use. 2. Establish clear, long-term policies to provide a framework for widespread adoption of E-Fuels.
3. Wider acceptance by the general public will be a challenge.	1. Foster collaboration between governments, industries, and research institutions for making easily acceptable models of E-fuel usage. 2. Develop and implement strategies for encouraging broad acceptance.

4. It is difficult for E-fuels to replace traditional fuels like petrol, diesel, etc.	1. Explore ways to integrate e-fuels into existing vehicles without major modifications.
---	--

## 7. UREA GOLD: A SULPHUR COATED UREA

Recently, Cabinet Committee on Economic Affairs (CCEA) has approved the launch of “**Urea Gold**,” a **sulphur-coated urea (SCU)** fertilizer, to address sulphur deficiency in Indian agriculture.

### About Urea:

1. Urea is one of the most concentrated nitrogenous fertilizers, which readily converts to ammonia in the soil — an essential macronutrient for plant functions.
2. Normal urea contains 46% of a single plant nutrient i.e. Nitrogen.
3. India is one of the largest consumers of chemical fertilizers in the world.
4. Urea is India’s most widely used fertilizer, with its consumption rising from 26.7 million tonnes to 35.7 mt between 2009-10 and 2022-23.
5. It is import dependent 2022-23, 7.6 million metric tons of urea were imported out of a total of 35.7 mt consumed, raising significant concerns.

### What is Urea Gold?

1. **Composition:** Unlike traditional urea with 46% nitrogen (N), Urea Gold features 37% N and 17% Sulphur, making it an enhancement in nutrient combination.
2. **Aims:** It aims to address sulphur deficiencies in the soil.
3. **Type:** It’s a non-organic, slow-release fertilizer with a special coating.

4. **Function:** Preheated urea granules are coated with molten Sulphur, forming a membrane that regulates nitrogen release for optimal plant growth.
5. **Nitrogen Content:** SCU generally contains around 31-38% N.

### About Nano Liquid Urea:

1. Nano urea contains nitrogen in the form of granules that are a hundred thousand times finer than a sheet of paper.
2. Nano liquid urea was launched in June 2021 by the Indian Farmers and Fertiliser Cooperative (IFFCO).
3. It was developed as a nanotechnology-based process to produce urea molecules in liquid form.
4. It was claimed by IFFCO that a 500-spray bottle of nano urea can substitute a full 45 kg bag of conventional fertilizer.
5. According to the Union Chemical and Fertilizer Minister, India is aiming to manufacture 44 crore bottles of Nano Urea annually by the year 2025.

### Why is Urea Gold needed?

1. **India:** Heavily reliant on Urea imports (7.6 million tonnes out of 35.7 million tonnes in 2023). Domestic Urea production relies heavily on **imported feedstock**.
2. **High Urea Consumption:** Leads to negative environmental impacts like **air and water pollution**, and ammonia emissions contributing to **global warming**.
3. **Low Nutrient Use Efficiency (NUE):** Causes higher input costs for farmers.

### Significance

1. Sulphur-coated urea allows for a **gradual release of nitrogen**, improving its availability and uptake by crops over time.
2. Urea Gold, enriched with humic acid, extends its **effectiveness and longevity** as a fertilizer.
3. Compared to conventional urea, Urea Gold offers **equivalent benefits with less quantity**, with 15 kg providing similar advantages as 20 kg of regular urea, promoting efficiency in farming practices.

### Key Findings about the Efficacy of Liquid Nano Urea

1. **Decline in grain nitrogen content:** declined by 17% in rice and 11.5% in wheat.
2. **Decline in yield:** There was a 21.6% decrease in wheat yield and a 13% decrease in rice yields with the use of nano urea decline.
  - This may lead to a challenge of Food Insecurity in the country.
3. **Higher cost:** The cost of nano urea formulation was 10 times higher than that of granular urea.
  - This will ultimately impact the economic condition of farmers.
4. **Decrease in Ground Mass and Root Volume:** The PAU field experiments also revealed that the above-ground biomass and root volume were reduced after nano urea application.
5. **Conventional Urea is more efficient:** According to scientists, even if 100 per cent use efficiency is achieved by this nanoformulation, the required nitrogen nutrient could not be provided to the growing crop compared to nitrogen provided by 45 kg of conventional urea.
6. **Scientists' conclusion:** Results are not encouraging and the use of IFFCO nano urea cannot be recommended for rice and wheat. It may further take 5-7 years for nano urea to reach efficacy equal to nano urea.

<b>3. Distribution and Infrastructure</b>	Building a robust <b>distribution network</b> to reach remote areas and smallholder farmers is essential for Urea Gold's success.
<b>4. Long-term Impact Studies</b>	While initial trials are promising, <b>further research is needed</b> to assess the long-term impact of Urea Gold on soil health, crop yields, and the environment.

### Conclusion

While Urea Gold and fortified fertilizers offer promising solutions to address NUE challenges and high Urea consumption, successful implementation requires **Addressing pricing discrepancies and ensuring SCU is affordable** for farmers compared to regular urea. **Streamlining distribution:** Implement efficient distribution channels to reach farmers readily. The launch of Urea Gold marks a significant step towards sustainable and efficient Indian agriculture. However, successfully navigating pricing and distribution challenges will be crucial to maximizing its impact.

### 8. WETLAND CITY ACCREDITATION UNDER THE RAMSAR CONVENTION

The Ministry of Environment, Forest, and Climate Change (MoEFCC) has suggested that Indore, Bhopal, and Udaipur be recognized as Wetland Cities, under Wetland City Accreditation (WCA).

#### What are Wetlands?

According to the Ramsar Convention, Wetlands are places that can be **natural or man-made**, like marshes, swamps, or areas with water. They can be **permanent or temporary**, with **still or moving water**, and can be **fresh, brackish, or salty**. They also include places with shallow marine water up to six meters deep at low tide.

Challenges	Solutions
<b>1. Pricing and Availability</b>	Ensuring Urea Gold is <b>readily available</b> and accessible to farmers at a competitive price is crucial for its widespread adoption.
<b>2. Education and Awareness</b>	Farmers need to be educated about the benefits and <b>proper application</b> of Urea Gold to maximize its effectiveness.

**About Wetland City Accreditation (WCA):**

1. Voluntary recognition system for the significance of wetlands in cities and nearby areas. Approved during the COP12 of Ramsar Convention in 2015. **Aim:** Encourage the conservation of wetlands and ensure sustainable benefits for local communities in urban and transitional zones.
2. The WCA is valid for 6 years. **Criteria:** Based on 6 factors, including the existence of Ramsar sites or other wetland conservation areas in the city.

**About Ramsar Convention**

1. Intergovernmental treaty established in 1971 in Ramsar, Iran, focusing on conserving and wisely using wetlands and their resources.
2. Global Participation: As of January 2024, 172 countries are part of the Ramsar Convention.
3. **India has 75 wetland sites** under the Ramsar Convention.

**9. IEA'S ELECTRICITY REPORT 2024**

The International Energy Agency (IEA) released the "Electricity 2024" report, providing critical insights into India's energy landscape.

According to the latest International Energy Agency's (IEA) Electricity 2024 Report, India's electricity demand will surpass China's and have the world's fastest growth rate by 2026.

**Key Insights from IEA's Electricity Report 2024**

1. Despite India's net-zero target by 2070, India will **heavily depend on coal** for electricity until 2026, constituting 68% of generation.
2. In 2023, India saw a significant rise in **renewable energy** adoption, with renewable sources contributing 21% to electricity generation and adding 21 GW of capacity, largely driven by solar and wind energy growth.
3. India's **electricity demand** surged by 7% in 2023, with an anticipated annual growth rate of 6.5% between 2024 and 2026, positioning the country to surpass China's electricity demand by 2026.
4. Emerging economies, predominantly in South Asia, are set to drive around 85% of the global expansion in **electricity capacity**, with India's demand nearing the levels of the United Kingdom.
5. Changing weather patterns in 2023 caused a 15% **decline in hydropower generation**, while the government mandated a 6% blending of imported coal with domestic coal until March 2024 for uninterrupted power supply.

**More on the news**

1. The wetlands linked to these cities are:
  - a. **Sirpur Wetland and Yashwant Sagar** in Indore
  - b. **Bhoj Wetland** in Bhopal
  - c. **Pichola, Fateh Sagar, Rang Sagar, Swaroop Sagar, and Doodh Talai** in Udaipur
2. Getting this accreditation will make it easier to carry out the **Amrit Dharohar Initiative** all over the country.  
(**Note: Amrit Dharohar Aims to achieve similar goals by promoting unique conservation values of Ramsar Sites.**)
3. **Significance of WCA**
  - a. Provides an opportunity for cities that value their natural or human-made wetlands to
    - i. Gain international recognition and will attract tourists from across the globe boosting their tourism.
    - ii. Solidify the positive branding opportunities for their efforts in demonstrating strong positive relationships with wetlands.
  - b. WCA will reinforce the ongoing Amrit Dharohar initiative of the MoEF&CC announced as part of this 2023-24 budget.



6. India is diversifying its **energy sources** by adding wind, solar, large hydro, and nuclear power projects.
7. Global **nuclear power plants** in the pipeline (2024-2026) are primarily in China and India, with a projected nearly 10% increase in global nuclear generation by 2026. India targets tripling its nuclear capacity by 2032, adding 4 GW by 2026.

### About India's Power Sector:

1. India's total **installed electricity generation capacity** as of May 2023 is 417 GW, with fossil fuels accounting for 56.8%, renewables at 41.4%, and nuclear fuel at 1.60%.
2. India aims to achieve:
  - a. a non-fossil fuel energy capacity of 500 GW by 2030,
  - b. meeting 50% of its energy needs from renewables,
  - c. reducing CO2 emissions by 1 billion tons, and
  - d. attaining a net-zero emission status by 2070, as per the **Panchamrit action plan** and revised Nationally Determined Contribution (NDC) of August 2022.

### International Energy Agency (IEA) Overview:

1. The IEA is an independent inter-governmental organization which has its **headquarters in Paris, France** operating within the **Organisation for Economic Cooperation and Development (OECD)** framework
2. Established in 1974 with the **primary goal** of ensuring the security of oil supplies.
3. Currently, it has 31 member countries, 11 association countries and 4 accession countries.
4. India became an **associate member** of the IEA in 2017.
5. A candidate country to the **IEA must be a member country of the OECD.**
6. **Key reports published** by the IEA include

- a. World Energy Outlook reports.
- b. India Energy Outlook Report.
- c. World Energy Investment Report.
- d. The IEA Technology Roadmap and Policy Pathway series.
- e. Annual Energy Efficiency Market Report.
- f. The Energy Technology Perspectives.

### What is Small Modular Reactor (SMR) Technology?

1. Momentum is increasing for small modular reactor (SMR) technology, offering **advanced nuclear reactors** with up to 300 MW(e) capacity per unit, significantly smaller than traditional reactors.
2. SMRs are characterized by their small size, modular design, and utilization of **nuclear fission** to generate heat and electricity, offering the potential for low-carbon energy production.
3. Despite progress in SMR development and deployment, challenges remain, with **research and development** efforts intensifying to address them.

### Conclusion:

The IEA's Electricity Report 2024 underscores the complexities and opportunities in India's evolving energy landscape, emphasizing the continued role of coal, the growth of renewables, and the promising trajectory of nuclear power, including the emerging significance of Small Modular Reactor technology.

#### RENEWABLES 2023 REPORT: IEA

The International Energy Agency (IEA)'s Renewables 2023 report showcased **advancements** in the energy sector alongside **continuous challenges**.

#### Key Highlights of the Report

1. Global **renewable capacity additions** surged by nearly 50% in 2023, with China leading the way in solar and wind.
2. **Renewables** are set to surpass coal as the **largest electricity source by 2025**, with wind and solar becoming dominant by 2028.
3. **India** is expected to **double its renewable capacity by 2028**, becoming the world's third-largest renewables market.

4. **Solar PV module** prices dropped by nearly 50% in 2023, driving rapid adoption globally.
5. **Biofuel expansion** and **EV adoption**, particularly in emerging economies like Brazil, are projected to offset significant oil demand by 2028.

## 10. 200<sup>th</sup> YEAR OF THE 1<sup>ST</sup> SCIENTIFIC NAMING OF A DINOSAUR: MEGALOSAURUS

1. 2024 marks the **bicentennial** (200th year) of the 1<sup>st</sup> scientific naming of a dinosaur, the **Megalosaurus (meaning great lizard)**.
  - Megalosaurus was named by William Buckland (in 1824).
2. These **carnivorous dinosaur's** fossils were discovered in Oxfordshire, England (UK).
3. In 1824, they were named based on scattered bones, including vertebrae, and hip.
4. Dinosaurs are a diverse group of reptiles of the clade Dinosauria.
5. They belong to the **Mesozoic Era** (252-66 million years ago) which includes 3 consecutive geologic periods (Triassic, Jurassic, and Cretaceous).
  - They are believed to be ancestors of modern Birds.

