



INSIGHTSIAS

SIMPLIFYING IAS EXAM PREPARATION

LIGHTENING: NATURAL DISASTER

The Indian Union government is reluctant to declare lightning a natural disaster, as it believes that deaths caused by lightning can be prevented through awareness of safety measures.

17 JULY - 22 JULY 2023

WEEKLY CURRENT AFFAIRS

WWW.INSIGHTSONINDIA.COM

INSIDE

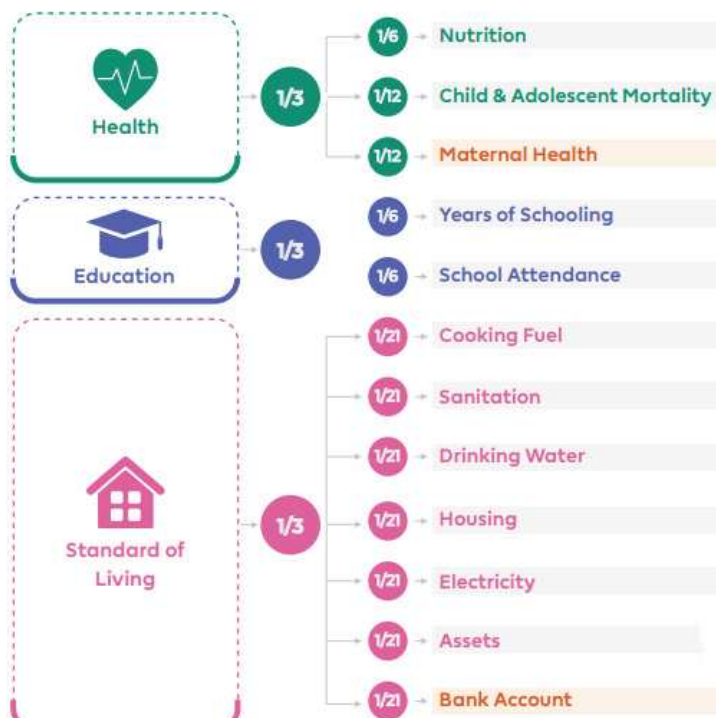
GS1

- Use of women as weapons of assault in a conflict 4

GS2

- The Collegium system 4
- Issue of succession faced by the regional political parties in India 5
- Efforts to reform the statistical system in India 6
- Breaking Barriers and Building Inclusivity - Women still minority 7
- Senior advocates in the SC 8
- Mekong Ganga Cooperation (MGC) Mechanism 9
- National Multidimensional Poverty Index 10

Indicators and their weights

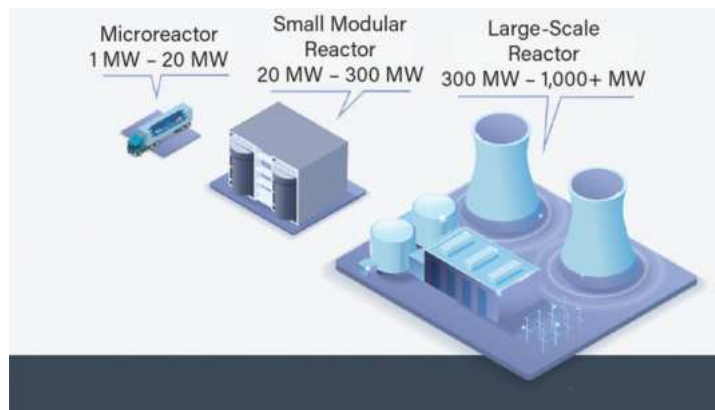


- The Rajasthan Minimum Guaranteed Income Bill 2023 11
- From Great Powers to Asia - India is raising its diplomatic game 12
- Strengthening Multilateral Development Banks: The Triple Agenda 13
- Facilitating Investment in the Sustainable Development Goals 14

GS3

- Lightning: Natural Disaster 16
- Reforms in India Railway 17
- Tax Challenges Arising from the Digitalisation of the Economy 18

- Industrial Concentration in India 19
- Small Modular Reactors (SMRs) 20



- A Roadmap to eliminate poverty in India 21
- Checking indiscriminate use of groundwater for irrigation 22

GS4

- J Robert Oppenheimer 23

CONTENT FOR MAINS ENRICHMENT

- "I am become Death, the destroyer of worlds" 23
- Cremating unclaimed bodies 24
- Why are Hollywood's actors and writers on strike? 24
- Tankai method 24

FACTS FOR PRELIMS

GS1

- Endogamy and harmful genetic variants in India 24
- Ghaggar River 25
- Bicentenary year of Nawab Wajid Ali Shah 25



Bicentenary year of Nawab Wajid Ali Shah

Context: An exhibition, heritage walk, and talk are planned in Kolkata to commemorate the bicentenary year of Nawab Wajid Ali Shah, the last king of Awadh



Mirza Wajid Ali Shah (1822-1887) was the eleventh and last King of Awadh (from 1847 to 1856). Wajid Ali Shah's first wife was Alam Ara who was better known as Khas Mahal because of her exquisite beauty.

Awadh under subsidiary alliance	Saadat Ali Khan II, the Nawab of Awadh, entered into a subsidiary alliance with the British in 1801. However, in 1856, the British took over Awadh under the Subsidiary Alliance, citing "maladministration" and "lawlessness" as reasons. As a result, Nawab Mirza Wajid Ali Shah was exiled to Garden Reach in Metiabruz, Kolkata, where he spent the remainder of his life on a pension.
Administration	He was generous, kind and compassionate towards his subjects. He took keen interest in the administration of justice, introduced reforms, and reorganised the military.
Music	Wajid Ali Shah and other composers greatly contributed to the light classical form of thumri. He is known as "Qaiser," adopted the pseudonym "Akhtarpiya" for his compositions. His ghazals can be found in <i>Diwan-i-Akhtar</i> and <i>Husn-i-Akhtar</i> . He is credited with creating new ragas like Jogi, Juhi, Shah-Pasand, among others. The text <i>Ma'danul Moosiqui</i> by Hakim Mohammad Karam Imam, a courtier of Wajid Ali Shah, serves as a valuable source of information on music in Nawabi Lucknow.
Dance	He elevated Kathak to new heights, adding artistic elements, aesthetic touches, and literature to the dance form. Wajid Ali Shah introduced two distinct forms, <i>Rahas</i> and <i>Raas</i> , where <i>Rahas</i> encompassed dramatic elements while <i>Raas</i> focused on religious themes. He choreographed and performed a dance called <i>Rahas</i> based on Kathak moves with the ladies of his court. His reign marked the establishment of the <i>Lucknow Gharana</i> , known for its graceful movements, elegance, and natural poise in Kathak dance.
Hindustani theatre	He established the renowned <i>Parikshaana</i> , where talented girls received music and dance training from expert teachers. He organized the grand <i>Jogia Jashan festival</i> , where people from all walks of life in Lucknow could participate, dressed as Yogis regardless of their caste or creed.
Literature	He supported and sponsored various poets and writers, including 'Barq', 'Ahmad Mirza Sabir', 'Mufti Munshi', 'Aamir Ahmad Amir', 'Irshad-us-Sultan', 'Hidayat-us-Sultan', 'Amanat', and Mirza Ghalib. He generously granted Mirza Ghalib an annual pension of Rupees five hundred in 1854.

Visit Insights IAS Daily Current Affairs

- Fusion of rock art at Rudragiri Hillock 25

GS2

- Digital time voucher system for political parties 26
- Bhoomi Samman" 2023 awards 26
- Panel of Vice-Chairpersons 26
- Rule 267 Vs Rule 176 of the Rajya Sabha 27
- India has a 3–5-year China+1 window 27
- NATO summit 27

GS3

- CPTPP 28



CPTPP

Context: United Kingdom has officially signed a treaty to join the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP)



Aim: By joining the CPTPP, the UK aims to deepen its trade ties in the Pacific region and diversify its trading partners beyond the EU. The agreement is expected to come into effect in the second half of 2024



About CPTPP

CPTPP also known as TPP12 or TPP-12 (signed 8 March 2018) is a trade agreement between Australia, Brunei, Canada, Chile, Japan, Malaysia, Mexico, New Zealand, Peru, Singapore, Vietnam and United Kingdom.

Aim	Reducing trade barriers and promoting economic cooperation
Background	In 2005, a trade agreement between a small group of Pacific Rim countries comprising Brunei, Chile, New Zealand, and Singapore led to the formation of the Trans-Pacific Partnership (TPP) consisting of 12 nation-states. After the withdrawal of the US (2017), the remaining eleven signatories, known as the TPP-11 , continued talks and their efforts led to the formation of CPTPP.
Significance	CPTPP removes 99% of tariffs on goods and services . It also includes commitments to combat wildlife trafficking and prevent environmental abuses such as unsustainable logging and fishing, with trade penalties for non-compliance. All countries of CPTPP are also members of the Asia-Pacific Economic Cooperation (APEC) (except UK)
About Brexit	Brexit refers to the U.K.'s decision to leave the European Union. The country formally left the EU in January 2020, after a referendum in 2016.
Discussion about UK joining CPTPP	Supporters of Brexit argue that UK membership in the CPTPP will boost economic growth , while opponents believe the benefits are relatively small compared to trade with the European Union
India on CPTPP	India did not join CPTPP as the treaty places stricter labour and environmental standards

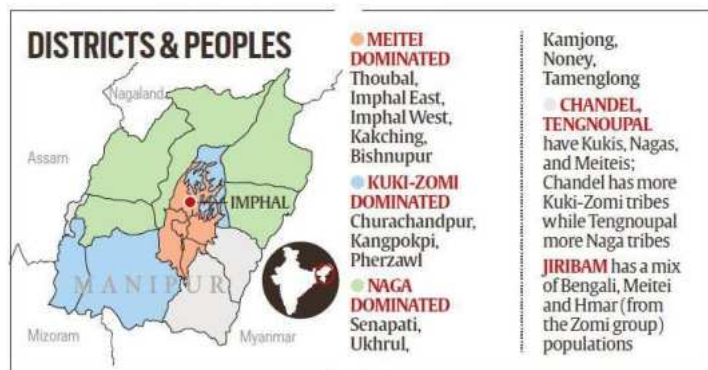
Visit Insights IAS Daily Current Affairs

- Export Preparedness Index (EPI) Report, 2022 28
- Agri Infra Fund 29
- Evolution of synthetic Genomes 29
- China event raises concern over India's only ape 29
- Local Currency Settlement System (LCSS) 30
- Crimean-Congo haemorrhagic fever (CCHF) virus 31
- Universe Expansion Dispute 31
- Low-cost perovskite solar cells 31
- RBI's SOPs to Banks for Rupee Trade 32
- Steel Slag Roads 32
- 93% DPT3 immunisation coverage in 2022: WHO 32
- Cicada species 33
- Gambusia 33
- Zombie Fires 33
- Sovereign Green Bonds 33
- Advance Authorisation Scheme 34
- Plant species that can withstand extreme dehydration 34
- Airbus C-295 aircraft 34
- Credit Guarantee Scheme for Livestock Sector 34
- Invest India 35
- Biofortified foods 35
- Fossil shows a pugnacious mammal attacking a dinosaur

- Sports Corner 35
- Wimbledon: Carlos Alcaraz 36

MAPPING

- North Korea 36
- Manipur 36



- Kerch Bridge (Crimea) 36
- Sweden 37
- East Africa Crude Oil Pipeline (EACOP) project 37
- Surat 37

GS1

USE OF WOMEN AS WEAPONS OF ASSAULT IN A CONFLICT

Context:

A video of two Kuki women being paraded naked by a mob during the ongoing clashes in Manipur is circulating on social media.

The larger question: Women's bodies have become sites of male violence, especially during communally charged conflicts.

Reasons behind this grim reality: India's social contract [an implicit agreement among the members of a society to co-operate for social benefits, by sacrificing some individual freedom for state protection] seems to be melting.

Two aspects of this meltdown:

- The systems of violence in and around Manipur.
- The structures of silence around it.

The systems of violence in and around Manipur:

- The state is witnessing civil strife.
- **Social cleavages** between Meitei and Zo-Kuki communities have turned into a **partition** with well over a hundred dead, and thousands displaced.
- **Even the state administration stands partitioned.** Meitei police officers don't operate in the hills, and Kuki-Zo officers don't operate in the Valley.
- Essentially, **India is witnessing fresh partitions** and associated armed ethnic mobilisation in Northeast India.

Such systems of violence are a by-product of Competing desires for regional hegemony - demands for access to resources and power within the Union and **vote-bank politics**.

The structures of silence:

- It relates to what feminist scholars called **systemic violence against women** in Manipur.
- It took a **leaked video and associated public shock** for Manipur police to order an investigation.

The issue of gender-based violence in conflicts:

- Unfortunately, the issue **has not received adequate attention** in the discourse on gender equality and sustainable development.
- Sexual violence in conflict zones has often been regarded as an inevitable by-product of civil strife/ war and the **perpetrators of violence have seldom been punished**.

What needs to be done?

- **Addressing the deeply entrenched patriarchal attitudes** of the administration (say, police) to improve

reporting and conviction rates.

- **Bridging the gap** between gender-based violence laws.
- **SDG 5 calls for ending violence against women and girls** in public and private spheres. As India is committed to the achievement of SDGs, **the governments need to take a tough stance** against the perpetrators of violence (in scenarios like Manipur).

Conclusion:

- India's social contract seems to be weakening because wrongdoers in power are not being held accountable.
- Whether it is Manipur or Delhi, where India's wrestling champions have been fighting for justice against sexual harassment by those in power, **the only way to deliver justice is to ensure accountability**.

Insta Links: [Violence/crime against Women](#)

Mains Links: [What are the continued challenges for women in India against time and space? \(UPSC 2019\)](#)

GS2

THE COLLEGIUM SYSTEM

Context:

The SC Collegium under CJI DY Chandrachud has transparently streamlined the appointment process of judges to the constitutional courts.

The Collegium system:

- **About:**
 - **The collegium system**, which has evolved through judgments of the SC, is the way by which judges of the SC and HCs are **appointed and transferred**.
 - **It is a five-member body**, headed by the incumbent CJI and comprises the four other senior most judges of the SC at that time.
- **Evolution - Three Judges Cases:**
 - S.P. Gupta & Others v. Union of India (1981), Advocate on Record Association v. UoI (1993) and re Presidential Reference case (1998).
 - It was established that the recommendation made by the CJI **without following the consultation process** for the appointment of SC and HC Judges is **not binding** on the government.
- **Criticism:**
 - **The system is non-transparent** since it is seen as a closed-door affair with no prescribed norms regarding eligibility criteria, or selection procedure.
 - **The system is opaque and not accountable**.

Judges do not appoint judges all over the world except India.

- **Limited role of the government**, may object to and seek clarification on the collegium's choices, but if the collegium reiterates the same names, the government is bound to appoint them.
- **Efforts to reform the collegium system:** NJAC, Memorandum of Procedure (MoP), etc.

HOW THE NJAC CAME ABOUT

2002 | Justice Venkatachaliah Committee set up by NDA-1 in its report for the first time suggested a National Judicial Commission for the appointment of judges

Aug 2014 | Govt passes NJAC

Act through a constitutional amendment

Dec 31, 2014 | Act gets Pranab Mukherjee's assent

April 13, 2015 | The NJAC Act is notified

SC Advocates on Record

Association and others filed batch of petitions in Supreme Court challenging NJAC, claiming NJAC infringed on judiciary's independence

Oct 16 | Apex court scraps NJAC Act. Back to collegium system

How has the appointment process been streamlined recently?

- **Adding a balanced mix of merit and seniority** through a selection procedure which involves meaningful discussion on and assessment of candidates' judicial acumen.
- **Recommendations of the Collegium are now notified within days by the government.**
- **The requirements for candidates' consideration** have been made public by the Collegium's resolutions.

Points under the Collegium's consideration:

- **Quality of judgments of the candidates:** A Judgment Evaluation Committee goes through the judicial work of the candidates.
 - **Justice Dipankar Dutta's** name was the first to be cleared for SC appointment by the Collegium in this manner.
- **The seniority of Chief Justices and senior puisne Judges** in their respective parent HCs as well as overall seniority of the HC Judges.
- **The merit, performance and integrity** of the judges are under consideration.
- **The need to ensure diversity and inclusion** in the SC. Diversity and inclusion means -
 - Representation of HC not/inadequately represented;
 - Appointment of persons from marginalised and backward segments of society;
 - Gender diversity (Justice Sunita Agarwal appointed as the CJ of the Gujarat HC); and
 - Representation of minorities.
- **The need to ensure the better administration of justice:** As a result, the Collegium did not bow to the request made by three HC judges against their out-of-State transfers.

Insta Links: [The impasse over the appointment of judges](#)

Prelims Links: UPSC 2019

Consider the following statements:

1. The 44th Amendment to the Constitution of India introduced an article placing the election of the Prime Minister beyond judicial review
2. Supreme Court of India struck down the 99th amendment to the Constitution of India as being violative of the independence of the judiciary

Which of the statements given above is/are correct?

1. 1 only
2. 2 only
3. Both 1 and 2
4. Neither 1 nor 2

Ans: 2

ISSUE OF SUCCESSION FACED BY THE REGIONAL POLITICAL PARTIES IN INDIA

Context:

24 years after its formation, the Nationalist Congress Party (NCP) split over the question of succession.

Similar cases:

- **The Shiv Sena, Samajwadi Party (SP)** have gone through this churn.
- **The Biju Janata Dal (BJD)** seems poised to undergo this churn.

The rise of regional parties in India:

- It coincided with the decline of Congress in the **1990s**.
- They were basically **caste-based alignments**, with the Mandal movement providing the necessary prompt.

Characteristics of regional parties in India:

- **Have a regional agenda** (concentrates on regional or local matters) and recognise a distinct religious, ethnic, cultural, or linguistic group.
- **The electoral ground** is restricted to a specific state or region.

Reasons for succession battles in several regional parties in India today:

- **Have become 'Hindu undivided families':** Consisting of all those who have directly descended from a common ancestor as well as their wives and unmarried daughters.
- **Have given up their larger purpose:**
 - Many of these parties began with the goals of promoting sub-nationalism, protecting their own caste or ethnicity and larger federal interests (DMK).
 - But over a period of time, **they have all be-**

come parties strangled in family feuds.

- **Have a centralised party structure**, *low intra-party democracy*, and are often **controlled by a single family**.
- **Have not evolved with time**: There is splintering within castes and caste identity itself has gone through a lot of change.
 - **The ideological divide is thinning**, forcing everybody to go beyond family, caste, or ethnic loyalty to create a larger purpose.

Implications of these succession battles:

With the decline of regional parties, **the challenges to a dominant party system will reduce**.

Challenges for regional parties:

- **The paradox** about regional parties is that the family is central to their survival, but the family is also a liability.
- **Absence of charismatic leaders**: For example, for the BJD, who will be the leader after Naveen Patnaik is a worrying question.

Way ahead:

- The regional parties have to come up with an **internal decision-making process** for anointing the next leader.
- These regional parties can have a **think tank** (like RSS for BJP) that sits as the arbitrator to look for an alternative when required.

Insta Links: [Political parties in India](#)

Mains Links: “The Indian party system is passing through a phase of transition which looks to be full of contradictions and paradoxes.” Discuss. (UPSC 2016)

EFFORTS TO REFORM THE STATISTICAL SYSTEM IN INDIA

Context:

The Ministry of Statistics and Programme Implementation (MoSPI) has constituted a Standing Committee on Statistics (SCoS) to **reform the statistical system in India**.

India's statistical machinery	
MoSPI	It came into existence as an Independent Ministry in 1999 after the merger of the Department of Statistics and the Department of Programme Implementation.
	It has two wings - Statistics and Programme Implementation .

The Statistics Wing	Called the National Statistical Office (NSO), it consists of the Central Statistical Office (CSO), the Computer Centre and the National Sample Survey Office (NSSO). Besides these two wings, there is the National Statistical Commission (NSC) and one autonomous Institute of National importance - the Indian Statistical Institute.
Mandate of NSO	NSO is the nodal agency for the planned development of the statistical system in the country. It coordinates the statistical work in respect of the Ministries or Departments of the Government of India and maintains liaison with international statistical organisations (UNSD, ESCAP, etc). It prepares national accounts as well as publishes annual estimates of national products and provides statistical information to assess and evaluate the changes in the growth, composition, and structure of the organised manufacturing sector. It compiles and releases the Index of Industrial Production (IIP), Conducts the Annual Survey of Industries (ASI), all-India Economic Censuses and follow-up enterprise survey.
Criticism	Bibek Debroy - the chairperson of the Economic Advisory Council (EAC) to the PM, had suggested an overhaul of the system and contended that the Indian Statistical Service has “ little expertise in survey design ”.

About the SCoS:

- **It will replace**: The Standing Committee on Economic Statistics (SCES), which was constituted in 2019 to examine economic indicators only.
- **Chairman**: India's first chief statistician and the former chairman of the NSC - **Pronab Sen**, has been named the chair of the new committee.
- **Mandate**:
 - To provide a new internal oversight mechanism for official data, and
 - To review the framework and results of all surveys conducted under the aegis of the NSO.
 - While the panel will help finalise survey results, the NSC will have the ultimate authority to approve the publication of those results.
- **Terms of reference**:
 - **To ensure more coverage**, the panel -
 - Has 10 official members and 4

non-official members who are eminent academics.

- Will look beyond economic data and advise the Ministry on technical aspects (sampling, design, methodology) for all surveys.
- To identify data gaps to be filled by official statistics, along with an appropriate strategy to plug those gaps.
- To explore the use of administrative statistics to improve data outcomes.

Concerns Related to the Indian Statistical System	
Institutional and Structural Issues	Not released timely: The government have a timetable for the release of national accounts, the Index of Industrial Production and inflation. But there are no specific timelines for the release of labour force statistics and consumption expenditure surveys
	Apprehensions regarding NSSO: Under MoSPI, it has become part of the general bureaucracy and ceases to exist as an autonomous body. Moreover, the fear is that in the absence of the oversight of independent bodies like the CSI and NSC, the statistical system may become amenable to political interference.
Methodology	Use of small surveys for estimations
	Challenges in price adjustment for GDP calculations
	The faulty approach in data collection and collation
	The incoherence of GDP data
Nature of Data	Unreliable data on the unorganised sector
	Shortcomings in MCA21 data used for GDP calculations

[Insta Links: A short history of data](#)

BREAKING BARRIERS AND BUILDING INCLUSIVITY - WOMEN STILL MINORITY

Context:

Preeti Aghalyam, the first woman to become the Director of an Indian Institute of Technology (IIT), highlighted the underrepresentation of women on IIT campuses.

- Her appointment coincides with a broader effort by various IITs to address the gender imbalance on their campuses.

The enrolment ratio of **men to women in engineering colleges in India** has improved over the years. However, the proportion of women in IITs remains low, **with some institutes having as little as 5% to 12% female representation in 2014.**

Implications of Underrepresentation of Women in Higher Education in India:

Implications	Examples
Limited Access to Opportunities	Women miss out on educational and career opportunities , limiting their potential for growth and advancement.
Gender-Based Stereotyping and Bias	Stereotypes reinforce gender roles , limiting women's choices in pursuing certain fields of study or careers.
Unequal Workforce Representation	Fewer women in higher education result in a limited pool of qualified female professionals in various sectors, leading to gender imbalance in the workforce.
Economic Disparities	Women's lower participation in higher education can contribute to the gender pay gap and economic disparities between men and women.
Lack of Diverse Perspectives	The absence of women's voices and perspectives in academia limits the development of inclusive knowledge and hinders innovation.
Reinforcement of Social Norms	The underrepresentation of women in higher education perpetuates traditional societal norms and expectations , hindering progress towards gender equality.
Missed Contributions to Research and Innovation	Society misses out on the unique talents, perspectives, and contributions that women can bring to research and innovation in various fields.

Government Schemes for Women:

	Description
Digital Gender Atlas	Ministry of Human Resource Development has prepared a digital gender atlas for advancing girls' education in India.
National Scheme of Incentive to Girls for Secondary Education (NSIGSE)	The objective of the scheme is to establish an enabling environment to reduce dropouts and to promote the enrolment of girl children in secondary schools.