## 11. DENMARK LAUNCHES GREEN FUELS ALLIANCE INDIA

1. In January 2024, **Denmark** introduces the **Green Fuels Alliance India (GFAI) initiative**.
  - a. It is part of Green Strategic Partnership (GSP) signed in 2020 between India and Denmark.
  - b. It is Inspired by initiatives like the **India-Denmark Energy Partnership** and joint R&D efforts on Green Fuels.
2. **Goals and Significance:**
  - a. Strengthen collaboration in sustainable energy solutions.

- b. Advance joint goals for carbon neutrality.
- c. Facilitate renewable energy production in India to become a global leader in the green energy value chain.
- d. Aid in achieving net zero emissions by 2070.
- e. Foster (encourage) innovation, collaboration, and partnerships among firms, businesses, and governments.

3. **Green Fuels:** They are also known as **green hydrocarbons or biofuels**, are derived from biomass sources through various biological and thermochemical processes.

### 4. Other Similar Partnership Initiatives by India:

- a. U.S.-India Strategic Clean Energy Partnership
- b. Memorandum of Understanding (MoU) on Green/Clean Hydrogen Between India and Saudi Arabia
- c. India-Australia Green Hydrogen Taskforce
- d. Global Biofuels Alliance formed by Brazil, India, and the United States
- e. Quad's Climate Working Group focusing on clean energy.

### 5. Related News: Global Biofuels Alliance (GBA)

- a. **GBA** comprises **19 countries** and **12 international organizations**, including the World Economic Forum, the World Bank, and the Asian Development Bank.
- b. **India, U.S.,** and Brazil are the **founding members**.
- c. India proposed the GBA during the **India Energy Week** in February 2023 and officially launched it at the G20 summit in September 2023.
- d. The GBA aims to encourage the growth and use of sustainable biofuels, establishing standards and certifications.

## 12. SPECIES IN NEWS

Name	Description
1. <b>Tibetan Brown Bear</b>	<p>a. India has recorded its <b>1<sup>st</sup></b>-ever confirmed sighting of a rare Tibetan brown bear (<i>Ursus arctos pruinosus</i>) in Sikkim.</p> <p>b. Also known as Tibetan Blue Bear, an omnivore (eat both plant and animal).</p> <p>c. Mainly found in Nepal, Bhutan and the Tibetan plateau.</p> <p>d. <b>Status:</b></p> <ul style="list-style-type: none"> <li>• Included in Appendix I of CITES,</li> <li>• Schedule I of Wildlife Protection Act, 1972</li> </ul>
2. <b>Vultures</b>	<p>a. Vulture restaurant set up in Kodarma, Jharkhand to conserve Critically Endangered species.</p> <p>b. Total <b>9</b> species of vultures are found in India out of which <b>3</b> are migratory (<b>Cinereous, Griffon, Himalayan</b>), protected under Schedule I of Wildlife Protection Act, 1972.</p> <p><b>IUCN Status:</b></p> <ul style="list-style-type: none"> <li>• <b>Critically Endangered</b> – White-Rumped, Slender-Billed, Indian, Red-Headed</li> <li>• <b>Near Threatened</b> – Bearded, Cinereous, Himalayan</li> <li>• <b>Endangered</b> – Egyptian</li> <li>• <b>Least Concerned</b> – Griffon</li> </ul>
3. <b>Binturong and Small-Clawed Otter</b>	<p>a. Two New mammalian species were found in <b>Kaziranga National Park, Assam</b>. Both are listed under Schedule I of Wildlife Protection Act, 1972.</p> <p>b. <b>Binturong</b> is largest civet in India.</p> <p>c. Native to South East Asia</p> <p>d. IUCN Status – <b>Vulnerable</b>, CITES Appendix III</p> <p>e. Small Clawed otter is primarily found in fresh water, IUCN status – <b>Vulnerable</b>, CITES Appendix I</p>
4. <b>Invasive MosquitoFish</b>	<p>a. Two Invasive species of MosquitoFish- <b>Gambusia affinis</b> and <b>Gambusia holbrooki</b> - introduced into local water bodies to address mosquito menace but dangerous to native species of fish, plants etc.</p>
5. <b>Pantoea Tagorie</b>	<p>a. A <b>plant growth promoting bacteria</b> found in Jharia coal mine soil samples.</p> <p>b. It is named after Rabindranath Tagore.</p>
6. <b>Tapioca Plants</b>	<p>a. Also known as <b>Cassava</b>, Cultivated in Tropical regions for its tuberous roots, from which cassava flour, breads and an alcoholic drink is derived.</p>
7. <b>Austropallenehalanychi (Sea Spider)</b>	<p>a. <b>Yellow</b> in colour, 4 black eyes, large bulbous claws, found off the <b>Antarctica</b> Ocean, a distant relative of <b>Horseshoe</b> crabs, unique feature of breathing through lungs, use straw like parts to consume food.</p>
8. <b>European wood bison</b>	<p>a. Largest and heaviest land animals in Europe, also known as <b>Wisent</b>, in danger due to ongoing war in Ukraine. Originally, they were 3 subspecies but <b>2 of them are now extinct</b>. IUCN status – <b>Near Threatened</b>.</p>
9. <b>Chum Salmon</b>	<p>a. A <b>migratory</b> fish spotted in <b>arctic</b> ocean, also known as <b>Dog Salmon</b>, most widely distributed of all the pacific salmon.</p>
10. <b>Blue Dragons</b>	<p>a. <b>Venomous</b> creature spotted near Besant beach, Chennai. It is <b>small sea slug (up to 3 cm in size)</b>, also known as the <b>Sea Swallow, Dragon Slug</b> or <b>Blue Angel</b> (<i>Slug is any shell less organism</i>)</p>



## G. SOCIETY AND CULTURE

### 1. SAPINDA MARRIAGES

- The Delhi High Court has recently dismissed a petition questioning the constitutionality of Section 5(v) of the **Hindu Marriage Act, 1955**, which does not allow Sapinda Marriage between Hindus.

#### What is a Sapinda Marriage?

- A Sapinda marriage is when people closely related to each other get married.
- As per **Section 5(v)** of the **Hindu Marriage Act**, such marriages are prohibited within the following generations on both the mother's and father's sides:

Mother's Side	Father's Side
1. Sibling (1st generation)	1. Sibling (1st generation)
2. Parents (2nd generation)	2. Parents (2nd generation)
3. Grandparents (3rd generation)	3. Grandparents (3rd generation)
	4. Great-grandparents (4th generation)
	5. Great-great-grandparents (5th generation)

- An **exception** is provided for those following **any existing custom** that permits such marriage.
- However, customs must be followed for a long time to be valid. Hence, the court may ask for proof of such custom.

#### What are the theories on which such legal provision is made?

- The concept of sapinda comes from the word **pinda**, which means one's body.
- Vijaneshwara's Theory:** This theory says that people are related as sapindas if they share a common ancestor. They are linked because they share the same body particles from their ancestors. This concept encourages marrying outside one's own family.

- Jimutavahana's Theory:** According to this theory, people become Sapindas not just through blood or marriage, but also through physical contact during religious rituals done for the same ancestors such as Pinda-daan.
- The Hindu Marriage Act of 1955 follows Vijaneshwara's idea but with some changes, allowing more flexibility in who can marry whom.

#### What has happened in the recent case?

- In **2007**, a woman's **marriage** was declared **void** when her husband proved their marriage as Sapinda.
- The woman approached the **High Court** challenging the **constitutional validity** of the prohibition of Sapinda Marriage.
- She argued that **Section 5(v)** of the **Hindu Marriage Act** violates **Article 14** of the constitution which calls for Equality before the law and Equal protection of law.
- She claimed that her marriage had the **consent of the family** which indicates its legitimacy.
- However, the court rejected the petition saying that the **proof of custom** is needed to claim an exception for the marriage.
- The court's statement is based on the need to regulate the **Incestuous marriage**. Incestuous marriage refers to the act of marrying someone closely related by blood, such as a sibling, parent, or close relative, which is generally considered taboo in many societies. Taboos are things that society or culture considers inappropriate, disrespectful, or forbidden to talk about or engage in.

#### Why is Incestuous marriage considered taboo in many societies?

- Genetic risks:** When closely related people have children, those children have a higher chance of having health problems because they might inherit harmful genetic traits from both parents.
- Social norms:** It goes against what most people think is right in families. It can cause a lot of problems like family fights and feeling ashamed in society.

### What is the Status of Incestuous marriage in other countries?

1. In the USA, Incestuous marriages are banned in all states except New Jersey and Rhode Island.
2. In some countries, like France and Portugal, there are no laws against Incestuous marriage.
3. In Italy, Incest is considered a crime if it causes a public scandal.

### Why such marriages are observed in South India?

1. In some communities in South India, it's common for marriages to occur between relatives, like cousins or within the same extended family. This practice is known as **consanguineous marriage**.
2. The latest **National Family Health Survey (NFHS-5)** conducted between **2019-2021**, shows that Tamil Nadu has the highest number of consanguineous marriages at 28% with Karnataka close behind at 27%.
3. Such marriages have been taking place since 2000 years among Dravidian Hindus.
4. The **reasons** behind such practice are:
  - a. Earlier, marrying someone beyond a certain river or area was considered to be impacting their reputation.
  - b. The wealth of the family remains the same family.
  - c. Girls are safe as families have known each other for years.
  - d. Families do not need to pay a large dowry in the marriage.

## 2. MITAKSHARA LAW

1. Supreme Court ruled that **children born from void or voidable marriages** are **legitimate for property inheritance** under the **Hindu Succession Act (HSA), 1956** which recognizes **Mitakshara Law**.
2. The court held that such children be treated as an extended family of a common ancestor to decide a valid share in the property of the common ancestor.

### Mitakshara Law

1. It is one of the 2 major Hindu law schools (the other being Dayabhaga) that governs the succession of property in Hindu families.
2. It is **based on** the commentary on the **Yajnavalkya Smriti**, written by Vijñaneswara in the 12th century.

3. It recognizes the concept of **coparcenary**, which means that **ancestral property** is jointly held by all male members of the family, and they have equal rights in the property.
  - Coparcener has no absolute right to transfer his share because his share is not definite or ascertainable as their shares fluctuate with the births and deaths of the coparceners.
4. According to this school, a woman could never become a coparcener.
  - However, the **Hindu Succession (Amendment) Act, of 2005 empowered women** to become a coparcener like males in ancestral property.
5. It is prevalent throughout India, except in some eastern parts where **Dayabhaga School** is followed.
6. There are **4 sub-schools** of Mitakshara Law:
  - a. Dravidian/Madras school of thought,
  - b. Maharashtra school of thought,
  - c. Banaras school of thought,
  - d. Mithila school of thought.
  - e. Punjab School

### Mitakshara vs. Dayabhaga schools in coparcenary rights

Mitakshara Schools	Dayabhaga School
1. An orthodox School	1. Reformist School
2. Right of a son by birth in the ancestral property equals to the interest of his father.	2. Son is entitled to his ancestral property only on the death of his father.
3. Son becomes coparcener right after his birth.	3. Son becomes coparcener by death of his father.
4. Coparcenary right is applicable to the property of grandfather and great-grandfather.	4. Father is the absolute owner of his property in his lifetime.
5. One cannot transfer his share to the third party as their share is not definite or ascertainable.	5. One can transfer his share as they are defined.

### 3. DENOTIFIED, NOMADIC AND SEMI-NOMADIC TRIBES

1. The National Human Rights Commission (NHRC) emphasised the importance of executing the recommendations of the **Idate Commission report**.
2. **Idate Commission** or the National Commission for Denotified, Nomadic and Semi-Nomadic Tribes (**DNTS**) was constituted in 2014 under **Bhiku Ramji Idate**.
3. The commission was mandated to compile a state-wise list of Denotified Nomadic and Semi-Nomadic Tribes (DNTs), identify DNTs not included in SCs/STs or OBC lists, recommend measures for their welfare, etc.

#### About DNTS

1. They are also known as '**Vimukt Jatis**'. These communities are among the most vulnerable and disadvantaged.
2. The suffering of these groups started when the British government introduced the **Criminal Tribes Act in 1871**.
  - These communities were notified as criminals under this Act.
  - They were forcibly alienated from their traditional occupations and habitations through other subsequent legislation.
3. They were oppressed, mistreated, and ignored. The British government's rules negatively impacted their daily lives and jobs.
4. They continued to live as hunter-gatherers and nomadic herders.
5. Though the **Indian Government** stopped treating them as criminals in 1952 (**repealed the act**) they still face big problems.
6. They missed out on the government support that groups like the SCs/STs received.
7. They're not on any official list that would help them get government benefits, and they're often left out of programs meant to help people. Many of them don't go to school and lack basic things like clean water, places to live, and medical care.