Nai Manzil	An integrated education and skilling scheme in partnership with the World Bank, aimed at minority youth without a formal school leaving certificate , providing formal education and skills for better employment and livelihoods. 30% target allocation for women beneficiaries.
Naya Savera	A scheme providing financial support to students from minority communities to prepare for competitive examinations. 30% allocation for women beneficiaries.

Conclusion:

Efforts for gender parity continue as women remain a minority at IITs. While progress has been made, there is still a long way to go in improving the gender ratio at these institutions.

Insta Links: [Problems Faced by minority women in India](#)

Mains Link: [What are the continued challenges for women in India against time and space? \(Mains 2019\)](#)

SENIOR ADVOCATES IN THE SC

Context:

The SC has published new guidelines for the designation of senior advocates practising mainly in the Apex Court.

Background: The new guidelines come after the SC's ruling seeking modification in the guidelines issued by the SC (in 2018) aftermath of its **Indira Jaising ruling (2017)**.

How were advocates designated before the 2017 ruling?

- The **Advocates Act 1961** states two classes of advocates - **senior advocates and other advocates**.
- A senior advocate **must be a deserving candidate** [by virtue of his ability, standing at the Bar, or special knowledge or experience in law] in the opinion of the SC or an HC].
- It was the **Chief Justice and the judges who designate** an advocate as a 'senior' advocate.

What did the court decide in the Indira Jaising case?

- Indira Jaising (India's first woman Senior Advocate) challenged the existing process as **opaque, arbitrary, and fraught with nepotism**.
- The SC (in 2017) decided to lay down guidelines for itself and all HCs on the process of designating senior advocates.
- It decided the setting up of a **permanent committee and a permanent secretariat**.
- **Permanent secretariat** -
 - Is a body tasked with receiving and compiling all applications for designation.

- **Published** the proposal for designation on the official website of the concerned court, inviting suggestions and views.
- **Forward** these suggestions to the permanent committee for scrutiny.

- **The committee then interview the candidate** and made an overall evaluation based on a **point system** that gave marks for -
 - years of practice
 - pro-bono work undertaken
 - judgements
 - publications and
 - a personality test
- Once a candidate's name was approved, **it was forwarded to the Full Court to decide on the basis of the majority**.
- **The Full Court could also recall** the designation of a senior advocate.
- The SC had acknowledged (in its 2017 ruling) that the **guidelines are not exhaustive** and left them open for consideration by this Court.

The Guidelines to Regulate the Conferment of Designation of Senior Advocates 2018:

- These were released to **bring greater transparency** to the designation process.
- The guidelines **discouraged the system of voting by secret ballot**, except in cases where it was unavoidable.
- A **permanent committee** was created and empowered with powers of conferment.
 - **The CJI-chaired committee** was to consist of two senior-most SC judges, the Attorney General of India, and a member of the Bar nominated by the chair and other members.
 - **The Committee was to meet at least twice a year**.
- **The CJI or any other judge could recommend** the name of an advocate for designation.
- Alternatively, **advocates could submit their applications** to the Permanent Secretariat.

Issues with the 2018 guidelines:

- **The point-based system** (which awarded 40% weightage to publications, personality, and suitability) is **subjective, ineffective** and dilutes the esteem and dignity of the honour being conferred traditionally.
- **The rampant circulation of bogus journals** could be published by paying a nominal amount.
- **Discontinuation of a secret ballot** disincentivises the judges from expressing their views about the suitability of any candidate.

New vs Old guidelines		
Dimensions	2023 guidelines	2018 guidelines

Minimum age to apply for the senior advocate designation	45 years	No minimum age
How can the CJI/ a judge recommend a name?	The CJI along with any Judge of the SC may recommend in writing the name of an advocate for the designation	The CJI along with “any judge” can recommend an advocate’s name for designation
Relaxation in age limit	Can be given by the Committee/ the CJI or an SC judge if they have recommended an advocate’s name	
Points for publication	Only 5 marks will be given for the combined - publication of academic articles, the experience of teaching in the field of law, and guest lectures delivered	15 marks were set aside for publications
Weightage given to reported and unreported judgements (excluding orders that do not lay down any principle of law)	50 points	40 points

Insta Links: [Why does the Centre want to revisit the process for designating senior advocates at Supreme Court, High Courts?](#)

Prelims Links: (UPSC 2022)

With reference to India, consider the following statements:

1. Government law officers and legal firms are recognized as advocates, but corporate lawyers and patent attorneys are excluded from recognition as advocates.
2. Bar Councils have the power to lay down the rules relating to legal education and recognition of law colleges.

Which of the statements given above is/are correct?

1. 1 only
2. 2 only
3. Both 1 and 2
4. Neither 1 nor 2

Ans: 2

MEKONG GANGA COOPERATION (MGC) MECHANISM

Context:

Speaking at the 12th Mekong Ganga Cooperation (MGC) Mechanism meeting, External Affairs Minister S Jaishankar highlighted the **importance of peace and prosperity in the Mekong region** for India’s Act East policy.

About MGC

The Mekong–Ganga Cooperation was established in 2000, at Vientiane, Laos at the First MGC Ministerial Meeting. It comprises **six member countries**, namely India, Thailand, Myanmar, Cambodia, Laos, and Vietnam. The four areas of cooperation are **tourism; culture; education; transportation and communication**.

- **Aim:** Both the Ganga and the Mekong are **civilizational rivers**, and the MGC initiative aims to **facilitate closer contact among the people inhabiting** these two major river basins

About the Mekong River:

The Mekong or Mekong River is a **transboundary river in East Asia and Southeast Asia**. It is the world’s **twelfth-longest river** and the third-longest in Asia. Covering a distance of nearly 5,000 km from its source on the Tibetan Plateau in China to the Mekong Delta, the river flows through six countries: China, Myanmar, Thailand, Lao PDR, Cambodia, and Viet Nam.

About the Lower Mekong region:

The lower Mekong region refers to the **area surrounding the lower section of the Mekong River**, which runs through Southeast Asia. It encompasses countries such as Cambodia, Laos, Thailand, and Vietnam.

The historic and contemporary significance of the lower Mekong region for India:

Historic Significance	Contemporary Significance

Cultural Heritage: The lower Mekong region holds a rich historical and cultural heritage that has connections with India's ancient river civilizations.	Economic Cooperation: The Mekong region plays a vital role in India's Act East policy for fostering economic growth and shared opportunities.
Geographical Ties: The region's geographical proximity to India has facilitated trade, cultural exchanges, and historical interactions.	Comprehensive Connectivity: India is committed to enhancing connectivity within the region through infrastructure projects like the India-Myanmar-Thailand Trilateral Highway and Motor Vehicles Agreement
Cultural Exchange: The Mekong region has been a hub for cultural exchange between India and the ASEAN countries , fostering mutual understanding and friendship.	Development Partnerships: India aims to collaborate with the Mekong sub-region countries in various developmental initiatives, addressing contemporary aspirations and promoting stability.
Historical Trade Routes: The lower Mekong region has historically served as a significant trade route, facilitating commerce and exchanges between India and Southeast Asia.	Tourism and Education: The Mekong region offers opportunities for tourism, educational exchanges, and cooperation in sectors like science and technology.

Insta Links: [Act East Policy](#)

Mains Links: India's northeastern region is already a main pillar of the Act East policy but it can also be a key component of Indo-Pacific policy and strategy. Comment. (15M)

Prelims link:

Q. In the Mekong-Ganga Cooperation, an initiative of six countries, which of the following is/are not a participant/participants?

1. Bangladesh
2. Cambodia
3. China
4. Myanmar
5. Thailand

Select the correct answer using the code given below:

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

Ans: C

POVERTY INDEX

Context:

The NITI Aayog released the 'National Multidimensional Poverty Index: A Progress Review 2023'.

Key highlights:

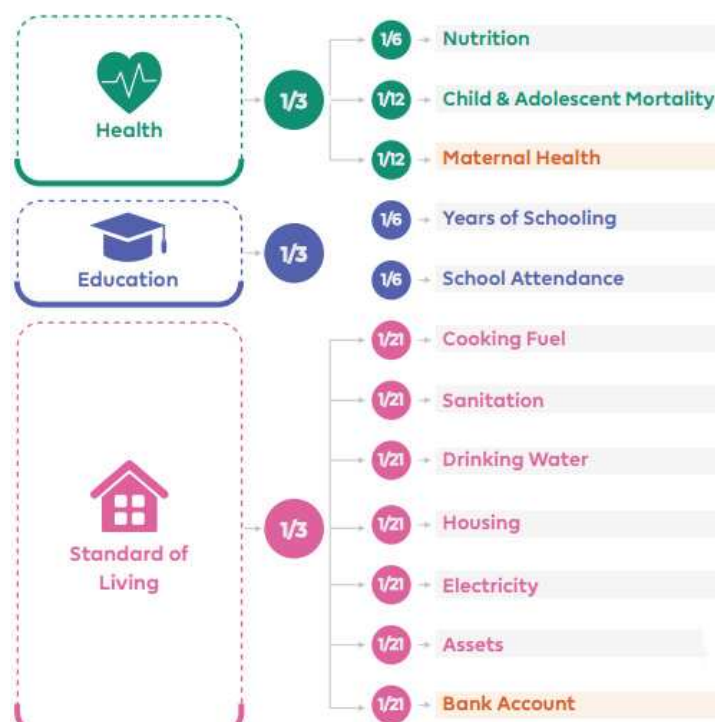
- India has registered a **decline** in the number of multidimensionally poor from **24.85% in 2015-16 to 14.96% in 2019-2021**.
- In absolute terms, **~13.5 crore Indians escaped poverty** during the five-year time period.
- Still, one in seven Indians is multidimensionally poor.

What is the National Multidimensional Poverty Index (MPI)?

- With its first edition released in 2021, the project is aimed at **deconstructing** the Global MPI and **creating a globally aligned and yet customised** India MPI.
- It seeks to draw up **comprehensive Reform Action Plans** with the larger goal of **improving India's position** in the **Global MPI rankings**.
- NITI Aayog is the nodal agency** for the National MPI, ranking States and UTs based on their performance.

Methodology:

Indicators and their weights



- It captures **overlapping deprivations** in health, education and living standards to ascertain multidimensional poverty.
- Each of the specific parameters (under 3 broad categories) is assigned a value to calculate what is called a **'deprivation score'**.
- The deprivation score is the sum of the weighted status of all the indicators for an individual - **if it is**

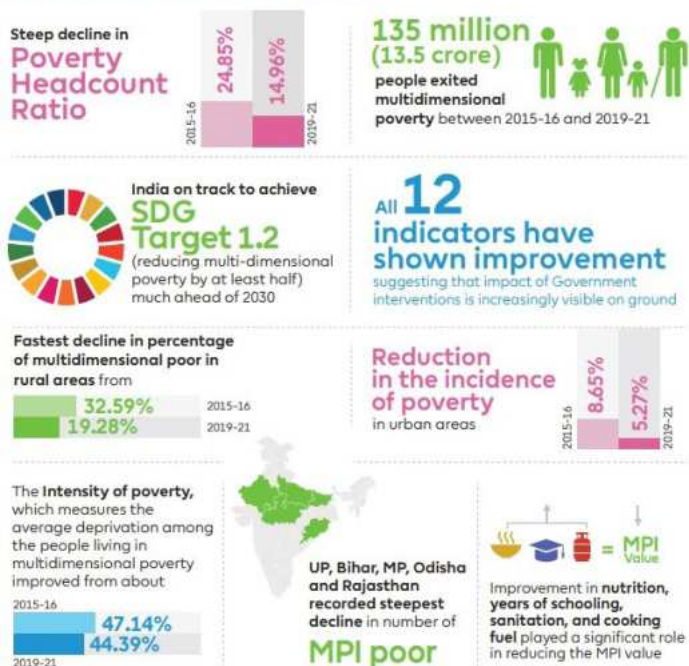
NATIONAL MULTIDIMENSIONAL

more than 0.33, only then an individual is considered multidimensionally poor.

- The primary data source to arrive at these figures was **National Family Health Survey-5 (NFHS-5)**.

Highlights of the National MPI Report 2023 (2nd Edition):

Highlights: MPI Progress Report 2023



- **Which indicators have reduced India's multidimensional poverty?** Improvements in indicators like access to cooking fuel, sanitation, drinking water, and bank accounts.
- **Where more improvements are needed?** Indicators like nutrition and access to education, where the improvement has only been marginal.

Performance of various states:

- **BIMARU states:** The number of people in poverty in rural areas witnessed the fastest decline (from 32.59 to 19.28%), owing to improvements in states like Bihar, UP, MP, Odisha, and Rajasthan.
- **Number of states with less than 10% of people living in multidimensional poverty:**
- **Doubled between 2016 and 2021 from 7** (Mizoram, HP, Punjab, Sikkim, TN, Goa, and Kerala) **to 14** (Telangana, Andhra Pradesh, Haryana, Karnataka, Maharashtra, Manipur, and Uttarakhand).
- **Except for Bihar**, no other state in India has more than one-third of its population living in multidimensional poverty.

Comparing with Global MPI 2023:

- In 2005/2006, about 645 million people were in multidimensional poverty in India, with this number declining to about 370 million in 2015/2016 and **230 million in 2019/2021**.
- Thus, **415 million** poor people moved out of poverty from 2005/2006 to 2019/2021.
- Incidence fell from 55.1 to **16.4%**.

- **Deprivation in all indicators declined.**

What is keeping Indians multidimensionally poor?

- **Within the health category**, 3 sub-indicators - nutrition, child and adolescent mortality, and maternal health - showed only moderate improvement.
 - **Lack of proper nutrition contributed close to 30%** - the highest - in the overall calculation of India's MPI.
- **Other indicators** that did not record a significant decline include lack of years of schooling, inadequate access to maternal health services and less-than-desired school attendance.
- **Within the standard of living category**,
 - While there has been a significant improvement in access to cooking fuel, **~44% of India's population is still deprived of it**.
 - While sanitation numbers have improved, **over 30% of the population is deprived when it comes to sanitation services**.
 - **Access to housing** also remained to be an indicator where the improvement was only marginal. standard of living criteria.

Government's flagship programmes:

- **Health and Nutrition:** Poshan Abhiyan and Anaemia Mukh Bharat have contributed to reduced deprivations in health.
- **Sanitation:** Swachh Bharat Mission (SBM) and Jal Jeevan Mission (JJM) have improved sanitation across the country.
- **Cooking fuel:** PM Ujjwala Yojana (PMUY) has positively transformed lives.
- **Other initiatives:** Initiatives like Saubhagya (electricity), PM Awas Yojana (housing), PM Jan Dhan Yojana (banking), and Samagra Shiksha (education).

Conclusion:

Consistent implementation across a diverse set of programmes and initiatives that have strong interlinkages will lead to a further reduction in deprivations across multiple indicators.

Insta Links: [Multidimensional Poverty Index](#)

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

THE RAJASTHAN MINIMUM GUARANTEED INCOME BILL 2023

Context:

The Rajasthan Minimum Guaranteed Income Bill 2023 has been recently tabled by the Rajasthan government.

About the Bill:

Objective: In order to provide individuals or households with a minimal additional guaranteed income in the form of a guaranteed wage/pension, the bill would establish entitlement-based social security.

Salient provisions:

- **Minimum guaranteed income:**
 - Each adult citizen of the state has been guaranteed a **minimum income for 125 days a year**.
 - This will be provided through two schemes,
 - **In the urban areas** through the Rajasthan government's flagship Indira Gandhi Shahri Rozgar Guarantee Yojana.
 - **In the rural areas** through the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA).
- **Guaranteed employment:**
 - **The minimum wages** should be paid weekly or in any case not later than a fortnight to **ensure the right to employment**.
 - **The Program Officers** (BDO in rural and an Executive Officer of the local body in urban areas) shall ensure that the work site is **within a radius of 5 Km** of where the job card is registered.
 - The applicant is entitled to an **unemployment allowance** if the program officer fails to offer work within 15 days of receiving the application.
- **Guaranteed social security pension:** The government will provide eligible categories (aged, disabled, widows, and single women) with a **minimum pension of Rs 1,000**, which will be **increased at the rate of 15% each year**.

Significance of the Bill:

- The Bill contains many firsts in the country. **For example**, guaranteeing minimum employment and pensions by law distinguishes it from cash transfer schemes.
- The Bill is part of a bouquet of schemes and measures undertaken by the Rajasthan government to **combat inflation with an eye on the polls later this year**.

Challenges towards implementation:

- **Identification of eligible beneficiaries** with minimum inclusion and exclusion errors.
- **Financial burden**, as the government anticipates an additional expenditure of Rs 2,500 crore per year, which may increase with time.

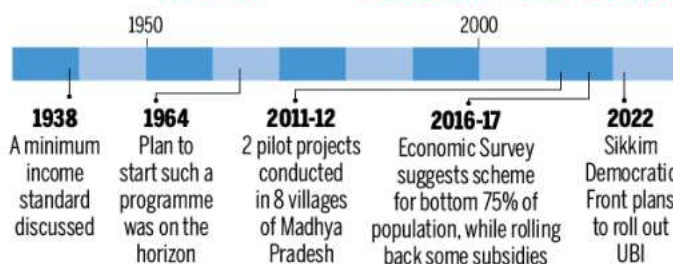
Conclusion:

- The true measure of any society can be found in how

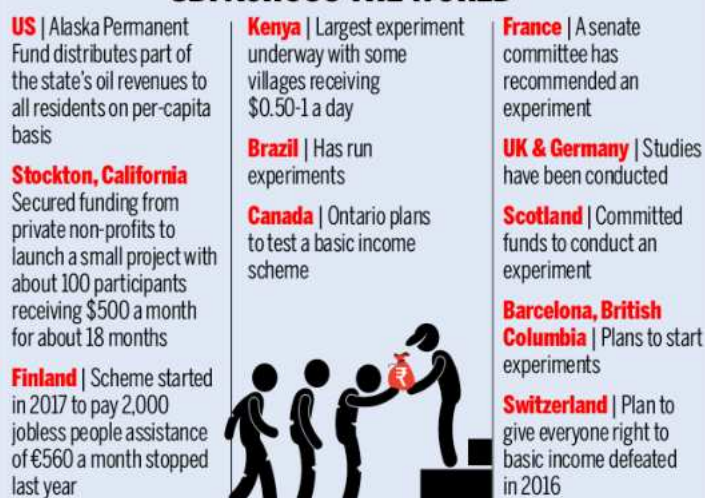
it treats its most vulnerable members (Gandhiji).

- It is therefore a **moral responsibility** of every government to ensure the welfare of vulnerable/ disadvantaged people.

INDIA'S TRYST WITH INCOME SUPPORT



UBI ACROSS THE WORLD



Insta Links: [Universal basic income](#)

Mains Links: The Universal Basic Income, the implementation of which has repeatedly been debated in India, seeks to alleviate poverty. Critically discuss the possibility of UBI in India. (15M)

FROM GREAT POWERS TO ASIA - INDIA IS RAISING ITS DIPLOMATIC GAME

Context:

The Indian PM's decision to stop in Cairo (Egypt) on his way back from Washington and Abu Dhabi (UAE) as he came home from Paris suggests India is looking for greater engagement in Africa, Asia and the waters (Indo-Pacific) that connect them.

Other similar engagements: India's External Affairs Minister is currently engaging (in Jakarta and Bangkok) with -

- The Association of South East Asian Nations (ASEAN)

AN),

- The ASEAN “plus one” meeting,
- The East Asia Summit (EAS),
- The ASEAN Regional Forum (ARF),
- The Forum for Mekong Ganga Cooperation (MGC), and
- The Bay of Bengal Initiative for Multi-sectoral Technical and Economic Cooperation (BIMSTEC).

The focus of these engagements:

- **India’s neighbourhood figured prominently:**
 - For example, the Indian PM and French President issued a declaration on the **Indo-Pacific Roadmap** for wide-ranging co-operation in countries of **Africa, the Indian Ocean Region, South Asia, Southeast Asia and the Pacific**.
 - Similarly, the joint statement issued by the Indian PM and the US President included a section on the strategic collaboration in the Indo-Pacific through the **Quad**.
- **To boost cooperation in bilateral, plurilateral and multilateral arrangements:** Like the Indian Ocean Rim Association, the Indian Ocean Naval Symposium, the Indian Ocean Commission, the Djibouti Code of Conduct, and the ASEAN-led institutions.

Why are these engagements not business as usual in Indian diplomacy?

- **India’s relations with its Asian neighbourhood** since independence were **treated as separate** from Delhi’s engagement with the great powers.
 - It was based on the proposition that India must keep the major powers out of the region **to create an “area of peace” in Asia**.
 - However, Delhi neither had the power to stop the great powers from coming into the region nor prevent its Asian neighbours from aligning with outside powers.
- The main criterion for membership in the **non-aligned movement (NAM)** is that NAM members should not have deep military-strategic cooperation with great powers.

Implications of these policies:

- **Violated the essence of international politics** - the sovereign will protect themselves with whatever resources s/he can mobilise and can’t put ideology ahead of survival.
- Delhi also ignored that most threats to a sovereign arise from **problems with neighbours**.

When did things start changing?

- After the end of the Cold War and the new compulsions on India to liberalise its economy.
- **India’s new focus** was on trade and investment and connectivity in relations with its neighbours in Asia that were long neglected.

- **Delhi also broke the rule of keeping political distance** from the major powers.

What led to recent changes in Indian diplomacy?

- **Deterioration in India-China relations:**
 - As a result, Delhi embraced the Indo-Pacific framework and the **Quad** initiated by Japan and supported by the US in East Asia.
 - **To the West**, India joined Israel, UAE, and the US to launch the so-called **I2U2 forum**.
 - **India’s strategic partnership with the Western powers is rising** compared to its engagement with **Russia and China**.

Conclusion:

- Delhi now takes an **integrated view of its interests** and pursues them through new and cross-cutting forums (for example, the Quad and the ASEAN are seen as complementary to each other).
- As India becomes a major economic entity with significant geopolitical force, its ability to shape the intersection between its extended neighbourhood and the world will rapidly grow.

Insta Links: [Diplomacy, with a change in terms of reference](#)

Mains Links: [How will I2U2 \(India, Israel, UAE and USA\) grouping transform India’s Position in global politics? \(UPSC 2022\)](#)

STRENGTHENING MULTILATERAL DEVELOPMENT BANKS: THE TRIPLE AGENDA

Context:

An Independent Expert Group (IEG) that was commissioned by the Indian G20 Presidency has released the ‘Strengthening Multilateral Development Banks: The Triple Agenda’ report.

What are Multilateral Development Banks (MDBs)?

- An MDB is an **international financial institution** consisting of member nations from developed and developing countries.
- **MDBs provide loans and grants** to member (especially poor/ developing) nations **to fund projects that support their social and economic development**.

The emergence of MDBs:

- **At the end of WWII**, delegates from 44 countries met in Bretton Woods (US) to agree upon a series of new rules for international cooperation and reconstruction.
- This led to the creation of the **IMF and World Bank Group (WBG)** in 1944.

- The WB was responsible for providing **financial assistance for the post-war reconstruction and economic development** of the less developed countries.
- **While the WBG is the oldest and the largest MDB**, there are ~15-16 prominent MDBs and Regional development banks (RDBs) today.

The role played by MDGs:

- MDBs have a key role to support the needed reforms and resources.
- **They work with governments and the private sector** to create the conditions for investment and transformation.
- They are the most effective institutions **to provide low-cost, long-maturity financing**, to mitigate and share risks (in the most efficient way) faced by private investors.

Challenges faced by MDBs:

- **No longer suited to address the emerging global challenges:** They lack resources, cultural ethos, methods and will to address the challenges like **climate change and pandemics**.
- **They are in a state of stagnation:** Trapped in their procedures, approach and methods of work and resistant to structural changes.
- Therefore, to transform development, the MDBs will have to transform themselves.