#### Efforts to improve conditions of DNTS:

1. Efforts were made to integrate these communities into the mainstream.

2. The first **commission** to address their issues was **established in October 2003**, the **Renke Commission was formed in 2008**.
3. Development and Welfare Board for DNTs established in 2021 for a period of 3 years (extendable up to 5 years).
4. Scheme for Economic Empowerment of DNTs (**SEED**) for educational empowerment, health insurance, livelihoods and housing.

#### Recommendations of the Idate Commission

1. Assign DNTs not included in SCs/STs/OBCs list should be listed as OBCs.
2. **Enhance legal and constitutional safeguards** by including a **3<sup>rd</sup> schedule** in Scheduled Castes and the Scheduled Tribes (Prevention of Atrocities) Act, 1989.
3. Establish permanent commission for the DNTs, SNTs, and NTs.
4. Establish a separate department for their welfare in the states with their seizable populations.
5. Undertake a thorough survey of DNT families to determine their estimated numbers and distribution.

### 4. BRU REFUGEE

Tripura government has allocated land for rehabilitation the last batch of Bru refugees.

#### Who are Bru?

- a. The Bru, also known as Reangs, belong to a tribal group native to the northeastern regions of India, traditionally inhabiting areas within Mizoram, Tripura, and Assam.
  - Within Tripura, the **Brus** are recognized as a **Particularly Vulnerable Tribal Group (PVTG)**.
- b. Currently, a significant number of Brus in Tripura have been living as internally displaced persons for over two decades, having fled ethnic conflicts mainly originating from Mizoram.

#### History of conflict:

- a. The conflict began in 1995 when two Mizo organizations, the Young Mizo Association and the Mizo Students' Association, called for the removal of Brus from the electoral rolls in Mizoram, arguing that they were not original residents.

- b. The Brus, are ethnically different and often labeled as “Vai” or outsiders by the majority Mizos, and they faced severe discrimination.
- c. In response to these efforts to disenfranchise them, the Brus formed the Bru National Liberation Front, an armed faction, and the Bru National Union, a political group, advocating for the establishment of a separate Bru Autonomous District Council (ADC) in Mizoram’s western regions under the 6th schedule of Indian Constitution.
- d. This led to ethnic tensions, resulting in the displacement of many Brus from the districts of Mamit, Kolasib, and Lunglei in Mizoram to Tripura in 1997.
- e. As of the latest estimates by the Home Ministry, approximately 35,000 Brus are living as refugees in the Kanchanpur camp in northern Tripura.

### 2020 Agreement for Bru Rehabilitation:

1. In January 2020, a landmark agreement was reached between the governments of Tripura, Mizoram, the central government, and representatives of the Bru community to facilitate the resettlement of Bru refugees in Tripura.
2. Bru families were assured of receiving a plot for residence, a fixed deposit account with Rs 4 lakh, a construction grant of Rs 1.5 lakh for building their homes, along with free ration and a monthly allowance of Rs 5,000 for two years.
3. The agreement also included provisions to integrate the resettled Brus into Tripura’s electoral rolls, ensuring their political representation and rights.

Under the above rehabilitation program only land were allocated for the last batch of refugees.

### What were the challenges faced by the Reang community?

The Bru refugees faced numerous challenges, both in the camps and as they navigate the process of rehabilitation:

1. **Basic Needs:** Access to clean water, adequate food, and healthcare remained a significant challenge in the relief camps.
2. **Education:** Educational facilities in the camps were limited, affecting children’s right to education and their future prospects.

3. **Identity and Citizenship:** Securing official documents and recognition had been a hurdle for many Bru people, impacting their access to government schemes and benefits.
4. **Integration:** The process of integrating into the local communities of Tripura poses socio-cultural and economic challenges.
5. **Sustainable Livelihoods:** Creating sustainable livelihood opportunities for the Bru people is critical. Most are accustomed to jhum cultivation, which is not viable in their current locations, necessitating vocational training and employment opportunities.

### 5. ALLIANCE FOR GLOBAL GOOD-GENDER EQUITY AND EQUALITY LAUNCH BY INDIA

1. From 15-19 January 2024, World Economic Forum’s annual meeting held at Davos, Switzerland.
2. India participated in the spirit of “**Vasudhaiva Kutumbakam**”.
3. **India** announced a new alliance for Global Good, Gender Equity and Equality at the meeting.
  - a. It aims to bring together global best practices, foster knowledge sharing, and attract investments in key areas such as women’s health, education, and enterprise.
  - b. It builds on commitments of G20 Leaders’ Declaration and India’s dedication to women-led development.
  - c. Supported by Bill and Melinda Gates Foundation, and anchored by Confederation of Indian Industry Centre for Women Leadership.
  - d. WEF will be a ‘**Network Partner**’ and Invest India an ‘**Institutional Partner**’.

### 6. PRAKARAM DIWAS 2024

1. Across India, **January 23** is not just a date, it’s a **national celebration**: Parakram Diwas, marking the **birth anniversary** of the legendary freedom fighter, **Netaji Subhash Chandra Bose**.
2. He is called “**Netaji**”, which means respected leader, because of his strong determination and major role in India’s Independence movement.

#### Key Events:

1. **Bharat Parv Launch:** A 9-day event by the **Ministry of Tourism** to show India’s diverse culture.

- Award Announcement:** Subhash Chandra Bose Aapda Prabandhan Puraskar-2024, recognizing excellent work in **Disaster Management**, was announced.

### Parakram Diwas: Understanding Its Significance

- Start:** Began in 2021 to honor Netaji Subhas Chandra Bose's birthday.
- Meaning:** 'Parakram' means **courage**. It reflects Netaji's bravery in fighting for India's freedom.

**Celebrations:** Led by the Ministry of Culture, it involves many activities that remember Netaji's role in the freedom struggle.

- Special Events:** Includes performances, exhibitions, and talks about Netaji and the Azad Hind Fauj.
- Memorial:** A grand statue of Netaji was placed near India Gate in New Delhi in 2022, replacing an earlier hologram.

#### Key Facts: -

- On 8 September, 2022 Prime Minister revealed a 28-foot-tall statue of Netaji Subhas Chandra Bose near India Gate in New Delhi.
- This statue replaced a hologram of Netaji put there on January 23, 2022. It honors Netaji's 125th birthday.
- This big statue, made of black granite, took 26,000 hours to make by hand. It was created by Arun Yogiraj and his team.
- The Prime Minister promised this granite statue earlier in 2022. It's one of India's tallest handmade statues.
- The granite came from Khammam, Telangana.

**Subhash Chandra Bose Aapda Prabandhan Puraskar:** Recognizing Heroes in Disaster Management.

- Purpose:** To honor individuals and organizations for their work in disaster management.
- Administered By:** National Disaster Management Authority (NDMA).
- Award Details:** Announced on 23<sup>rd</sup> January each year with a cash prize (Rs. 51 lakhs for an organization, Rs. 5 lakhs for an individual).
- Eligibility:** Open to Indian nationals and organizations working in various disaster management areas.
- SCBAPP2024 Winner:** The 60 Parachute Field Hospital, Uttar Pradesh, for its outstanding medical aid during disasters like the Uttarakhand floods and Nepal Earthquake.

## 7. 75<sup>th</sup> REPUBLIC DAY

- This year, India is celebrating its 75<sup>th</sup> Republic Day with a special focus on women's participation. The parade, held on Kartavya Path on January 26<sup>th</sup>, has the theme '**Viksit Bharat**' (Developed India) and '**Bharat - Loktantra ki Matraka**' (India as the mother of Democracy).
- For the **first time, women lead the parade**.
- The French President, Emmanuel Macron, was the chief guest**, signifying the strong India-France relationship. France contributes to the parade with a marching contingent, a band, and participation in the fly-past with Indian Air Force planes.
- The Republic Day, 2024 parade features 25 tableaux from different states, union territories, and government departments, showcasing India's cultural diversity and achievements.
  - ◆ Additionally, the Ministry of Culture displays '**Anant Sutra - The Endless Thread**', an exhibit of 1,900 sarees from across India.
  - ◆ The Ministry of Defence released a commemorative coin and stamp to mark this special 75<sup>th</sup> Republic Day.

**India's Republic Day** marks the **adoption** of its **Constitution on January 26, 1950**, turning the nation into a **self-governing, democratic republic**. **Dr. Rajendra Prasad**, the **first President** of India, raised the Indian flag during the first Republic Day celebration, signaling India's ability to choose its own government.

### What is Republic Day?

- Definition:** Republic Day is a major **national celebration** in India. It marks the day when India's Constitution was applied and the country became a completely self-governing republic.
- Enactment of the Constitution:** On **January 26, 1950**, the Constitution of India came into effect. This was a big step because it meant that India was now a country governed by rules made by Indians, not by British laws.
- Significance:** This day is important because it represents the moment India truly gained full control of its own laws and government.



## Why Celebrate on January 26?: Historical Significance of the Date:

- a. **Purna Swaraj Day:** January 26 was originally celebrated as **Purna Swaraj Day** since 1930. This was the day when the Indian National Congress, a key party in the independence movement, declared complete independence (Purna Swaraj) from British rule.
- b. **Connection to the Constitution:** When India was choosing a day to start its new Constitution, January 26 was picked to honor this historic declaration of independence.

## Historical Background of Republic Day: India's Journey to Its Own Constitution:

- a. **Independence Without a Constitution:** When India became independent on August 15, 1947, it didn't immediately have its own constitution. Instead, it used the Government of India Act 1935, a law made during British rule, as its main law.
- b. **Creating the Constitution:** To build a constitution suitable for India, a special committee was formed. This committee's job was to create a set of rules and laws that would guide how India would be governed.
- c. **Dr. B.R. Ambedkar's Role:** Dr. B.R. Ambedkar, known as the Father of the Indian Constitution, led this committee. His work was crucial in shaping the laws and principles that would govern India.

## The Making of the Constitution

1. **Drafting the Constitution:**
  - a. **Formation of the Drafting Committee:** In August 1947, the Constituent Assembly, which was responsible for writing the Constitution, formed a Drafting Committee. Dr. B.R. Ambedkar was appointed as the Chairman of this Committee.
  - b. **Diverse Inputs:** The Committee gathered ideas and inputs from various sources, including constitutions of other countries, to make sure the Indian Constitution was comprehensive and suited to India's needs.
2. **The Process of Drafting:**
  - a. **Debates and Discussions:** The Constituent Assembly had many discussions and debates. Members of the Assembly came from different parts of India, representing various interests and perspectives.

- b. **Final Draft:** After about two years of work, the final draft of the Constitution was prepared. This document outlined the rights and duties of citizens, the framework for governance, and the powers of the government.

### 3. Adoption and Enactment:

- a. **Adoption:** The Constituent Assembly adopted the Constitution on November 26, 1949. This day is also observed as Constitution Day in India.
- b. **Enactment:** Though adopted in November 1949, the Constitution came into full effect on January 26, 1950. This was to honor the historical significance of January 26 as Purna Swaraj Day.

## Significance of the Constitution:

### 1. A Sovereign Democratic Republic:

- a. **Sovereignty:** The Constitution marked the beginning of India as a sovereign state, free from colonial rule.
- b. **Democracy:** It established India as a democratic country where citizens would have the power to elect their leaders.

### 2. Fundamental Rights and Duties:

- a. **Rights:** The Constitution guarantees fundamental rights to all citizens, ensuring equality, freedom, and justice.
- b. **Duties:** It also lays down duties for citizens, emphasizing the importance of being responsible and contributing to the nation's welfare.

### 3. Guiding Principles:

- a. **Justice, Liberty, Equality, and Fraternity:** These are the core values enshrined in the Preamble of the Constitution, guiding the nation and its citizens.

## Republic Day Celebrations:

### 1. Pre-Parade Events:

- a. **Starting Date:** The celebrations begin on January 23, coinciding with Parakram Diwas, which commemorates the birth anniversary of Netaji Subhash Chandra Bose.
- b. **President's Address:** On the eve of Republic Day, the President of India delivers an address to the nation, highlighting achievements, challenges, and visions for the future.

**2. Wreath-Laying at Amar Jawan Jyoti:**

- a. **Tribute to the Fallen Soldiers:** Early on Republic Day, the Prime Minister pays homage to the soldiers who have sacrificed their lives for the country at the Amar Jawan Jyoti, a war memorial.

**3. Flag Unfurling and Parade:**

- a. **Unfurling the National Flag:** The celebrations at Rajpath (now Kartavya Path) in New Delhi commence with the President unfurling the National Flag, followed by the National Anthem and a 21-Gun Salute.

- b. **The Republic Day Parade:** The parade is a display of India's military strength, cultural diversity, and technological advancements. It includes:
  - I. Marching contingents from the Armed Forces and Paramilitary Forces.
  - II. Tableaux from different states and government departments.
  - III. Performances by folk artists and school children.

**4. The Main Attractions of the Parade:**

- a. **Cultural Tableaux:** These tableaux showcase the cultural heritage and social and economic progress of various states and union territories.
- b. **Fly-Past:** The parade concludes with a spectacular fly-past by the Indian Air Force, displaying various aircraft formations.