Triple agenda to harness the potential of MDBs:

The three elements of this agenda are:

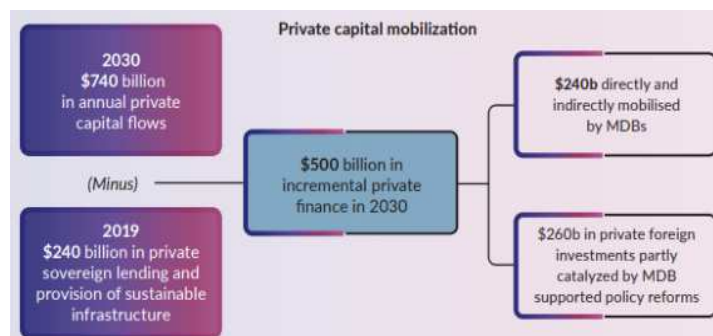
- Adopting a triple mandate of eliminating extreme poverty, boosting shared prosperity, and contributing to global public goods;
- Tripling sustainable lending levels by 2030; and
- **Creating a third funding mechanism** which would permit flexible and innovative arrangements for purposefully engaging with investors willing to support elements of the MDB agenda.

How can it be achieved?

- Effective implementation of the triple agenda **requires important changes in the ways that MDBs operate**.
- **MDBs must become effective agents** in all developing countries for integrating development and climate agendas.
- **They must work with governments and the private sector** to reduce, share and manage risks and thereby bring down the cost of capital.
- **They must change their culture**, become more client-responsive, and take more risks.
- **Timelines** for project preparation should be shrunk and **procedures** rationalised.
- They must also increase the scale and nature of their activities.

Way ahead:

- One of the greatest opportunities for transformation is in **MDB's engagement with the private sector**.
- **The MDB system must become more than the sum of its individual entities**. Their strength has come from **heterogeneity**, which permits innovations in different parts of the system.



Conclusion:

While the reform agenda needs to be decisively put on track, there is a need for an independent monitoring group to encourage the full implementation of recommendations and report to G20 on progress.

Insta Links: [Reforming Multilateral Development Banks](#)

Mains Links: The World Bank and the IMF, collectively known as the Bretton Woods Institutions, are the two inter-governmental pillars supporting the structure of the world's economic and financial order. Superficially, the World Bank and the IMF exhibit many common characteristics, yet their role, functions and mandate are distinctly different. Elucidate (UPSC 2013)

FACILITATING INVESTMENT IN THE SUSTAINABLE DEVELOPMENT GOALS

Context:

The UNCTAD released a new publication - "Facilitating Investment in the Sustainable Development Goals".

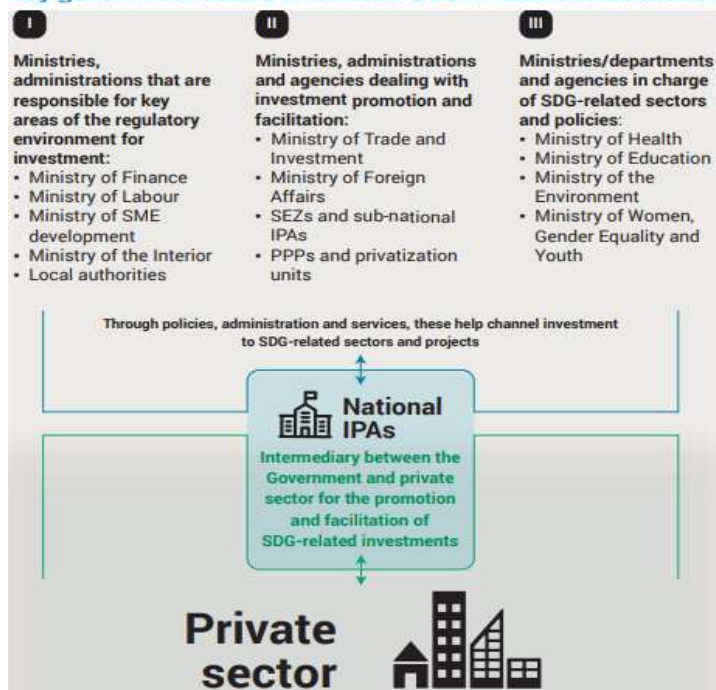
About the publication: It is part of UNCTAD's investment advisory series, which provides practical advice and case studies of best policy practices for **attracting FDI that contribute to sustainable development**.

Highlights of the publication:

- **To shore up funding for the UN SDGs**, countries need more proactive and tailored services for investors.
- **An estimated \$4 trillion** is required in developing countries annually to achieve the SDGs. This can be made possible through foreign investment.
- **The role of the investment promotion agencies (IPAs)** can be significant, as they are the focal point for government-wide efforts to facilitate foreign in-

vestment.

Key government actors involved in SDG investment facilitation



Investment promotion vs facilitation:

- **Investment promotion** is meant to attract potential investors that have not yet selected an investment destination.
- Whereas facilitation starts at the pre-establishment phase **when an investor shows interest in a location**.

Why does investment facilitation matter?

- **Investment facilitation aims** at making it easier for investors to establish and expand their investments, as well as conduct their day-to-day business in host countries.
- **This can happen by providing** relevant information, making rules and regulations more transparent and streamlining administrative procedures for investors.

How can IPAs bolster SDG implementation through investment facilitation?

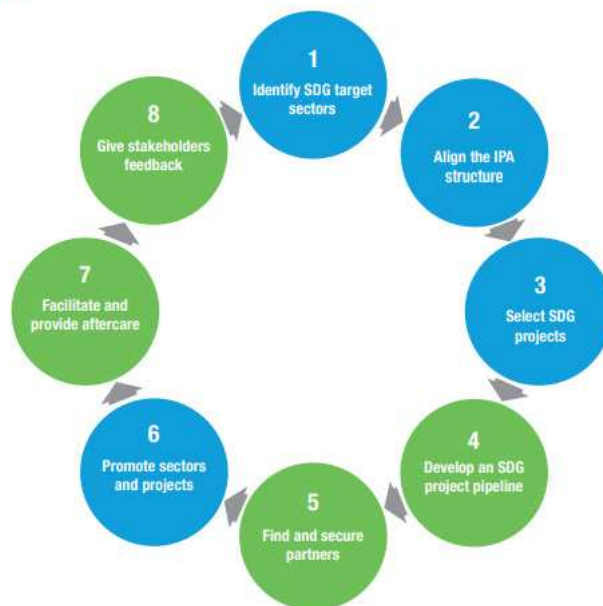
- **By ensuring** that investment facilitation services are inclusive. This will address the specific needs and opportunities of SDG-related sectors, and specific investor groups.
- When establishing a project, **IPAs can assist in filling in the information gap** by pointing investors to potential partners and incentive programmes.
- **They can forge new partnerships** with local governments and national ministries dealing with SDG-related investment opportunities.
- To stay competitive in a digitalised economy post-COVID-19, **IPAs have increasingly turned to digital platforms** to conduct many of their promotional and facilitation services.

Challenges:

- While sustainable investment continues to grow, such financing remains heavily concentrated in the world's richest economies.
- **Most of it goes to sectors related to climate change adaptation** (renewable energy), and far less towards sectors such as health, education, water and sanitation.

Way ahead:

The SDG investment promotion cycle with typical investment facilitation activities



- **Developing SDG project pipelines** by prioritising sectors where funding is needed the most.
- **Defining related targets** and preparing relevant investment project profiles.
- **There is a need for stronger knowledge management** of insights and lessons learned on SDG investment.

Best practice - Invest India:

- **The IPA** has an online Industrial Land Bank that showcases all available land in several subregions that can be used for development.
- The agency is in the process of **aggregating** the tool at the national level.

Conclusion:

Investment is particularly important for SDGs-related investment, which often requires more proactive and more tailored services for investors than traditional investment.

Insta Links: [India, its SDG pledge goal, and the strategy to apply](#)

GS3

LIGHTENING: NATURAL DISASTER

Context:

The Indian Union government is **reluctant to declare lightning a natural disaster**, as it believes that deaths caused by lightning can be prevented through awareness of safety measures.

- India currently has an early warning system for lightning, providing forecasts from five days to up to three hours in advance.

Some states like Bihar and West Bengal have been urging the government to classify lightning deaths as natural disasters. If declared, victims would be eligible for compensation from the State Disaster Response Fund (SDRF), with the central government contributing 75% to the fund.

Status of death due to lightning: According to data from the National Crime Records Bureau (NCRB), lightning strikes caused 2,880 deaths in 2021, accounting for 40% of all accidental deaths caused by natural forces.

What is a Disaster?

A disaster is a result of **natural or man-made causes that leads to sudden disruption of normal life**, causing severe damage to life and property to an extent that available social and economic protection mechanisms are inadequate to cope.

In India, the criteria for declaring a disaster as a natural disaster are typically based on the guidelines provided by the National Disaster Management Authority (NDMA).

Criteria for Declaring a Natural Disaster in India:

	Description
Non-Anthropogenic	The disaster should not be primarily caused by human activities or interventions and should result from natural phenomena beyond human control.
Impact	The disaster should cause significant damage, loss of life, or disruption to the environment, infrastructure , or socio-economic activities, requiring specialized response and recovery measures.
Verification	The occurrence and impact of the disaster should be verified and confirmed by relevant government authorities , scientific institutions, or disaster management agencies.

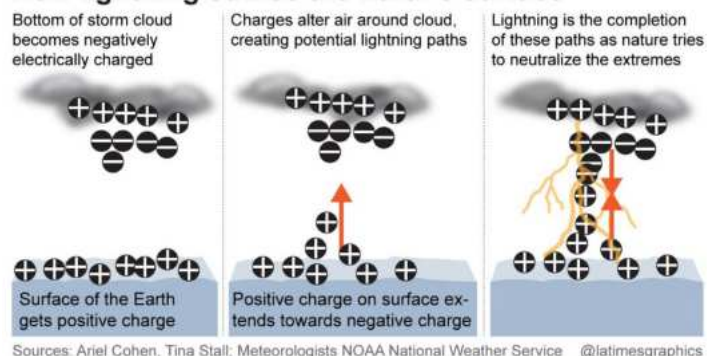
Recognition

The disaster should be recognized as a natural disaster by the **concerned state or central government authorities** responsible for disaster management.

About Lightning:

- It is a **very rapid and massive discharge of electricity into the atmosphere**. It is the process of occurrence of a natural 'electrical discharge of very short duration and high voltage between a cloud and the ground or within a cloud', accompanied by a bright flash and sound, and sometimes thunderstorms.

How lightning strikes the Earth's surface



Impacts of Lightning	Description
Human Casualties	Between 1972 and 2019 , around 90,632 people were killed due to lightning strikes. Lightning is the biggest contributor to accidental deaths due to natural causes.
Agriculture Sector	Frequent lightning strikes adversely impact small and marginal farmers . Around 77 per cent of farmers are killed due to lightning as they work in agricultural fields during the Kharif cropping season in the monsoon period.
Rural Areas	Mainly, rural and forest areas are the most vulnerable due to lightning because of the presence of water bodies and tall trees , with almost 96 per cent of deaths occurring in rural areas compared to urban areas . Regarding deaths due to lightning, the population in rural areas is more vulnerable than in urban areas.
Tribal Population	The Annual Lightning Report 2020-2021 confirms that 60-70 per cent of deaths occurred in tribal populations due to lightning in Jharkhand, Odisha, Madhya Pradesh, West Bengal, and other states.
Other Sectors	Lightning also adversely impacts the aviation, power, and communication sectors .

Insta Links: [How lightning strikes?](#)

REFORMS IN INDIA RAILWAY

Context:

The launch of the **Vande Bharat trains** has received attention, but overall improvements in **railway services** are necessary.