**Post-Parade Events:****1. Award Ceremonies:**

- a. **Padma and Gallantry Awards:** In the evening, the President confers the Padma Awards (for exceptional and distinguished service) and Gallantry Awards (for bravery) to the deserving individuals.

**2. Beating Retreat Ceremony:**

- a. **Date and Venue:** Held on January 29 at Vijay Chowk, New Delhi.
- b. **Significance:** This ceremony marks the official end of Republic Day celebrations. Military bands perform, creating a solemn and patriotic atmosphere.

**Special Highlights of the 75th Republic Day:****1. Themes for 2024:**

- A. 'Viksit Bharat' and 'Bharat – Loktantra ki Matraka': These themes reflect the idea of India as a developed nation and the mother of democracy.

**2. Women-Centric Parade:**

- A. Emphasis on showcasing women's contributions in various fields, including the armed forces.

**3. International Participation:**

- A. The parade featured participation from France, highlighting the strong diplomatic ties between India and France.

**Special Aspects of the 75th Republic Day Celebrations:****1. A Women-Centric Parade:**

- A. **Highlighting Women's Role:** The 2024 parade notably focused on the contributions of women in various fields, including the armed forces and cultural sectors.

- B. **Unique Features:** This included all-women contingents, women-led musical performances, and showcasing achievements of women in different spheres.

**2. French Participation:**

- A. **International Collaboration:** A significant feature of the 2024 parade is the participation of French military contingents and bands, emphasizing the strong bond between India and France.

- B. **Joint Air Show:** French and Indian air forces collaborated for the fly-past, showcasing military cooperation between the two countries.

**3. Farmers as Special Guests:**

- A. **Honoring Agriculture:** In a unique gesture, farmers were special guests at the parade, reflecting the government's focus on agricultural development and farmer welfare.

- B. **Representation:** Farmers from various Farmers Producers Organisations (FPOs) and beneficiaries of agricultural schemes were present.

**Cultural and Commemorative Events:****1. Tableaux and Performances:**

- A. **Diverse Themes:** Tableaux from different states and ministries depicted India's cultural richness, technological advancements, and social achievements.

**B. Cultural Troupes:** Folk dance groups from various states performed, showcasing regional art forms.

## 2. Textile Installation 'Anant Sutra – The Endless Thread':

**A. Tribute to Indian Textiles:** This installation displayed a vast array of Indian sarees, celebrating the rich textile heritage of India.

## 3. Commemorative Coin and Stamp:

**A. Memorializing the Occasion:** The Ministry of Defence released special commemorative coins and stamps in honor of the 75th Republic Day.

## 4. National School Band Competition:

**A. Engaging the Youth:** This competition aimed to foster a sense of national pride and unity among school children.

## Raksha Rajya Mantri gave away the best marching contingents and tableaux awards for the Republic Day Parade on January 30, 2024.

The person announced two sets of results for the Republic Day Parade 2024: one judged by a panel and another decided by public voting on MyGov. He praised all the winners. Three panels of judges were constituted for reviewing the performances of the Marching Contingents from the Services, Marching Contingents from Central Armed Police Forces (CAPF)/other auxiliary forces, and tableaux from States/Union Territories and Ministries/Departments. The winners were chosen based on these judges' evaluations.

- 1. Best Marching Contingent among the three Services** SIKH Regiment Contingent
- 2. Best Marching Contingent among CAPF/other auxiliary forces** Delhi Police Women Marching Contingent
- 3. Top Three Tableaux (States/UTs):** **First** – Odisha (Woman Empowerment in Viksit Bharat) **Second** – Gujarat (Dhordo : A Global Icon Of Gujarat's Border Tourism) **Third** – Tamil Nadu (Kudavolai System in ancient Tamil Nadu – Mother of Democracy)
- 4. Best Tableau (Ministries/Departments)** Ministry of Culture – (Bharat : Mother of Democracy; Loktantra Ki Matraka)
- 5. Special Prize:** (a) **Central Public Works Department** (Central Vista – Viksit Bharat Ka Pratibimb) (b) **'Vande Bharatam' Dance Group**

In addition to the above, an online Poll named 'Vote for your Favourite Tableau at Republic Day 2024' was conducted on MyGov from 26th January 2024 to 27th January 2024, for the citizens to vote for their favourite Tableaux from States/UTs and Ministries/Departments and also amongst the Marching contingents to select the best from Services as well as CQPFs/ other auxiliary Forces as popular choice category. The results in the popular choice category are as under:

- 1. Best Marching Contingent among the Three Services** Rajputana Rifles Regimental Marching Contingent (RAJ RIF)
- 2. Best Marching Contingent among CAPF/other auxiliary forces** CRPF Woman Marching Contingent
- 3. Top Three Tableaux (States/UTs):** **First** – Gujrat (Dhordo : A Global Icon Of Gujarat's Border Tourism) **Second** – Uttar Pradesh (Viksit Bharat Samradh Virasat) **Third** – Andhra Pradesh (Transforming School Education in Andhra Pradesh – Making Students Globally Competitive)
- 4. Best Tableau (Central Ministries/Departments)** Ministry of Home Affairs (Vibrant Villages)

Ministry of Defence and MyGov congratulate all the winners, thanks all the participants for their contributions, and encourages citizens to continue participating in such future activities.

## Other Notable Initiatives:

### 1. Vande Bharatam 3.0:

National Dance Competition: A platform for showcasing traditional and contemporary dance forms, with selected performances featured in the parade.

### 2. Veer Gatha 3.0:

Project for School Students: An initiative to educate students about the bravery and sacrifices of Indian armed forces personnel.

### 3. Bharat Parv:

Celebration at Red Fort: Organized by the Ministry of Tourism, it includes displays of Republic Day tableaux, cultural performances, and food courts representing cuisines from across India.

### 4. Parakram Diwas:

Honoring Netaji Subhash Chandra Bose: Various events at Red Fort, including light and sound shows, plays, and dance performances based on his life.

### Importance of Republic Day

- 1. Reflecting Our Belief in Democracy:** Republic Day shows how much we believe in democracy and important values like fairness, freedom, equality, and being together. This day reminds us to keep working hard for our country and to always respect these important values.
- 2. Showing Our Unity in Diversity:** The big parade and cultural events on Republic Day show how rich and diverse India's cultures, languages, and traditions are. This celebration of different cultures shows how strong and united we are as a country. It brings people from all different backgrounds together.
- 3. Sending Messages to the World:** On Republic Day, we also show how strong our military is with a big parade. We invite guests from other countries and talk to the media from around the world. This helps us make friends with other countries and shows everyone how important India is in the world.
- 4. Inspiring Everyone:** Republic Day is also a great chance to teach people, especially young people, about our country's history and what our Constitution says. Celebrating this day makes us feel proud of our country and encourages us to work together to make our country better. It inspires us to do good things for our country.

### Conclusion

Republic Day is a very important day for India. It is the day when we remember how India became a republic

and when we started using our Constitution. This day reminds us of our journey to become a country where the people are in charge. It's a day to think about what we have done well and to look forward to making our country even better. We celebrate this day by remembering the important ideas in our Constitution, like democracy, fairness, freedom, equality, and being together as a nation.

### 8. RAM MANDIR: CONSECRATION EVENT

- On January 22, 2024, The Pran Pratishtha (**CONSECRATION**) of the idol at Ayodhya's Ram temple was performed.
  - The basic meaning of Pran Pratishtha is giving life to the idol. It is the act which transforms an idol into a deity, giving it the capacity to accept prayers and grant boons.
  - The process of the Pran Pratishtha is mentioned in the Vedas and elaborated upon in various Puranas, such as Matsya Puran, Vaman Puran, Narad Puran, etc.
  - Pran pratishtha can be held for both **chalitmoorti** (household idols that can be moved about) and **d. sthirmoorti** (temple idols that once fixed remain so).
- Coincided with **India's 75th year** as a Republic and the commencement of the **Amrit kaal**.
- PM Narendra Modi views it as the beginning of a new time period, a **'new kaal chakra.'**

Ram Janmabhoomi Movement Timeline:				
Early History (1751-1856):	Mid-19th Century Conflicts (1855-1856):	Early Legal Battles (1858-1949):	Post-Independence Escalation (1949-1989):	Movement Intensifies (1983-1992):
<ul style="list-style-type: none"> <li>Maratha attempts to gain control (1751, 1756)</li> <li>First recorded dispute (1822)</li> </ul>	<ul style="list-style-type: none"> <li>Violent clash, Hindus gain control (1855)</li> <li>Attack on Ram Janmabhoomi repelled (1856)</li> </ul>	<ul style="list-style-type: none"> <li>Against Hindu rituals (1858)</li> <li>Permission for Ram temple denied (1885)</li> </ul>	<ul style="list-style-type: none"> <li>Temple proposal, idol placement, major dispute (1949)</li> <li>Hindu Mahasabha resolution ('liberation' of site)</li> <li>Legal and political actions with consequences</li> </ul>	<ul style="list-style-type: none"> <li>Appeal for return of religious sites (1983)</li> <li>HP launches 'liberation' movement (1984)</li> <li>Babri Masjid unlocked, dispute intensifies (1986)</li> <li>BJP actively supports temple movement (1989)</li> <li>Foundation-laying ceremony held</li> </ul>

### Features of Shri Ram Janmbhoomi Mandir

Feature	Description
1. Architectural Style	The design follows the <b>Māru-Gurjara</b> architecture style of the <b>Nagara</b> style, prevalent in northern India.
2. Dimension	<b>Length</b> (east-west): <b>380 feet</b> , <b>Width</b> : <b>250 feet</b> , <b>Height</b> : <b>161 feet</b>

3. Design	The <b>Sompura family</b> , designed the Ram Mandir in 1988. With expertise in temple architecture, they've created over 100 temples worldwide, including the famous <b>Somnath temple</b> .
4. Building Materials	<ul style="list-style-type: none"> <li>a) <b>Bansi Paharpur Pink Sandstone</b> from Rajasthan's Bharatpur district for the main structure.</li> <li>b) <b>Granite stones</b> in the plinths for a robust foundation.</li> <li>c) <b>White Makrana marble</b> and colored marble for intricate inlay work.</li> <li>d) <b>Teakwood</b> utilized for temple doors.</li> <li>e) Special bricks inscribed with "<b>Shri Ram</b>" used. These bricks, called Ram Shilas, symbolize Ram Setu stones.</li> <li>f) Other materials include <b>Shaligram Rock, copper plates, gold, and Ashtdhatu</b>.</li> </ul>
5. Boundary Walls	Surrounding wall influenced by <b>Dravida style</b> temples, exhibiting a hybrid characteristic.
6. Mandapas	Nritya Mandap, Rang Mandap, Sabha Mandap, Prathana Mandap, and Kirtan Mandap
7. Unique Construction	Traditional methods utilized, avoiding steel or iron for sustainability.

**Temple Complex Features:**

Feature	Description
Parkota Wall	<ul style="list-style-type: none"> <li>a) Rectangular compound wall surrounding the temple.</li> <li>b) Length: 732 meters, Width: 14 feet.</li> </ul>
Additional Temples	<ul style="list-style-type: none"> <li>a) 4 corner temples dedicated to Surya Dev, Devi Bhagwati, Ganesh Bhagwan, and Lord Shiva.</li> <li>b) Northern arm: Temple of Maa Annapurna.</li> <li>c) Southern arm: Temple of Lord Hanuman.</li> <li>d) Historic well named Sita Koop nearby.</li> </ul>
Proposed Temples	<ul style="list-style-type: none"> <li>a) Temples planned for Maharishi Vashishtha, Valmiki, Vishwamitra, Agastya, Nishad Raj, Devi Ahilya, and Mata Shabri.</li> <li>b) Restoration of ancient Lord Shiva temple at Kuber Tila.</li> <li>c) Installation of bronze idol of Jatayu.</li> </ul>
Infrastructure	<ul style="list-style-type: none"> <li>a) Sewage treatment plant, water treatment plant, fire service, independent power station.</li> <li>b) Pilgrims Facility Centre for 25,000 people, including medical and locker facilities.</li> <li>c) Separate block with bathing area, washrooms, washbasin, and open taps.</li> </ul>

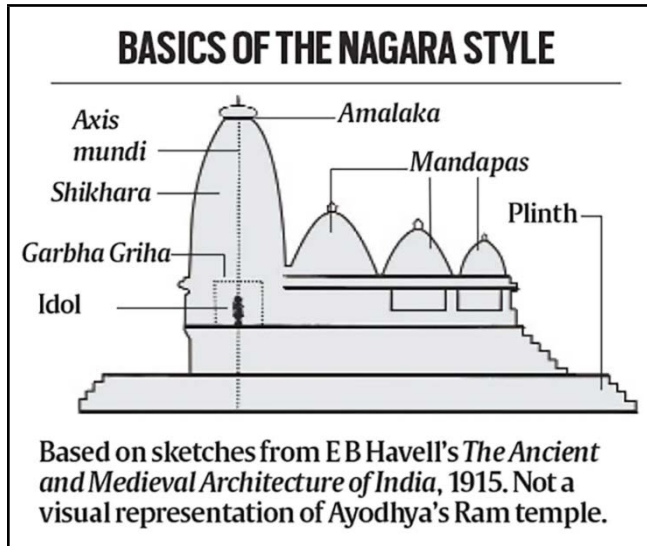
Lightning Protection	a) Installation of 200 KA light arresters to prevent lightning damage.
Educational Center	a) Museum showcasing artifacts related to Lord Ram and the Ramayana.
Time Capsule	<ul style="list-style-type: none"> <li>a) Placed 2,000 feet underground beneath the temple.</li> <li>b) Contains copper plate with information on the temple, Lord Rama, and Ayodhya.</li> </ul>
Earthquake Resistance	a) Temple designed to withstand earthquakes, estimated age of 2500 years.
Idols and Bell	<ul style="list-style-type: none"> <li>a) Idols made from 60 million-year-old Shaligram Rocks from Gandaki River, Nepal.</li> <li>b) Bell made of Ashtadhatu (Gold, Silver, Copper, Zinc, Lead, Tin, Iron, Mercury).</li> <li>c) Bell weighs 2100 Kg, audible up to 15 Km.</li> </ul>

**Understanding Nagara Style Temple Architecture**

**1. Basic Elements of Hindu Temple Architecture**

- a) **Garbhagriha:** Small room housing the principal deity/deities.
- b) **Mandapa:** Entrance hall or covered area for gatherings.
- c) **Shikhara:** Towering spire above the sanctum sanctorum.

- d) **Vahana:** Mount of the main deity placed in line of sight from Garbhagriha.



## 2. Distinctive Features of Nagara Style

- Upraised Platform:** Temples constructed on an elevated platform called **Jagati**.
- Mandapas** located in front of the temple, often decorated with the highest Shikhara.
- The shikhara** over the mandapas in the pictures of the Ayodhya Ram temple can be seen having a square base, and a rectilinear outline.
- This is called the **phamsana-style** shikhara.
- Note that the mandapa shikhara right at the entrance has an octagonal base.

## 3. Comparison with Khajuraho Temple

- Similarities with Nagara style observed in the **Vishwanath temple** at Khajuraho.
- Notable resemblance in the design of the main Shikharas of both temples.
- Both feature curved pyramidal Shikharas ending in a horizontal disc called **Amalaka** topped with a **Kalasha**, known as **Latina-style Shikhara**.

## Significance of Ram Mandir

- Religious Fulfillment:** The temple's construction fulfills a longstanding spiritual aspiration of Hindus, holding immense religious significance.
- Cultural Preservation:** Ayodhya's profound connection to the Ramayana underscores the temple's role in preserving and honoring India's rich cultural heritage.

- Economic Boost:** The Ram Mandir has the potential to catalyze economic growth, generating employment opportunities and boosting tourism, thereby fostering local development.
- Religious Harmony:** Resolution of the Ayodhya dispute and the temple's construction could pave the way for religious harmony, potentially mitigating decades-long tensions between Hindus and Muslims.
- Charitable Endeavors:** Acting as a central hub, the temple may lead the growth of charitable institutions like schools and hospitals, enhancing community welfare.
- Infrastructure Development:** The temple's construction is poised to drive the development of essential infrastructure such as roads, vital for accommodating pilgrim influx and fostering regional progress.

## Conclusion

The inauguration of the Ram Mandir in Ayodhya signifies the resolution of one of the oldest land disputes in independent India

## 9. WEST BENGAL NOTIFIED STATE DAY & STATE SONG

- Recently, West Bengal government notifies **Poila Boisakh**, the first day of the Bengali New Year, as State Day and **Banglar Mati Banglar Jal** (written by Rabindranath Tagore) as State Song.
- Poila Boisakh is an important festival celebrated by Bengali communities across West Bengal, Tripura, Jharkhand, and Assam.
  - In 2023 it was celebrated on April 15th.
- Earlier, Governor C.V. Ananda Bose also observed **June 20 as Paschim Banga Dibas**, triggering a war of words with the State government.
  - On June 20, 1947** the Bengal Legislative Assembly held a meeting to decide if the Bengal Presidency would stay with India or Pakistan, or be divided, having the Hindu majority districts staying with India as West Bengal and the Muslim majority areas forming East Pakistan.

## 10. Classical language status to 'Bangla'

Recently, West Bengal's Chief Minister raised the demand to provide classical language status to 'Bangla' and seeking national fair status to the 'Gangasagar Mela'.

**Why Bengali needs to be recognized as classical language?**

1. Bengali people's rich heritage and culture can be traced back to ancient times. Based on scientific research, it has been established that Bengali language had its **origin from almost 2,500 years**.
2. Apart from being the official language of West Bengal and the **2nd most spoken language in India, it is also the 7th most spoken language in the world**.

**Classical Languages and Criteria for Declaration:**

1. Currently, only 6 languages enjoy the 'Classical' language status in India namely **Tamil (declared in 2004), Sanskrit (2005), Kannada (2008), Telugu (2008), Malayalam (2013), and Odia (2014)**.
2. **Criteria for Declaration:**
  - a) High treasure of its early texts/recorded history over a period of at least **1500-2000 years**;
  - b) A body of ancient literature/texts, which is considered a **valuable heritage** by generations of speakers;
  - c) The **literary tradition should be original** and not borrowed from another speech community;

**Benefits given to the classical languages:**

1. **International Awards:** Two major annual international awards are provided to eminent scholars in classical Indian languages.
2. **Centres of Excellence:** Establishing Centres of Excellence for the study of Classical Languages.
3. **University Grants Commission (UGC):** Creation of Professional Chairs for Classical Languages in Central Universities.
4. **Research Project Funding:** University Grant Commission (UGC) awards research projects to promote and study Classical Languages.

## Gangasagar Mela

**About Gangasagar Mela:**

1. It is **second largest human gathering** globally, following Kumbh Mela.
2. It is an **annual event** that coincides with Makar Sankranti.
3. It takes place at **Sagar Island, West Bengal**.
4. The pilgrims take a dip in the Ganga during the sacred event and visit the temple dedicated to **Kapil Muni**.

**Historical Roots:**

1. It has references in Indian epics like **Ramayana and Mahabharata**.
2. It traces existence back to around **400 BCE**.

**Kapil Muni: A Vedic Sage**

1. Founder of the **Samkhya system** of Indian philosophy.
2. Lived around the **6<sup>th</sup> century C.E.**



3. He has been described as an **incarnation of Vishnu** in the Puranas.
4. He is renowned for teaching **bhakti yoga** for liberation.

**Sagar Island**

1. Westernmost island in the **Ganges-Brahmaputra delta**.
2. Positioned at the **mouth of the Hugli (Hooghly) River**.
3. Separated from the mainland by an arm of the Hugli River to the east.

**Benefits of National Fair Status:**

1. **Official Recognition:** The fair gains official recognition from the government as a significant and culturally important event.
2. **Government Support:** The fair may receive financial and logistical support from the government to enhance its organization and infrastructure.

- Promotion of Cultural Heritage:** National Fair status highlights the fair’s cultural and historical significance, promoting the cultural heritage associated with the event.
- Tourist Attraction:** The designation can attract more tourists and visitors, both nationally and internationally.

**Some other important fairs/Melas**

Mela Name	Frequency/Rotation	Location(s)	Special Features
Kumbh Mela	Every 12 years, rotates between sites	Allahabad, Haridwar, Ujjain, Nashik	Largest religious gathering; rotates locations
Pushkar Mela	Annual	Pushkar, Rajasthan	Largest camel and livestock fair
Hemis Gompa Fair	Annual	Ladakh, Jammu and Kashmir	Celebrated at Hemis Monastery

**11. STUDY ON CHILD MARRIAGE IN INDIA: LANCET**

A recent study on child marriage in India published in the *Lancet* noted the overall decrease in child marriage across the country but pointed out that four States, mainly **Bihar (16.7%), West Bengal (15.2%), Uttar Pradesh (12.5%), and Maharashtra (8.2%)** accounted for more than half of the total headcount burden of child marriages in girls.

**Child Marriage**

- Child marriage refers to **any formal marriage or informal union between a child under the age of 18 and an adult or another child.**
- Despite a steady decline in this harmful practice over the past decade, child marriage remains widespread, with approximately one in five girls married in childhood across the globe

**What are the key findings of the Lancet report?**

- India – 1 in 5 girls** are still married below *legal marriage age*.
- Skewed achievements** – Some States have achieved dramatic decreases while other states like West Bengal have struggled.
- West Bengal** – It has the **largest absolute increase in headcount** representing an increase of **32.3% in headcount with over 5,00,000 more girls getting married as children.**

**4. Prevalence of Child Marriages State Wise:**

STATE	Till Year 2009	Present
<b>Bihar</b>	<b>9.3%</b>	<b>16.7%</b>
<b>West Bengal</b>	<b>13.6%</b>	<b>15.2%</b>
<b>Uttar Pradesh</b>	<b>8.9%</b>	<b>12.5%</b>

**Impacts of Child Marriage**

- End of Childhood:** Child marriage is a global problem and is compounded by poverty. It abruptly ends a boy’s/girl’s childhood, pushing them into adulthood before they are physically and mentally prepared.
  - Child marriage leads childhood grooms to drop out of school and often settle for low-paying jobs to provide for their families.
- Violation of Human Rights:** United Nations Children’s Fund (UNICEF) categorizes child marriage as a human rights violation due to its adverse impacts on the development of both girls and boys.
- Maternal and Child Health Implications:** The adverse impact of child marriage extends to maternal and child health.
  - Child brides often become pregnant during adolescence, when the risk of complications during pregnancy and childbirth increases.
  - The practice can also isolate girls from family and friends, taking a heavy toll on their mental health.

**Initiatives to Tackle Child Marriage**

- Prohibition of Child Marriage Act, 2006 (PCMA)
- Beti Bachao Beti Padhao (BBBP) scheme.
- National Commission for Protection of Child Rights (NCPCR).



4. Protection of Children from Sexual Offences (POCSO) Act 2012.
5. CHILDLINE.

### Way Forward

1. Mobilize **political will** at both state and national levels to prioritize the eradication of child marriage through legislative measures.
2. **Conduct social campaigns** involving all stakeholders including panchayats, schools and local communities and without a political will to enforce the existing laws the situation at the grass roots will not improve as rapidly as it has in other parts of the country.
3. **Promote a culture of reporting and transparency** by regularly updating and providing detailed information on child marriage cases under PCMA 2006.
  - Facilitate a comprehensive review of PCMA 2006 to identify loopholes and areas for improvement in enforcement.
4. **Empower girls with information**, skills, and support networks for increased autonomy and decision-making.

## 12. WORLD'S TALLEST STATUE OF BR AMBEDKAR

1. In January, 2024 World's tallest statue of BR Ambedkar '**Statue of Social justice**' was unveiled in Vijayawada, Andhra Pradesh.
2. It is a **206-foot Bronze Statue** of Dr. B.R. Ambedkar and is one of the top 50 tallest statues in the world.
3. Built from **400 tonnes of steel**, the statue of social justice is a complete project under the 'Made in India' initiative.

### Other important Statues

1. **Statue of Unity** (SARDAR VALLABHBHAI PATEL)
2. Statue of Equality (Hyderabad's Shamshabad, Telangana): Ramanuja.
3. Statue of belief (Nathdwara, Rajasthan): Lord Shiva.

## 13. AWARDS/PERSONALITIES

### A. NATIONAL SPORTS AND ADVENTURE AWARDS 2023

1. In January, 2024 President Droupadi Murmu presented the National Sports and Adventure Awards, 2023.

- The awards are **given annually** to recognize and reward excellence in sports, highlight extraordinary performance at the national and international competitive events, encourage sportsmanship and promote nation-building by creating a sense of national pride and unity in a country as diverse as India.
  - The awards are administered by the Ministry of Youth Affairs & Sports, Government of India.
2. The **6 categories** of the National Sports Awards are:
    - I. Major Dhyan Chand Khel Ratna Award
    - II. Arjuna Award,
    - III. Dronacharya Award,
    - IV. Major Dhyan Chand Award,
    - V. Maulana Abul Kalam Azad rolling Trophy, also called the MAKA Trophy, and
    - VI. Rashtriya Khel Protsahan Puraskar
- \* **Since 2004, the Tenzing Norgay National Adventure Award has also been given out along with the 6 National Sports Awards.**

### Details of awards included in the event

- I. **Major Dhyan Chand Khel Ratna Award-2023**
  1. India's highest sporting honor, Instituted in 1991–1992,
  2. It has been named after the hockey legend Major Dhyan Chand (1905–79).
  3. The award is conferred annually by the Ministry of Youth Affairs and Sports.
  4. Given for outstanding performances over 4 years.
  5. **2023 awardees-** Asian Badminton Gold medalist pair **Chirag Chandrashekhkar Shetty and Satwik Sai Raj.**
- II. **Arjuna Award-2023**
  1. 2<sup>nd</sup>-highest sporting honour established in 1961.
    - Notable, It was India's highest sporting honour before the Khel Ratna came into being.
  2. Awarded for consistent good performance over 4 years.
  3. Winners receive a **statuette of Arjuna**, a certificate, and a cash prize.