Challenges hindering the development of Railways in India:

- **Congested networks:** Overstretched infrastructure with 60% plus routes being more than 100 per cent utilized, leading to a reduction in the average speed of passenger and freight trains.
- **Efficiency:** Low efficiency of the Railways in terms of the human resources it employs, and their capacity.
- **The decline in the growth of internal revenue generation:** A decline in the growth of internal revenue generation has meant that Railways has been funding its capital expenditure through budgetary support from the central government and borrowings.
 - While the support from the central government has mostly remained consistent, Railways' borrowings have been increasing.
- **Centralised decision making:** Currently, decision-making in Railways is centralised. The Railway Board has the powers of policy-making, operations, and regulation. Railway zones have very limited powers with regard to raising their own revenue.
 - Therefore, they are unable to contribute more effectively towards improving Railways' revenue.
- **Safety and poor quality of service delivery:** There have been a number of accidents and safety issues. However, it has declined off late.
 - Poor cleanliness of trains and stations, delays in booking/train departures and arrivals and in booking tickets are key issues.
- **Competition from the Aviation Industry:** Due to an increased quality of life and rapid lifestyle changes necessitated by an increase in personal disposable income, the Indian railways are also facing stiff competition from airlines as a means of transportation and travel which does not bode well for the railways.
- **A vicious cycle for Railways:** Poor finances of Railways had led to low investment in infrastructure. Low investment means Railways' infrastructure and services take a hit (resulting in low speed, delays, and safety issues).
 - Poor infrastructure and services result in loss of remunerative business for Railways which leads to further deterioration of finances.

Measures taken by Indian Railways:

Measure	Description
---------	-------------

New Trains	<ul style="list-style-type: none"> • The benefits of the Vande Bharat trains include stimulating local manufacturing and providing an upgraded travel experience • Vistadome Trains: Running in most scenic routes and improves tourism
Special Freight Train Operations Scheme	Allows private enterprises to run freight trains from their private terminals, leading to speedier cargo evacuation.
Mission Raftaar	Aims to double the average speed of freight trains and increase the average speed of Superfast/Mail/Express trains by 25 kmph.
Amrit Bharat Station Scheme	Aims to equip stations with facilities inspired by the mega-upgradation of marquee stations such as New Delhi and Ahmedabad, but at a lower cost.
Indian Railway Management Service (IRMS)	Marks a paradigm shift in the management of Indian Railways, aiming to rationalize the top-heavy bureaucracy.
TCAS (Train Collision Avoidance System)	An indigenously developed system to minimize accidents caused by human error.
Measures to expedite project commissioning	<ul style="list-style-type: none"> • Assured finance through extra-budgetary resources for throughput enhancement works. • Emphasis on proper project preparation, advanced land acquisition, EPC contracts, mechanization in construction, and intensive project monitoring to increase the pace of commissioning.

Role of National Rail Plan (NRP) for 2030:

Indian Railways have recently prepared a National Rail Plan (NRP) for India – 2030 to create a 'future ready' Railway system by 2030. The objective of the Plan is to create capacity ahead of demand, which in turn would also cater to future growth in demand right up to 2050.

Features of the plan:

Feature	Description
Focus on freight:	Increase the modal share of Railways in freight to 45% by 2030.
	Substantially reduce transit time by increasing the average speed of freight trains to 50 kmph.

National Rail Plan, Vision 2024:	Accelerated implementation of critical projects by 2024.
	100% electrification and multi-tracking of congested routes.
	Upgradation of speed to 160 kmph on Delhi-Howrah and Delhi-Mumbai routes.
	Upgradation of speed to 130 kmph on all other Golden Quadrilateral-Golden Diagonal (GQ/GD) routes.
	Elimination of all Level Crossings on GQ/ GD routes.

Conclusion

The need of the hour is to find a balanced solution that would incorporate the pros of both private and government enterprises and enhance the image of Indian Railways as it continues to serve the world's largest democracy.

Insta Links: [Growth in Indian railways](#)

Mains Links: [Why is Public Private Partnership \(PPP\) required in infrastructure projects? Examine the role of the PPP model in the redevelopment of Railway Stations in India. \(UPSC 2022\)](#)

TAX CHALLENGES ARISING FROM THE DIGITALISATION OF THE ECONOMY

Context:

138 members of the OECD/G20 Inclusive Framework on Base Erosion and Profit Shifting (BEPS) - representing over 90% of global GDP - agreed to an Outcome Statement.

BEPS:

- It refers to corporate tax planning strategies used by multinationals to shift profits from higher-tax jurisdictions to lower or no-tax jurisdictions.
- The OECD defines BEPS strategies as **exploiting gaps and mismatches in tax rules**. It erodes the tax base (costing countries USD 100-240 billion in lost revenue annually) of the higher-tax jurisdictions.
- As developing countries** have a higher reliance on corporate income tax, they suffer from BEPS disproportionately.
- Working together within the **OECD/G20 Inclusive Framework on BEPS**, over 135 countries and jurisdictions are collaborating on -
 - The implementation of measures to tackle tax avoidance,
 - Improving the coherence of international tax rules and
 - Ensuring a more transparent tax environment.

The objective of the Outcome Statement:

It delivered a package to further implement the Two-Pillar Solution to Address the Tax Challenges Arising from the Digitalisation of the Economy.

Two-Pillar Solution/ Global Anti-Base Erosion (GloBE) rules:

These rules were agreed upon in 2021 by 137 countries and jurisdictions under the OECD/G20 Inclusive Framework on BEPS.

KEY ELEMENTS OF THE TWO-PILLAR SOLUTION

Pillar One	Pillar Two
Taxing rights over 25% of the residual profit of the largest and most profitable MNEs would be re-allocated to the jurisdictions where the customers and users of those MNEs are located	GloBE rules provide a global minimum tax of 15% on all MNEs with annual revenue over 750 million euros
Tax certainty through mandatory and binding dispute resolution, with an elective regime to accommodate certain low-capacity countries	Requirement for all jurisdictions that apply a nominal corporate income tax rate below 9% to interest, royalties and a defined set of other payments to implement the "Subject to Tax Rule" into their bilateral treaties with developing Inclusive Framework members when requested to, so that their tax treaties cannot be abused.
Removal and standstill of Digital Services Taxes and other relevant, similar measures	Carve-out to accommodate tax incentives for substantial business activities
The establishment of a simplified and streamlined approach to the application of the arm's length principle in specific circumstances, with a particular focus on the needs of low capacity countries.	

Significance of 2-Pillar Solution:

- It will define the multinational enterprises (MNEs) within the scope of the minimum tax.
- It will set out a mechanism for calculating an MNE's effective tax rate on a jurisdictional basis.
- It will impose the top-up tax on a member of the MNE group in accordance with an agreed rule.
- It will provide stability** for the international tax system, making it fairer and work better in an increasingly digitalised and globalised world economy.

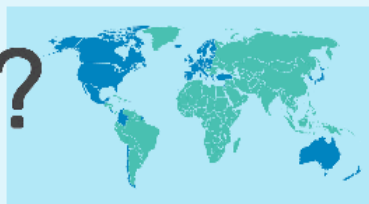
The Summary of the Outcome Statement:

- A text of a Multilateral Convention (MLC)** developed by the Inclusive Framework, which allows jurisdictions to reallocate and exercise a domestic taxing right over a portion of MNE residual profits.
- A proposed framework** for the simplified and streamlined application of the **arm's length principle**.
- The Subject-to-Tax Rule (STTR)** together with its implementation framework, will enable developing countries to update bilateral tax treaties to "tax back" income.
- A comprehensive action plan** will be prepared by the OECD to support the swift and coordinated implementation of the Two-Pillar Solution.

About OECD:

What Is the OECD?

(Organization for Economic Cooperation and Development)



• It aids developing countries outside membership and promotes reform

• It is an association of 38 nations in Europe, the Americas, and the Pacific

• It helps member countries formulate economic and social policies

• Members and key partners represent 80% of world trade



the balance

- It is an **intergovernmental organisation** with **38** Member countries, founded in **1961** (under the Rome Treaties of 1957) to stimulate economic progress and world trade.
- It is a forum whose member countries describe themselves as **committed to democracy and the market economy**.

Insta Links: [Base Erosion and Profit Shifting](#)

Prelims Links: UPSC 2016

Q. The term 'Base Erosion and Profit Shifting' is sometimes seen in the news in the context of

1. mining operation by multinational companies in resource-rich but backward areas
2. curbing of tax evasion by multinational companies
3. exploitation of genetic resources of a country by multinational companies
4. lack of consideration of environmental costs in the planning and implementation of developmental projects

Ans: 2

INDUSTRIAL CONCENTRATION IN INDIA

Context:

The biggest of India's big businesses seem to be thriving.

Data regarding India's big businesses: According to a former RBI Deputy Governor's report,

- **The share of assets** in the non-financial sectors owned by the **Big-5 business groups** has risen from 10% to 18% between 1991-2021.
- **Whereas the share of the next five** has fallen from 18% to less than 9%.

What causes this industrial concentration?

- **Functioning of markets:** Given asset-income inequality and differential power among economic agents, markets do not promote competition but concentration and centralisation.

The dangers of such a rapid rise in industrial concentration:

- Stifles competition
- Contributes to inflation or profiteering, through the manipulation of costs and prices.
- **Influence institutions of democracy**, such as the capture of the media.
- Dilutes the role that civil society can play as a countervailing power.
- In time, **leads to undue corporate influence over political processes** and the formulation of policy.
- Tendencies of **state capture**.
- Fosters extreme asset and income **inequality**.

How can this be minimised? By regulating markets to physically prevent the growth of dominant businesses and excessively large conglomerates or even break up those that are seen as too big for comfort.

Challenges towards regulating markets:

- **The state is not independent of the influence of big businesses:** The distance between the state and private capital has narrowed hugely, leading to the current situation in which the state promotes big business rather than regulates or curbs the latter.

Three trends have signalled this narrowing of political distance:

- **The embrace of neoliberalism** by powerful voices within and outside the state.
 - This implied the adoption of the view that the role of the state is **not to regulate private capital but to facilitate its growth** to foster competition and all-around economic progress.
 - However, the reverse has happened. **Examples** are in areas such as telecommunications and civil aviation.
- The propagation of the view that the state must help strengthen domestic big business.
 - State policy, diplomacy and public resources had to serve as instruments for the purpose.
 - **While liberalisation opened up Indian markets**, and subjected much of Indian business to global competition, **state intervention (like subsidies) was modified to protect and promote sections of big business**.
- **The refusal to reduce the influence of money in politics.**
 - Over time, the policy has been changed to **legitimise corporate donations to political parties**, including through the infamous **electoral bonds scheme**.
 - Thus, big business has turned out to be a prerequisite for garnering the resources needed to **manage elections and win electoral support**.

What is frightening in the current situation?

- These tendencies have coalesced into a strategy of strengthening Indian business as part of promoting the **national interest**.
- Any dissent against centralisation and concentration is being suppressed by the state in the name of national interest.

Way ahead:

- **Democracies have battled** hard to force governments to maintain some distance from private capital in general and big business in particular.
- **A broad alliance of diverse classes** can push the state to take strong action against monopoly and trustification.
- Similar efforts were seen in India immediately after Independence - **License-Permit-Quota Raj**.

Conclusion:

Though License-Permit-Quota Raj of the pre-reform era is not possible in today's India, what new India needs is the equitable treatment of all businesses (irrespective of their size) to promote national interest in the long term.

Insta Links: [Oxfam inequality report: Taxing the 'obscenely' wealthy may not be the right solution](#)

Mains Links: [Examine the impact of liberalisation on companies owned by Indians. Are they competing with the MNCs satisfactorily? Discuss. \(UPSC 2013\)](#)

SMALL MODULAR REACTORS (SMRS)

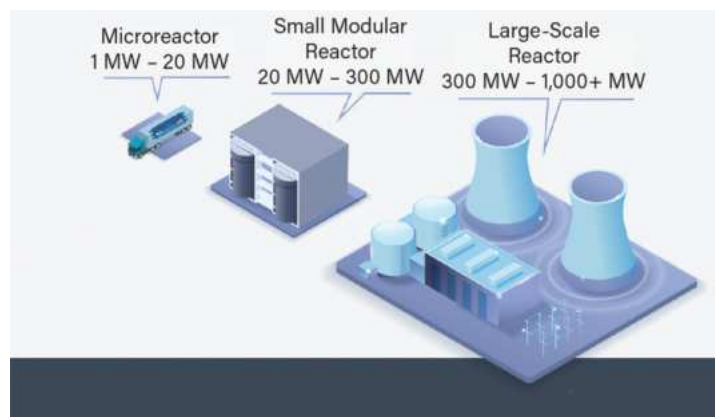
Context:

This article discusses **India's shift towards Small Modular Reactors (SMRs) as a strategic move** in the nuclear energy sector.

What are SMRs?