- Some of the **2023 recipients**-Mohammed Shami (cricket), Krishan Bahadur Pathak (hockey), Aishwary Pratap Singh Tomar (shooting)

### III. Dronacharya Award-2023

- The Dronacharya Award, instituted in 1985, is India's highest sports honour for coaches.
- The award comprises of
  - A bronze statuette of Dronacharya,
  - A scroll of honour and
  - Cash component of Rs.500,000

List of recipients	
Dronacharya Award Regular Category	Dronacharya Award Lifetime Category
Ganesh Prabhakar Devrukhkar (mallakhamb)	Jaskirat Singh Grewal (golf)
Mahaveer Prasad Saini (para-athletics)	Bhaskaran E (kabaddi)
Lalit Kumar (wrestling)	Jayanta Kumar Pushilal (table tennis)
RB Ramesh (chess)	
Shivendra Singh (hockey)	

### IV. Major Dhyan Chand Award-2023

- Another award named after India's hockey magician Dhyan Chand, the Major Dhyan Chand Award represents India's highest honour for lifetime achievements in sports.
- 2023 recipients:** Kavitha Selvaraj (kabaddi), Manjusha Kanwar (badminton), Vineet Kumar Sharma (hockey)

### V. Maulana Abul Kalam Azad Trophy-2023

- The **oldest National Sports Award** in India, the Maulana Abul Kalam Azad (**MAKA**) Trophy was instituted in 1956–1957.
- The objective of the trophy is to promote competitive sports and physical fitness amongst the Indian colleges and universities.
- Guru Nanak Dev University (GNDU) in Amritsar won the 2023 Maulana Abul Kalam Azad (MAKA) Trophy for the 25th time.
  - Lovely Professional University, Punjab (first runner -up); Kurukshetra University, Kurukshetra (second runner-up).

### VI. Rashtriya Khel Protsahan Puruskar-2023

- 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 **3 years**, the Rashtriya Khel Protsahan Puraskar has been a fixture in the National Sports Awards list since 2009.
- Nominees are decided in **4 different segments:**
  - Identification and nurturing of budding/ young talent
  - Encouragement to sports through Corporate Social Responsibility
  - Employment of sports persons and sports welfare measures
  - Sports for Development
- The objective of the award is to encourage the involvement of corporates, voluntary organizations etc., in the promotion and development of sports in the country.
- 2023 recipients:** Jain Deemed to be University, Bengaluru, Odisha Mining Corporate Limited

### \* Tenzing Norgay National Adventure Awards-2022

- Instituted in 1993-1994, the **National Adventure Awards** now known as the **Tenzing Norgay National Adventure Award** was presented for the year 1994 in 1995.
- Award is given in **4 categories** namely:
  - Land Adventure,
  - Water (Sea) Adventure,
  - Air Adventure, and
  - Life Time Achievement for adventure activities on Land, Sea, and Air.
- Award includes statuettes, certificates and award money of Rs. 15 lakh.
- 2023 recipients:** Late Ms. Savita Kanswal (land), Shri Tulsi Chaitanya Mothukuri(water), Shri Anshu Kumar Tiwari (air)

### B. PRADHANMANTRI RASHTRIYA BAL PURUSKAAR

- In January, 2024 the President of India, Smt. Droupadi Murmu conferred the '**Pradhan Mantri Rashtriya Bal Puraskar**' (**PMRBP**), instituted by the Ministry of Women and Child Development, to 19 children.
  - Every year, the Government of India acknowledges the exceptional achievements of children in the age group of 5 to 18 years by conferring the PMRBP.

- Each awardee received a medal and a certificate from the President.
2. This year’s awardees include: -
    - a. 1 child each in the categories of Bravery, Science & Technology and Innovation,
    - b. 4 in the category of Social Service,
    - c. 5 in the category of Sports, and
    - d. 7 in the category of Art & Culture
  3. Also, Artificial Intelligence (AI) used for the 1<sup>st</sup> time in a national level award to search for feats of excellence

**Background of Child Welfare Awards**

1. **Previous Child Welfare Awards:** The Government has

- a history of conferring awards for child welfare which included
- a. National Child Award for Exceptional Achievements - since 1996
  - b. National Child Welfare Award(Individual) - since 1979
  - c. National Child Welfare Award(Institution) - since 1979
  - d. Rajiv Gandhi Manav Sewa Award - since 1994
2. **Introduction of PMRBP:** In 2017-18, the awards were restructured and introduced under the name “Pradhan Mantri Rashtriya Bal Puraskar,” consolidating awards in two categories given below:

Award Category	Criteria	Recognition Components
1. <b>Bal Shakti Puraskar</b> (Earlier National Child Award)	Recognition for exceptional abilities and outstanding achievements in various fields such as innovation, scholastic achievements, sports, arts & culture, social service, and bravery.	Medal, Cash prize of Rs. 1,00,000/-, Book vouchers worth Rs. 10,000/-, Certificate, - Citation
2. (i) <b>Bal Kalyan Puraskar</b> (Earlier National Child Welfare Award) - <i>Individual Awards</i>	Given to individuals contributing significantly to child development, child protection, and child welfare for a minimum of 7 years, positively impacting children’s lives.	Cash prize of Rs. 1,00,000, Citation, Certificate
(ii) <b>Bal Kalyan Puraskar</b> (Earlier National Child Welfare Award) - <i>Institutional Awards</i>	Awarded to institutions demonstrating exceptional work for the welfare of children in any field.	Prize of Rs. 5,00,000/-, Citation, Certificate

**C. JEEVAN RAKSHA PADAK SERIES OF AWARDS**

1. In January,2024 The President of India has approved the conferment of **Jeevan Raksha Padak Series of Awards-2023** on 31 persons.
2. This series of awards are given to a person for meritorious act of human nature in saving the life of a person.
3. The award is given in **3 categories:**
  - I. Sarvottam Jeevan Raksha Padak
  - II. Uttam Jeevan Raksha Padak
  - III. and Jeevan Raksha Padak.
4. Persons of all walks of life are eligible for these awards. The award can also be conferred posthumously.

**D. OLDEST TENNIS PLAYER TO ACHIEVE THE WORLD NO. 1 RANKING: ROHAN BOPANNA**

1. Rohan Bopanna, at the age of 43 and 330 days, has become the oldest player to get the No 1 men’s

- doubles ranking with victory in the Australian Open quarter-finals.
2. He has **two Grand Slam titles** and five ATP Masters 1000 titles in his long career.
  3. He has also represented India at the **2012 and 2016 editions of the Olympics.**
  4. Bopanna is the 4th Indian after Leander Paes, Mahesh Bhupathi and Sania Mirza to take the world number 1 rank in doubles. All 4 are also the only Indian Grand Slam winners.

**Previous Record**

1. The previous oldest men’s doubles No. 1 was **Mike Bryan at 41 years** and 76 days in 2019.
2. **Lisa Raymond** holds the record as the oldest women’s doubles No. 1 at 39 in 2012.
3. Bopanna and Ebden share equal ranking points, but Bopanna will be ranked first due to fewer tournaments played by Ebden.

## 14. US EXECUTES WITH NITROGEN GAS FOR THE 1<sup>st</sup> TIME

1. Alabama executes a person with nitrogen gas, stirring controversy over the use of new methods for the death penalty.
2. The UN human rights chief is worried about how executions are done, and this has led to discussions about whether we should keep using the death penalty.
3. Capital punishment, also known as the death penalty, is an institutionalized form of punishment wherein individuals are intentionally executed for their alleged misconduct.

Arguments in Support of Capital Punishment	Arguments against (Ethical Concerns)
1. <b>Deterrence Effect:</b> Advocates argue that the fear of facing the ultimate punishment may deter individuals from committing heinous crimes.	1. <b>Limited Deterrence:</b> Some critics argue that there's not enough proof that the death penalty effectively prevents crime, with some studies showing minimal impact.
2. <b>Retributive Justice:</b> Some view the death penalty as a just response to certain crimes, believing that it serves as a fitting consequence.	2. <b>Risk of Injustice:</b> Opponents argue that retributive justice poses a significant risk of executing innocent individuals, leading to a grave miscarriage of justice.
3. <b>A Moral Imperative:</b> Supporters contend that capital punishment provides a sense of closure and satisfaction to victims and their families.	3. <b>Emotional Toll:</b> Critics argue that executions can inflict severe emotional trauma, perpetuating suffering rather than providing closure.
4. <b>Public Safety:</b> Supporters claim that capital punishment contributes to public safety by permanently removing dangerous individuals from society.	4. <b>Alternatives to Isolation:</b> Opponents suggest life imprisonment achieves public safety without the irreversible nature of capital punishment.
5. <b>Legal Precedent:</b> Advocates suggest that the death penalty sets a legal precedent emphasizing the seriousness of certain crimes, potentially deterring others.	5. <b>Arbitrary Application:</b> Critics argue the death penalty is often arbitrarily applied, influenced by factors like race and socioeconomic status, undermining the notion of consistent legal precedent.

### Capital Punishment in India

1. **Constitutional Validity Affirmed:**
  - a) Notable cases include Jagmohan Singh vs State of Uttar Pradesh (1973), Rajendra Prasad vs State of Uttar Pradesh (1979), and Bachan Singh vs State of Punjab (1980).
  - b) The Supreme Court affirmed the constitutional validity of the death penalty in these cases.
2. **Doctrine of Rarest of Rare:**
  - a) The Bachan Singh Case established the Doctrine of Rarest of Rare.
  - b) This doctrine helps in determining when the death penalty is an appropriate punishment based on the exceptional nature of the crime.
3. **Law Commission Recommendation (2015):**
  - a) In its 262nd Report in August 2015, the Law Commission of India suggested the abolition of the death penalty for all crimes except those related to terrorism and waging war.
  - b) This recommendation sparked discussions about the scope and application of capital punishment in India.

### Nitrogen Overview:

1. **Element Position:** 7th in periodic table, between carbon and oxygen.
2. **Biological Importance:** Crucial for amino acids, DNA, and all living tissues.
3. **Atmospheric Presence:** 80% of Earth's atmosphere is nitrogen gas.
4. **Physical Properties:** Colorless, odorless, diatomic non-metal gas.

### Nitrogen Uses:

1. **Industrial Applications:** Used in ammonia, fertilizer, and nitric acid production.
2. **Explosives:** Key component in explosives like nitroglycerin.
3. **Refrigeration:** Liquid nitrogen for transport and freezing.
4. **Biological Preservation:** Used in preserving bodies and biological samples.



## H. ETHICS

### 1. TEACHINGS OF BUDDHA

Recently, the **Vice President of India** emphasized the significance of Buddha's teachings during his speech at the **12th General Assembly** of the **Asian Buddhist Conference for Peace (ABCP)**.

#### What are the Important Teachings of Buddha?

**1. The Four Noble Truths:** The Four Noble Truths are the central teaching in Buddhism which explains the fundamental nature of our existence and the path to liberation. It includes:

- a. **Dukkha (Suffering):** Life Involves Suffering. It has its ups and downs, and we all experience pain, dissatisfaction, and challenges from things like birth, ageing, illness, death, etc.
- b. **Samudaya (Cause of Suffering):** The root cause of our suffering is often our desires and attachments which are never satisfied and always changing.
- c. **Nirodha (Cessation of Suffering):** There's a way to stop suffering by letting go of those desires and attachments leading to inner peace and freedom.
- d. **Magga (Path to the Cessation of Suffering):** Buddha suggested the Noble Eightfold Path as a guide to living a balanced life.

**2. The Noble Eightfold Path:** It is a fundamental teaching in Buddhism, presenting a practical guide to living a wholesome and fulfilling life. It includes:

- a. **Right Understanding:** Understand that life has challenges, and learn about how to deal with them.
- b. **Right Intention:** Have good intentions, like kindness and compassion, and avoid harmful thoughts.
- c. **Right Speech:** Speak truthfully and kindly, and avoid gossiping or saying things that hurt others.
- d. **Right Action:** Act in ways that are good and avoid harmful behaviours.

e. **Right Livelihood:** Choose a job that doesn't harm others or the world.

f. **Right Effort:** Make an effort to be a better person and let go of unhelpful habits.

g. **Right Mindfulness:** Pay attention to the present moment without judging.

h. **Right Concentration:** Practice meditation to develop a focused and clear mind.

**3. The Middle Path:** It teaches balance and moderation in life, avoiding extremes.

a. **Avoiding Excess:** This means not overindulging in pleasures or desires, like overeating or chasing after excessive material wealth and luxury.

b. **Avoiding Self-Denial:** It also means not depriving oneself excessively, like through extreme fasting or harsh ascetic practices.

**4. The five conducts** that are very important for a Buddhist monk include:

- a. Non Violence
- b. Avoid Stealing
- c. Avoid Sexual Misconduct
- d. Avoid False Speech
- e. Avoid Intoxication

#### Contemporary Relevance of Buddha's Teachings:

**1. Mindfulness:** The practice of being present in the moment can help reduce stress and improve mental well-being. For example, taking a few moments to focus on your breath during a busy day can bring a sense of calm and clarity.

**2. Non-attachment to Material Possessions:** Letting go of excessive attachment to material possessions or outcomes can lead to greater contentment and freedom. For instance, realizing that happiness doesn't solely depend on having the latest gadgets or a high-paying job can lead to a more fulfilling life.

**3. Environmental Awareness:** Buddha's teachings advocate for respect and care for the environment.

Practices like reducing waste, conserving resources, and supporting eco-friendly initiatives align with these teachings.

4. **Inter-Faith Harmony:** Instead of focusing on religious differences, we can celebrate our shared values, like organizing community events that bring people of different faiths together to volunteer for a common cause.
5. **Peaceful Conflict Resolution:** Rather than resorting to violence, we can resolve disagreements through open communication and negotiation, like discussing concerns with a friend calmly instead of arguing or fighting.
6. **Social Justice and Equality:** Buddha's teachings promote social justice and equality by emphasizing the inherent dignity and worth of all beings. Supporting marginalized communities and advocating for equal rights aligns with these principles.
7. **Ethical Guide for Technological Advances:** Considering the ethical implications of new technologies, such as ensuring privacy and fairness in Artificial Intelligence systems, like advocating for laws that protect people's digital rights and data privacy.

### Conclusion:

Buddha's teachings remain relevant today, offering timeless wisdom for promoting peace, compassion and ethical living in a complex and interconnected world.

## 2. GOOD SAMARITANS

Delhi High Court stated that individuals who help an unknown injured person on a public road should not face harassment. This is a case of Good Samaritan.

### What is a Good Samaritan?

1. A Good Samaritan is a person who selflessly helps others in need, often in emergencies or times of distress, without expecting anything in return.
2. The term originates from the story of Good Samaritan in the Bible.

### Stakeholders Involved:

1. **Person in Need (Victim):** They want help and care to feel better.

2. **Helper (Good Samaritan):** They want to assist and be kind.
3. **Authorities:** They want to ensure everything is handled correctly and everyone is safe.
4. **Community:** People want to encourage helping each other and ensure everyone feels safe doing so.
5. **Medical Personnel:** If the person needs medical help, doctors and nurses want to provide care.
6. **Legal System:** They want to make sure everything is fair and follows the rules.

### What Factors Prevent People from Acting Like the Good Samaritan?

1. **Fear of Legal Consequences:** Someone might hesitate to help a fallen person on the road due to worries about being sued if they injure the person further while trying to assist.
2. **Bystander Effect:** In a crowded area, several people witness a car accident but nobody calls emergency services because each assumes someone else will do it.
3. **Mistrust or Indifference:** A person might walk past a homeless individual in need of medical attention because they don't trust them or feel indifferent to their situation.
4. **Cultural and Social Barriers:** A person might ignore a distressed individual on the street because they come from a culture where it's considered rude to intervene in strangers' affairs.
5. **Lack of Training or Confidence:** An individual might refrain from performing CPR on a stranger who has collapsed because they don't feel confident in their ability to do it correctly. CPR (Cardiopulmonary resuscitation) is an emergency procedure that involves chest compressions and rescue breaths.
6. **Personal Safety Concerns:** Someone might avoid breaking up a fight between strangers out of fear of being harmed themselves.

### What is the Legal Provision in India for Good Samaritans?

1. On the direction of the Supreme Court, the **Ministry of Road Transport and Highways** issued the following guidelines:

- a. Good Samaritans can take an injured person to the nearest hospital and leave immediately without any liability.
  - b. They won't be held responsible for any civil or criminal charges.
  - c. Hospitals must publicly announce that they won't detain Samaritans or demand money for treatment.
  - d. Public officials who force Good Samaritans to disclose personal information will face consequences.
2. In **2016**, the **Supreme Court** made these guidelines **obligatory** for all states and Union Territories.
  3. Additionally, **Section 134A** was added to the **Motor Vehicles (Amendment) Act of 2019** to safeguard Good Samaritans.

### How the culture of Good Samaritan be promoted in India?

1. **Social Media Influence:** Using platforms like Facebook, Twitter, and Instagram to share uplifting stories of Good Samaritan acts. For example, creating hashtags like #GoodSamaritanStories.
2. **Corporate and Institutional Support:** Encouraging businesses to implement policies that support employee volunteerism and community service. For instance, offering paid volunteer days or matching donations to charitable organizations.
3. **Reward and Recognition:** Creating awards or certificates to honour individuals who demonstrate exemplary acts of kindness. For example, recognizing a citizen who helped rescue people from a burning building or saved a drowning child.
4. **Law Reforms:** Implementing stricter provisions in the Motor Vehicles Act of 1988, can enhance the protection of Good Samaritans. This would encourage more people to step forward and assist others during emergencies.
5. **Charter of Rights Display:** Hospitals and police stations should prominently display a "Charter of Rights" for Good Samaritans, as mandated by the Supreme Court. This ensures that those who help in emergencies are aware of their legal protections.

6. **Adoption of Best Practices:** Learning from successful models, like the provisions in Canadian states where Samaritans are not held liable for emergency aid unless gross negligence is observed.

### Conclusion:

The Law Commission says that if accident victims get help within the first hour, called the "**Golden Hour**," about 50% of them could be saved, which makes the role of Good Samaritans important. They are everyday heroes who show kindness and compassion, making a positive difference in the lives of others through their selfless actions.

## 3. STRAY DOGS

According to the National Crime Records Bureau, there were 4,146 reported deaths caused by dog bites in India, highlighting the urgent need for better management of stray dogs.

### Who are Stray Dogs?

1. Stray dogs are dogs that don't have a home or owner. They wander around looking for food and shelter on their own.
2. India is home to an estimated 1.5 crore stray dogs, which is the highest in the world.
3. Stray dogs can sometimes bite people, especially if they feel threatened or if they're sick or hungry.
4. It can lead to injuries and sometimes even death, depending on the severity of the bite and whether the dog has rabies or other diseases.

### Stakeholders Involved:

1. **Government authorities:** Make and enforce laws related to animal control and public safety.
2. **Animal welfare organizations:** Work to protect and care for stray animals, advocate for their rights, and promote responsible pet ownership.
3. **Healthcare professionals:** Treat and provide medical care for individuals who have been bitten by stray dogs, and may also provide guidance on rabies prevention and treatment.

4. **Local communities:** Concerned residents who may be directly affected by stray dogs and dog bites, and may advocate for or against specific interventions or policies.
5. **Pet owners:** Responsible for their own pets and may be affected by stray dog issues.
6. **Businesses and tourism industry:** Concerned about the potential impact of dog bites on public safety and the reputation of tourist destinations.

### Ethical Considerations regarding the control of stray dogs:

#### 1. Animal Welfare:

- a. **Utilitarianism:** Utilitarianism aims to maximise overall happiness or well-being. When it comes to dealing with stray dogs, supporters argue that controlling their populations can prevent suffering, as many such dogs face hunger, disease, and injury on the streets.
- b. **Animal Rights:** On the other hand, animal rights advocates may argue that controlling stray populations through euthanasia or aggressive measures violates the rights of individual animals to live freely.

#### 2. Public Safety:

- a. **Deontological Ethics:** From a deontological perspective, which emphasizes duties and principles, controlling stray dogs could be seen as a duty of authorities to protect citizens from potential harm. Stray dogs can pose risks such as spreading disease, attacking humans or other animals, and causing accidents. Thus, controlling their population could be justified to ensure public safety.
- b. **Social Contract Theory:** Some may argue that controlling stray populations is part of the social contract citizens have with their government. Citizens expect their authorities to maintain public order and safety, and controlling stray animals could be seen as fulfilling this obligation.

#### 3. Compassion and Empathy:

- a. **Virtue ethics** emphasizes cultivating moral character and virtues such as compassion and empathy.
- b. Those advocating for the treatment of strays may argue that controlling populations should be done with compassion and empathy, considering the well-being of individual animals while also addressing public safety concerns.

#### 4. Environmental Impact:

- a. Stray dogs can have ecological impacts, particularly in sensitive ecosystems or areas with endangered species.
- b. Ethical considerations may involve balancing the needs of stray animals with the preservation of local ecosystems and biodiversity.

### What is the Present Policy Framework in India to control stray dogs?

#### 1. Prevention of Cruelty to Animals Act (PCA), 1960:

This law makes killing stray dogs punishable, considering actions like torture or transporting them in ways that cause suffering as cruelty.

#### 2. Animal Welfare Board of India (AWBI):

Established under the PCA of 1960, this advisory body has worked to promote animal welfare since 1962.

#### 3. Animal Birth Control (ABC) Program:

This program aims to control the stray dog population through sterilization and vaccination by Local bodies like municipalities and Panchayats.

#### 4. Judicial Perspective:

In the **Animal Welfare Board of India vs Nagaraja case (2014)**, the Supreme Court stated that every species has the right to life and security, except when the law allows taking their lives out of human necessity.

### Conclusion:

It is said that "In a world where you can be anything, be kind". In conclusion, addressing the challenges posed by stray dogs requires not only action but also compassion and collaboration. Let us stand together, raise our voices, and work towards a future where kindness and empathy guide our interactions with all creatures, creating a world where both humans and animals can live in harmony.





## I. ESSAY

### FORESTS ARE THE BEST CASE STUDIES FOR ECONOMIC EXCELLENCE

A common thread runs between the Indus Valley Civilization, the Rig Vedic age, the Chipko Movement and the Padma awardee Jamuna Tudu.

Yes, that's right! It is their love and respect for trees and forests. The people of the Indus Valley Civilisation and the hymns of the Rig Veda revered forests and wildlife. The participants of the Chipko Movement realised the importance of forests and hugged them to prevent their felling. More recently **Jamuna Tudu** achieved a similar feat and **saved** around ten thousand **trees from the timber mafia**.

Thus, since time immemorial, our civilisation has had respect and admiration our environment. This is reflected in our vernacular saying, '**Van hi jeevan hai**', i.e., forests themselves are our life. These forests provide us with materials to sustain life like oxygen, food, water and shelter. But more importantly we can learn several lessons from them that can make our life more pleasant and meaningful.

#### Forests and economic excellence

Forests are the best case studies for economic excellence in several ways. **Firstly**, they use the resources available to them in the most efficient manner. For instance, we have never heard of a case where a plant took more sunlight or oxygen than it needed. However, that is not the case with humans. Our government gives higher subsidy on urea compared to other fertilisers. This has led to our farmers only providing urea to the crops irrespective of which nutrients the soil is lacking.

**Secondly**, all the products of a tree have multiple uses. The bark can be used to build furniture or extract items like rubber, the leaves of some are edible like mahua, or give fruits like mangoes. We can learn from this and manufacture goods with multiple uses. This would ensure innovative manufacturing which can help boost employment and lower costs to consumer.

**Thirdly**, Balance is another lesson we can imbibe from forests. Various species of trees grow together in a forest. There is no domination of one over the other and they exist in sustainable cohabitation. Similarly, our economy should be a balanced one. One sector should not dominate over the other, like it happens in our country where **54%** of the population **works in agriculture**.

**Fourthly**, there is also diversity and variety in forests. Various kinds of forests are found all around the world - Tropical evergreen in Mexico, deciduous in India, coniferous in Canada etc. Each has its own utility and such diversity is enriching. The economy of a nation should also be diverse in its production, consumption and export. It should not be just an **oil economy**, like **Kuwait** or a **labour-exporting economy**, like **Vietnam**. Such dependence proves very harmful when crisis like the COVID-19 pandemic knocks on our doors. Economist Raghuram Rajan has thus aptly observed that 'diversity is the foundation of a strong economy.'

But perhaps the most important lesson that forests can teach us is that of adaptability and resilience. Forests are always adapting to the changing weather, climate and even disasters like cyclones. The trees shed their leaves during winters and close their stomata to control

evaporation during summer. The world economy has to imitate this example, especially in today's time when some or the other crisis is always around the corner.

### Relevance today - A stitch in time saves nine

The world is facing a **poly-crisis** today. **Economically**, the pandemic took away several jobs. Nations are now becoming 'fortress economies', not letting in firms of other nations. Economic borders are contracting, not only for goods and services, but also for human resources. Add to that the Russia-Ukraine war, which has wreaked havoc by disrupting global supply chains.