They are **advanced nuclear reactors with a capacity of up to 300 MW per unit**, offering advantages such as simplicity, safety, and cost-effectiveness.

- SMRs can be **factory-made and transported to a site for installation**.
- SMRs are **economical and time-efficient**, and unlike traditional reactors that require refuelling every 1-2 years, **SMRs only need refuelling every 3-7 years**.



Status of India's nuclear power:

- India has **over 22 nuclear reactors in 7 power plants** across the country which produce **6780 MW of nuclear power**
- India aims to **raise nuclear power to 10% of its energy mix by 2035**.

Global Status of SMRs:

- Worldwide over **70 SMR designs** are under development in 17 countries e.g., **U.S.'s NuScale Power company**, whose **600 MW SMR plant design** has been approved by the **Nuclear Regulatory Commission**.
- **Russia's 77 MW SMR, Akademik Lomonosov**, was operational as early as 2019.
- In the U.K., **Rolls-Royce** is setting up a manufacturing facility for SMRs.

Why does India need more nuclear power?

- **Very limited growth potential for hydropower** because of conserving biodiversity, the costs of rehabilitating and compensating landowners and the **seismological factors in the Himalayas**.
- **India has nearly 210 gigawatts of coal capacity**, producing 73% of the electricity of India, which is **not environmentally friendly**.
- Wind and solar powers are intermittent or variable.

India's strategy:

India's strategy for nuclear energy transition involves transitioning from larger nuclear power plants to smaller ones, specifically **Small Modular Reactors (SMRs)**. The government aims to **engage the private sector through public-private partnerships** to set up SMRs across the country. The long-term goal is to raise nuclear power to 10% of India's energy mix by 2035.

Niti Aayog's suggestions for SMRs include:

- Encouraging private sector participation through public-private partnerships.
- Implementing comprehensive regulatory changes to ensure safety standards and monitoring.

- Modifying foreign investment policies to attract domestic and foreign companies for SMR development in India.

Way ahead for India:

- The nuclear industry should move towards '**passive safety**' designs (for nuclear reactors). For example, active cooling pumps.
- **Enforcing nuclear liability**, for example, the Civil Liability for Nuclear Damage Act 2010.
- **Ending the monopoly** of the Nuclear Power Corporation of India Limited (NPCIL) in reactor operations. **Allow other government companies and private sector**

Conclusion:

If India hopes to achieve '**net zero**' by 2070, it needs ~100 GW of nuclear power by 2050. **India needs a portfolio of technologies** (including SMRs) to make nuclear power safe and cost-effective (capital cost) over time.

Insta Links: [Nuclear Technology](#)

Mains Links: Give an account of the growth and development of nuclear science and technology in India. What is the advantage of a fast breeder reactor programme in India? (UPSC 2019)

Prelims Links: UPSC 2016

India is an important member of the 'International Thermonuclear Experimental Reactor'. If this experiment succeeds, what is the immediate advantage for India?

1. It can use thorium in place of uranium for power generation
2. It can attain a global role in satellite navigation
3. It can drastically improve the efficiency of its fission reactors in power generation
4. It can build fusion reactors for power generation

Ans: 4

A ROADMAP TO ELIMINATE POVERTY IN INDIA

Context:

India's current per capita income is **\$2,379 in 2022-23**. The goal is to raise it by almost six times **in the next 25 years**, leading to a higher standard of living and poverty eradication. To achieve this vision, understanding the challenges and taking appropriate actions are essential.

Current achievements of India in poverty reduction:

- **415 million** poor people moved out of poverty from 2005/2006 to 2019/2021 (from 645 to 230 million). ([Global MPI](#))
- India has registered a **decline** in the number of mul-

tidimensionally poor from **24.85% in 2015-16 to 14.96% in 2019-2021**. ([National MPI](#))

Challenges that the country will face in economic development and subsequent poverty reduction:

On the global front:

- **Ukraine-Russia conflict:** The overall climate for peace, which is necessary for growth, has deteriorated after the conflict.
 - **Supply disruptions** of critical imports like oil can cause a severe setback not only to developing countries but also to developed countries.
- **The attitude of some countries towards global trade:** Rich countries that earlier preached to the developing countries to adopt a free trade model, are putting restrictions on imports.
 - This is happening when developing countries like India are reaching the stage of being able to compete in the world market.

At the domestic:

- **State of Indian economy:**
 - In the past 75 years, India has built a reasonably strong and diversified economy.
 - Though India is today the 5th largest economy, it is **ranked (2022) 149 out of 194 countries in per capita terms**.
- **Export-led growth strategy:** Several countries (South Korea, China, etc) achieved high growth over several decades by focusing on exports.
 - **This export-led growth strategy may not work for India**, particularly in the context of a changed global trade situation.
- **Adoption of new technologies:** India's ability to absorb new technologies like **Artificial Intelligence (AI)** will have ramifications for the industrial structure and employment.
 - **AI can result in increasing productivity and output but not necessarily jobs.**
- **Impact on output because of environmental considerations:** Bringing down pollution can have an output effect. In this context, **a high annual growth rate of 8% may have to be ruled out**.
- **Provision for basic income:**
 - In an uncertain world, the need for the provision of basic income becomes even more urgent.
 - However, there are many issues connected with basic income (**level and coverage**) which need to be resolved.

Actions India needs to overcome these challenges:

- **A multi-dimensional strategy:**
 - The emphasis should be on agriculture and related activities, manufacturing and exports.
 - India needs to preserve its achievements

and move forward in the services area.

- **Raising the per capita income:** By almost six times from \$2,379 in 2022-23 over the next 25 years.
- **Reorienting the educational system:** This will enable students to acquire the required skills.
- **Identify labour-intensive economic activities.**
- **For implementing the provision of basic income,** beneficiaries have to be determined considering certain normative considerations.

Potential implications of the above actions:

These will enable people to have a higher **standard of living**, reduce, **inequality and eliminate poverty**.

Conclusion:

Despite challenges, a 6 to 7% sustained growth and better job prospects are still possible if the growth strategy is correct and if an appropriate investment climate can be created.

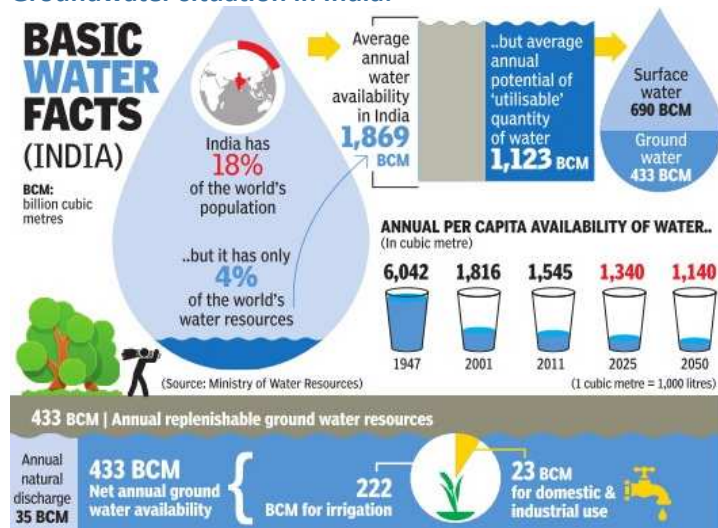
Insta Links: [National Multidimensional Poverty Index](#)

CHECKING INDISCRIMINATE USE OF GROUNDWATER FOR IRRIGATION

Context:

There is a need to urgently address the pressure on groundwater resources, starting with irrigation water use.

Groundwater situation in India:



Concerns:

- **India is the largest user of groundwater in the world**, extracting more than the two largest economies, the United States and China, together.
- **Growing domestic, industrial and agricultural demand** is increasing the stress on groundwater resources. **For example,**
 - India is dangerously falling under the category of a water-scarce country.

- **India gets 1,486 cubic metres** (1 cubic metre = 1,000 litres) **per capita** of freshwater every year.
- A country is officially water-scarce when the per capita availability is less than 1,000 cubic metres per annum.

- **Climate change is adding to the problem** and may have far-reaching implications, including threats to food security, increased conflicts, and mass migration, if not addressed timely.

The Interplay between groundwater stress and Agriculture:

- **Over 60% of irrigation requirements are met by groundwater.**
 - Since the 1980s, around **77% of the total addition** to irrigation in the northwestern plains has come from **tube wells**.
- **This has introduced new crops (water-guzzlers) in non-traditional areas**, for example, paddy in Punjab (the area under rice increased from **47 to 80%** of the total cropped area between 1970s-2019) and Haryana.
- **This has also increased cropping intensity** by expanding cultivation in the largely dry winter and summer seasons.

Implications of changing crop patterns:

- **Created a crisis by depleting groundwater at an alarming rate** and deteriorating soil-human health.
- Affecting crop diversity. **For example**, paddy in Punjab has practically wiped out oilseeds and pulses, maize and cotton.

What is aiding this? Water and electricity policies (subsidy) are often considered the main drivers of growth in the area under rice.

Way ahead:

- **Storing and using rainwater:** India receives 4,000 billion cubic metres (BCM) of freshwater annually through precipitation, but only 1,123 BCM is used currently.
- **Effective management of surface water resources** in regions where surface irrigation is available.
- **Energy and water pricing** can be an effective policy remedy for diversifying cropping patterns and checking depleting groundwater.
 - However, this may be less effective, as farmers may switch to **alternative energy** sources (solar pumping).
 - Also, irrigation water pricing in India is **non-volumetric** and mainly applies to canal-sourced systems, depending on the area and type of crops grown.
- **Encouraging farmers** to sell surplus solar energy by increasing the tariff.
- **Using water metres** for irrigation water pricing to assess the actual volume of water used. This will en-

courage water conservation through its efficient use.

Insta Links: [UN Groundwater Summit 2022](#)

GS4

J ROBERT OPPENHEIMER

J. Robert Oppenheimer was the **scientific director of the Manhattan Project**, the USA's World War II program to develop the first nuclear weapons. He is known as the **"Father of the Atomic Bomb"**.

However, after witnessing the destructive power of nuclear weapons, Oppenheimer became a **vocal advocate against their proliferation**. He found solace and philosophical guidance in the Bhagavad Gita, quoting the famous line **"I am become Death, the destroyer of worlds."**

Oppenheimer **actively opposed nuclear weapons** and worked to curtail their spread. Unfortunately, he faced **political persecution during the Cold War era** and lost his security clearance. Today, Oppenheimer's story serves as a cautionary tale and highlights the ethical dilemmas faced by scientists involved in creating powerful weapons.

- **Moral Responsibility:** Scientists must consider the potential destruction and harm caused by their weapons.
- **Dual-Use Technology:** The technologies they create can be misused or have unintended consequences, raising ethical concerns.
- **Impact on Innocent Lives:** Scientists question the effects on civilians, as powerful weapons often cause collateral damage.
- **Contributing to Conflict:** Scientists grapple with the ethical dilemma of their work potentially exacerbating conflicts and violence.
- **Long-Term Consequences:** Scientists must weigh the lasting effects, including proliferation and the risk of an arms race.
- **Personal Accountability:** Scientists may face moral conflicts and be held accountable for the ethical implications of their inventions.

There are three principles for conduct in war:

- **Discrimination** (distinguishing between enemy combatants and non-combatants)
- **Proportionality** (the harms must be proportional to the gains)
- Actions must be **militarily necessary**

Insta Mains: [Can a war ever be justified on moral grounds? Support your answer with suitable arguments. \(10M\)](#)

CONTENT FOR MAINS ENRICHMENT

**"I AM BECOME
DEATH, THE
DESTROYER OF
WORLDS"**

J Robert Oppenheimer used this quote to display regrets about his invention of nuclear weapons.

The quote **"Now I am become Death, the destroyer of worlds"** is not directly from the Bhagavad Gita but rather a paraphrase of a verse in the Gita.

Translated into English, this verse means:

"The Supreme Lord said: Time I am, the great destroyer of the worlds, and I have come here to destroy all people."

The verse is part of a **conversation between Lord Krishna and Arjuna on the battlefield of Kurukshetra**. Krishna reveals his **universal form**, a divine manifestation displaying his supreme power and **cosmic nature**. Arjuna is **awe-struck and becomes aware of the immense destructive power that Krishna wields as the God of Time**.