**Environmentally**, climate change is the greatest peril for the entire human race. As per the UN Environment Programme, it would hamper food security, worker productivity and the extreme disasters would destroy infrastructure and take lives. We saw this play out in the Pakistan floods of 2022 and more recently, when Cyclone Biparjoy made its landfall in Gujarat.

**Socially**, we see inequality persisting in the society. As per the Oxfam Report, top 3% in India own more than 50% of the nation's wealth. The falling ranks in the Global Hunger Index also shows the grim effect of such inequality and poverty.

In such a gloomy situation, the teachings from forests would be our glimmer of hope. All of the learnings mentioned before, if learnt, would ensure the best use of our scarce resources and enable us to tide over such hiccups. A balanced, diversified economy would raise the standard of living of the people by taking them out of the disguised employment of agriculture. It would also manoeuvre the economy of India out of services or the software exports, into other domains like handicrafts, textiles, infrastructure etc. Imbibing these lessons is thus the need of the hour

### Learning from the best

We are now aware of the teachings that we need to emulate. But how should we emulate them? Our government has already taken some steps to achieve economic excellence at par with the forests.

For adapting to crisis, the **PM Garib Kalyan Anna Yojana** was rolled out, so that the vulnerable have a safety net during the lockdown. An amount of Rs. 500 was also given, for three months, to women Jan Dhan account holders. Moreover, the Insolvency and Bankruptcy Code was paused to save businesses from vanquishing.

The share of employment of people in manufacturing is being improved through schemes like Start Up India, Stand Up India and MUDRA. With this, India will see a number of sectors contributing to the GDP, not just the agriculture.

For diversity, like in forests, the PLI scheme and the One District, One Product has been launched. Finally, to tie all of them up together and ensure efficient utilisation of resources, the Gati Shakti masterplan has been rolled out by the Ministry of Finance.

### In a nutshell

Forest indeed are the best case studies for economic excellence. We only used to consider them as providers of food, air and shelter, but now we know we can learn so much more from them- in life and in economy. The Indus Valley and the Rig Vedic people had knowledge about this and therefore, worshipped them. Let us take a cue out of their books and try to put to use the various values that forests teach us. That would help us lead a fruitful life and also stay true to our ancient wisdom-

**"Vruksho Rakshati Rakshitah"**

**(The trees would save you if you save them.)**



## J. SCHEME

### 1. PRADHAN MANTRI ADI ADARSH GRAM YOJANA (PMAAGY)

Recently, The Parliamentary panel on Social Justice and Empowerment has highlighted slow pace of implementation of the Pradhan Mantri Adi Adarsh Gram Yojana (PMAAGY).

#### Background:

1. The **Ministry of Tribal Affairs has been implementing** the scheme 'Special Central Assistance to **Tribal Sub-Plan** (SCA to **TSP**)'.
2. It was started in 1977-78.
3. After the merger of Plan and Non-Plan expenditure, the scheme was known as 'Special Central Assistance to **Tribal Sub-Scheme** (SCA to **TSS**)' since 2017.
4. Earlier the coverage of the scheme was limited to **23 States** (including J&K), while the States of Arunachal Pradesh, Meghalaya, Mizoram and Nagaland were **not** covered.
5. During the year 2017-18, it was decided by the Ministry to extend the benefit of the scheme to these States as well in the larger interest of the STs.

**About:** It aims at **mitigating gaps and providing basic infrastructure** in villages with significant tribal populations.

**Implementation Period:** 2021-22 to 2025-26

**Objectives:** The main objective of this scheme is **to achieve integrated socio-economic development** of selected villages through a convergence approach. It will include the following components:

1. Preparing Village Development Plans, based on the needs, potential, and aspirations.
2. Maximizing the coverage of individual/family benefit schemes of the Central / State Governments.
3. Improving the infrastructure in vital sectors like health, education, connectivity and livelihood.

#### Features:

1. **Nature of the Scheme:** The Scheme 'PMAAGY' is a Centrally Sponsored Scheme with a 100% Grant from the Government of India (GoI).

2. **Provision of fund under the Scheme:** A sum of Rs. 20.38 lakh per village will be provided as a 'gap-filling' fund for approved activities including administrative expenses.
3. **Implementing Agency:** Implementation of the scheme will be done through the State / UT Government administration.
4. **Village Development Plans:** The VDP will also aim at the following inclusions,
  - a) Skill Development plans
  - b) Village Development Plans with Community Forest Development
  - c) Integration of the Van Dhan Programme
  - d) Conservation of perennial river resources and water bodies originating from forests
5. **Technical Support:** Project Monitoring Unit (PMU) will be set up at the Central and State levels to provide technical resource support.
6. **Database Management:** A dedicated MIS will be developed to monitor the progress of work.
7. **Approval Mechanism:** Approval of the annual plan under the scheme will be given by the Ministry of Tribal Affairs, following the procedure as stipulated under the scheme guidelines.

#### Coverage of the Scheme:

All States and UTs having notified the ST population will be covered under the Scheme. A total of 36,428 villages having at least 50% ST population and 500 ST persons have been identified to be covered in the first phase of five years during 2021-22 to 2025-26.

#### Role of States/UTs:

States/UTs are encouraged for convergence of resources as Central/State Scheduled Tribe Component (STC) funds and other financial resources available with them for saturation of infrastructure and services in the villages identified under PMAAGY.

## 2. PRADHAN MANTRI GARIB KALYAN ANNA YOJANA (PM-GKAY)

Recently, the Prime Minister announced that the Pradhan Mantri Garib Kalyan Anna Yojana (**PMGKAY**) will be **extended for** an additional **5 years** until December **2028**.

**Launched:** April 2020

**Nodal Ministry:** Ministry of Finance

**Operated by:** Ministry of Consumer Affairs, Food & Public Distribution

### About the Scheme:

1. It was launched under the vision of "Atmanirbhar Bharat" to supply free food grains to migrants and poor.
2. It was announced as part of the 1<sup>st</sup> relief package during the COVID-19 pandemic.

### Purpose:

1. Under this scheme, the centre provides **5kg of free food grains** per person per month to the poor.
2. This is in addition to the subsidized (Rs 2-3 per kg) ration provided under the **National Food Security Act (NFSA)** to families covered under the Public Distribution System (PDS).

### Eligibility

1. **Families** belonging to the **Below Poverty Line** - Antyodaya Anna Yojana (**AAY**) and Priority Households (**PHH**) categories will be eligible for the scheme.
2. PHH are to be identified by State Governments/Union Territory Administrations as per criteria evolved by them. AAY families are to be identified by States/UTs as per the criteria prescribed by the Central Government.
3. Households headed by widows or terminally ill persons or disabled persons or persons aged 60 years

or more with no assured means of subsistence or societal support.

4. Widows or terminally ill persons or disabled persons or persons aged 60 years or more or single women or single men with no family or societal support.
5. All primitive tribal households.
6. Landless agriculture labourers, marginal farmers, rural artisans/craftsmen such as potters, tanners, weavers, blacksmiths, carpenters, slum dwellers, and persons earning their livelihood on daily basis in the informal sector like porters, coolies, rickshaw pullers, hand cart pullers, fruit and flower sellers, snake charmers, rag pickers, cobblers, destitutes and other similar categories in both rural and urban areas.
7. All eligible Below Poverty Line families of HIV positive persons.

### Documents Required

1. Ration Card
2. Aadhar Card (if linked with Ration Card)

### Benefits

1. More than 80 crore people will be provided 5 kg free wheat/rice per person/month along with 1 kg free whole chana to each family per month.
2. Wheat has been allocated to 6 States/UTs, - Punjab, Haryana, Rajasthan, Chandigarh, Delhi and Gujarat and rice has been provided to the remaining States/UTs.
3. This is over and above the regular monthly entitlements under the National Food Security Act, 2013 (NFSA).

### Merger of PMGKAY and NFSA

1. The government approved the integration of PM-GKAY benefits with the provisions of the NFSA Act in January 2023.
2. The integration aims to streamline the delivery of free food grains.

## Current Affairs January-2024

3. It also ensures that families falling under the Antyodaya Anna Yojana (AAY) and priority households (PHH) categories receive free food grains as per their entitlement under NFSA.

### 3. PRADHAN MANTRI SURYODAYA YOJANA

In January 2024, the Prime Minister announced the 'Pradhan Mantri Suryodaya Yojana' under which one crore households will get rooftop solar panels across the nation.

**Goal:** To Reduce the Electricity Bill

**Nodal Agency:** Rural Electrification Corporation (REC)

#### Key Features:

1. It aims to equip one crore poor to middle-class households with rooftop solar panels in a bid to provide electricity from solar energy.
2. The scheme will not only reduce the electricity bill of the poor and middle class but will also make India self-reliant in the energy sector.
3. To start a massive national campaign to mobilise residential segment consumers to adopt rooftop solar in large numbers.

#### Eligibility:

1. The candidates must be Indian nationals.
2. The applicant's yearly income can be up to Rs 1 or 1.5 lakh.
3. All necessary paperwork has to be filed correctly.
4. Candidates should not be working for the government at the moment.

#### Significance:

1. The scheme aims to achieve **40 GW** rooftop solar capacity by March 2026.
2. It will help households to **save** between Rs 15,000 to 18,000 annually.

3. The **net metering policy** will allow them to sell any surplus electricity to distribution companies (DISCOMs).
4. The net-metering policy allows **rooftop solar power** users to transfer their excess power back into the grid, thereby reducing their electricity costs.
5. It will reduce the consumption of grid-connected electricity and save electricity costs for the consumer.

**About Rooftop Solar Panels:** Rooftop solar panels are **photovoltaic panels** installed on the roof of a building that is connected to the main power supply unit.

### 4. PRADHAN MANTRI ANUSUCHIT JAATI ABHYUDAY YOJANA (PM-AJAY)

#### Background

1. PM-AJAY was launched in the year 2021-22.

#### Objectives

1. To reduce poverty of the SC communities by generation of additional employment opportunities through skill development, income generating schemes and other initiatives.
2. To improve socio-economic developmental indicators by ensuring adequate infrastructure and requisite services in the SC dominated villages.
3. To increase literacy and encourage enrolment of SCs in schools and higher educational institutions by providing adequate residential facilities in quality institutions, as well as residential schools where required, especially in the aspirational districts/ SC dominated blocks and elsewhere in India.

#### Present position

1. States need to submit their Annual Action Plan (AAP) in online mode through the web-portal.

## Current Affairs January-2024

2. Login details for State and District Level Officers has been sent to email of Principal Secretary of the States.
3. There are 2 id's for each level (State/District). One for creation of projects and another for its approval.
4. De-centralised planning will be used for creation of projects.

**Nodal Ministry:** Ministry of Social Justice & Empowerment.

### Combination of Three Schemes

The scheme is a merger of 3 Centrally Sponsored Schemes namely:

1. Pradhan Mantri Adarsh Gram Yojana (PMAGY).
2. Special Central Assistance to Scheduled Castes Sub Plan (SCA to SCSP).
3. Babu Jagjivan Ram Chhatrawas Yojana (BJRCY).

### Components:

The Scheme has 3 components:

1. **Development of SC dominated villages into an "Adarsh Gram":** The objective is to ensure the integrated development of SC majority villages, ensuring they have sufficient infrastructure.
2. **Grants-in-aid' for District/State-level Projects:**
  - a. To increase the income of the target population by way of comprehensive livelihood projects.
  - b. Improve socio-economic developmental indicators by ensuring adequate infrastructure in the SC dominated villages.
  - c. Increase literacy and encourage enrolment of SCs in schools by providing residential schools, where required.
3. **Construction/Repair of Hostels in higher educational institutions:**
  - a. The construction of hostels is one of the means to enable and encourage students belonging to Scheduled Castes (SC) to attain quality education.

- b. Such hostels are immensely beneficial to the students coming from rural and remote areas of the country.
- c. While the component of construction of hostels for SC girls is in operation from the Third Five Year Plan (1961-66), the same for boys was started with effect from the year 1989-90.

### Special Provisions:

1. Upto 15% of the total Grants will be used on income generating economic development schemes/ programme for SC Women.
2. Upto 30% of the total Grants should be utilized for infrastructure development.
3. Atleast 10% of the total funds for skill development.
4. Promote SC Women Cooperatives engaged in production and marketing of consumer goods and services.

### Achievements during the current Financial Year2023-24:

1. During the current FY2023-24, 1834 villages have been declared as Adarsh Gram under the Adarsh Gram Component.
2. The Hostel component of the scheme has sanctioned 15 new hostels.
3. The Grant-in-aid component has approved a perspective plan for 17 states for the current financial year.

### Coverage:

1. Scheme implemented in 28 States/UTs.
2. Not Covered States/UTs:
  - a) **States:** Arunachal Pradesh, Nagaland, Meghalaya & Mizoram
  - b) **UTs:** A & N Islands, Dadra Nagar Haveli, Daman & Diu, Ladakh& Lakshadweep.