Oppenheimer, who was familiar with the Bhagavad Gita, invoked this quote to **express the profound impact and consequences of the atomic bomb**, which, like Krishna, brought immense destructive power and the potential to annihilate entire worlds.

CREMATING UN-CLAIMED BODIES	<p>Naveen Shrivastava, a 52-year-old from Gopalganj district in Bihar, has taken it upon himself to give a dignified farewell to unclaimed bodies. Inspired by the loss of his cousin in the Ganga River, Shrivastava has cremated over 350 strangers in the past 15 years through his Satakshi Sewa Sansthan trust.</p> <p>Shrivastava's work has been appreciated by the police, who consider it a significant social service.</p>
WHY ARE HOLLYWOOD'S ACTORS AND WRITERS ON STRIKE?	<p>Hollywood writers and strikes are on strike due to various issues:</p> <ul style="list-style-type: none"> • Decreasing pay and inadequate compensation compared to rising industry profits. • The use of streaming services has resulted in fewer guaranteed weeks of work • Downsizing traditional writers' rooms in favour of "mini rooms" limits writers' involvement in productions. • Concerns about the impact of artificial intelligence (AI) on their profession, including the creation of new content without compensation and consent and the use of their original work to train AI models. • Lack of transparency in streaming platforms' viewership data. <p>The strike is the largest labour fight in Hollywood in six decades and marks the first dual strike of writers and actors since 1960.</p> <p>Usage: You can use this to highlight various ethical issues such as Fair compensation, Transparency, and consent, Protecting creative work, and Workers' rights</p>
TANKAI METHOD	<p>The Ministry of Culture and the Indian Navy have signed a Memorandum of Understanding (MoU) to revive the ancient stitched shipbuilding method, also known as the Tankai method.</p> <p>What is Tankai Method? The Tankai method is an ancient shipbuilding technique that involves stitching wooden planks together to construct ships, rather than using nails. This method offers flexibility and durability to the ships, making them less susceptible to damage from shoals and sandbars.</p> <p>This 2000-year-old shipbuilding technique will be preserved and brought back to life.</p> <p>Significance: The revival of the stitched shipbuilding method is vital for preserving India's rich maritime heritage and cultural history. Furthermore, it aims to promote cultural memories and strengthen ties with Indian Ocean littoral countries.</p>

FACTS FOR PRELIMS

GS1

ENDO GAMY AND HARMFUL GENETIC VARIANTS IN INDIA

Context:

A study by researchers at the **Institute for Human Genetics**, University of California, focused on **genetic differences among South Asian populations, particularly in India, Pakistan, and Bangladesh**.

- The researchers found **distinct genetic patterns among different regions, including smaller geographies within India, attributed to endogamous practices like caste-based and region-based marriages**.

About Endogamy:

- Endogamy is the practice of **marrying within a specific social, cultural, or ethnic group, often with the aim of preserving traditions, customs, and identity within that group**.

Key Findings:

- The study also revealed a worrying trend of **higher frequency of homozygous genotypes in the South Asian cohort**, which can increase the risk of genetic disorders.
- The research highlighted the need for a **detailed map of the Indian genome to understand the country's incredible diversity and address major hereditary disorders**.

Conducting such studies within the country would also **protect vulnerable communities from exploitation**. Harnessing the power of genetic studies **could lead to interventions for major health concerns in India**.

GHAGGAR RIVER

Context:

In early July this year, the Ghaggar River and its tributaries in Haryana, caused widespread devastation after reclaiming their floodplains.

- The river, including its tributaries **Tangri, Markanda, and others**, were previously considered dead and heavily encroached upon. However, due to heavy monsoon rains in the **Shivalik hills**, the rivers flooded their catchment areas and breached their banks, resulting in significant losses.
- Additionally, unscientific, and illegal mining has harmed the natural balance of rivers like the Ghaggar and Yamuna.

About Ghaggar-Hakra River

It is an **intermittent river in India and Pakistan** that flows only during the monsoon season. The river is known as **Ghaggar before the Ottu barrage** and as **Hakra** downstream of the barrage in the Thar Desert. In pre-Harappan times the **Ghaggar was a tributary of the Sutlej**.

- Origin:** It originates in the village of **Dagshai in the Shivalik Hills** of Himachal Pradesh and flows through Punjab and Haryana states into Rajasthan.
- Tributaries:** The main tributaries of the Ghaggar are the Kaushalya River, Markanda, Sarsuti, Tangri and Chautang



Bicentenary year of Nawab Wajid Ali Shah

Context: An exhibition, heritage walk, and talk are planned in Kolkata to commemorate the bicentenary year of Nawab Wajid Ali Shah, the last king of Awadh



Mirza Wajid Ali Shah (1822-1887) was the **eleventh and last King of Awadh** (from 1847 to 1856). Wajid Ali Shah's first wife was Alam Ara who was better known as Khas Mahal because of her exquisite beauty.

Awadh under subsidiary alliance	Saadat Ali Khan II, the Nawab of Awadh, entered into a subsidiary alliance with the British in 1801 . However, in 1856, the British took over Awadh under the Subsidiary Alliance, citing " maladministration " and " lawlessness " as reasons. As a result, Nawab Mirza Wajid Ali Shah was exiled to Garden Reach in Metiabruz, Kolkata , where he spent the remainder of his life on a pension.
Administration	He was generous, kind and compassionate towards his subjects. He took keen interest in the administration of justice, introduced reforms, and reorganised the military.
Music	Wajid Ali Shah and other composers greatly contributed to the light classical form of thumri. He is known as " Gaiser ," adopted the pseudonym " Akhtarpiya " for his compositions. His ghazals can be found in Diwan-i-Akhtar and Husn-i-Akhtar . He is credited with creating new ragas like Jogi, Juhi, Shah-Pasand , among others. The text Ma'danul Moosiqui by Hakim Mohammed Karam Imam , a courtier of Wajid Ali Shah, serves as a valuable source of information on music in Nawabi Lucknow.
Dance	He elevated Kathak to new heights , adding artistic elements, aesthetic touches, and literature to the dance form. Wajid Ali Shah introduced two distinct forms, Rahas and Raas , where Rahas encompassed dramatic elements while Raas focused on religious themes. He choreographed and performed a dance called Rahas based on Kathak moves with the ladies of his court. His reign marked the establishment of the Lucknow Gharana , known for its graceful movements, elegance, and natural poise in Kathak dance.
Hindustani theatre	He established the renowned Parikhasana , where talented girls received music and dance training from expert teachers. He organized the grand Jogia Jashan festival , where people from all walks of life in Lucknow could participate, dressed as Yogis regardless of their caste or creed.
Literature	He supported and sponsored various poets and writers, including " Barq ," Ahmad Mirza Sabir , " Muht-i-Munshi ," Aamir Ahmad Amir , Ishad-us-Sultan , Hidayat-us-Sultan , Amanat , and Mirza Ghalib . He generously granted Mirza Ghalib an annual pension of Rupees five hundred in 1854.

Visit Insights IAS Daily Current Affairs

FUSION OF ROCK ART AT RUDRAGIRI HILLOCK

Context:

The Rudragiri hillock in **Andhra Pradesh** features a **unique combination of prehistoric rock paintings from the Mesolithic period** and exquisite artwork from the **Kakatiya dynasty**, dating back to around 1300 AD.

- The site includes **five naturally formed rock shelters** that served as living quarters during the **Mesolithic age, around 5000 B.C.**
- The Kakatiya-era paintings display scenes from the **epic Ramayana** and are adorned with a variety of colours derived from white kaolin and different pigments.

One of the caves depicts a fierce battle between the **Va-nara brothers Vali and Sugriva**, with Rama shooting arrows at Vali. Another cave features a grand sketch of **Hanuman carrying the Sanjivani hill in his right hand**, symbolizing his mission to save Lakshmana's life.

About Kakatiya Dynasty:

- Kakatiyas is an Andhra dynasty that flourished in the **12th century CE**. The Kakatiya dynasty ruled from **Warangal (Telangana) from CE 1083-1323**.
- They were known for the construction of a **network of tanks for irrigation and drinking water** and thereby gave a big boost to the overall development of the region.
- There are hundreds of Hindu temples built under the **patronage of Kakatiya kings** like **Ganapati Deva, Rudrama Devi and Prataparudra** in the Kakatiya dynasty. E.g., **Thousand Pillar Temple or Rudreshwara Swamy Temple, Telangana**. It is a **star-shaped, triple shrine (Trikutalayam)** dedicated to **Vishnu, Shiva, and**

BICENTENARY YEAR OF NAWAB WAJID ALI SHAH

Surya.

GS2

DIGITAL TIME VOUCHER SYSTEM FOR POLITICAL PARTIES

Context:

The Election Commission of India (ECI) has introduced a digital time voucher system for political parties to access government-owned electronic media, such as Doordarshan and All India Radio, during elections.

What is the Digital time voucher system?

The digital time vouchers serve as **permissions or allocations of specific time slots** for political parties to broadcast or telecast their campaign messages on these media platforms. This system streamlines the process, **eliminates the need for physical collection**, and enhances accessibility and convenience for political parties participating in election campaigns.

Significance:

- This move reflects the ECI's commitment to **leveraging technology for a smoother electoral process**.
- The scheme aims to provide **equitable access to electronic media** for campaigning, with base time allotted to each national and state party, and **additional time based on their poll performance**.

Rules:

In India, the rules regarding political parties' access to government-owned electronic media, such as Doordarshan and All India Radio, are governed by the **Election Commission of India (ECI) and the Prasar Bharati Act**.

- **Allotment of Airtime:** During elections, the ECI mandates that Doordarshan and All India Radio allocate a certain amount of free airtime to recognized political parties for broadcasting their messages.
- **Time Slots:** The ECI determines the time slots for political parties based on factors like their previous electoral performance and representation in the legislature. Parties are allocated fixed time slots for their broadcasts.

Other aspects of rules are mandated under the **Representation of the People Act, 1951**

BHOOMI SAMMAN" 2023 AWARDS

Context:

Recently, the President of India presented the "Bhoomi Sam-

man" 2023 awards to **State Secretaries and District Collectors** along with their teams who excelled in achieving **saturation of the core components of the Digital India Land Records Modernization Programme (DILRMP)**.



Digital India Land Records Modernization Programme (DILRMP)



Aspect	Description
The Digital India Land Records Modernization Programme (DILRMP)	The Digital India Land Records Modernization Programme (DILRMP) is a central sector scheme (100% funding by centre) launched in 2016 by the Government of India, to to modernize the land records system and implement a conclusive land-titling system with title guarantee.
Previous Scheme	National Land Record Modernization Programme (NLRMP) (launched in 2008 and renamed as DILRMP in 2016)
Nodal Ministry	Ministry of Rural Development. The scheme has been extended for a period of five years i.e., 2021-22 to 2025-26 .
Unique Land Parcel Identification Number (ULPIN)	A 14-digit alphanumeric unique ID based on geo-coordinates assigned to land parcels (Bhu-Aadhaar number) will be assigned to each registered title.
NGDRS	National Generic Document Registration (NGDRS) creates a uniform system for registration of deeds/documents across different States
Multilingual Records of Rights	Records of Rights transliterated in all 22 scheduled languages to address linguistic barriers in land governance
Services Provided	Obtaining ownership details of a plot with its size and geolocation through ULPIN Facilitating caste, income, and domicile certificates Online information on crop profile, crop insurance, and e-linkages to credit facilities/banks
Resolution of Disputes	Comprehensive land record management system helps resolve arbitration cases and boundary-related disputes amicably Reduces burden on the judiciary and administration
What is Conclusive land-titling system?	It is a method of recording land ownership that provides clear and indisputable proof of ownership . Under this system, the government guarantees the authenticity of land records , making them legally binding and final . Government protects the title holder from any challenges or disputes.
Other similar Scheme	SVAMITVA scheme provides a 'Record of Rights' to village household owners with issuance of legal ownership cards.

PANEL OF VICE-CHAIRPERSONS

Context:

For the first time in Rajya Sabha history, **women have equal representation in the panel of vice-chairpersons**.

Rajya Sabha Chairman Jagdeep Dhankhar nominated **four women parliamentarians**, making up **half of the eight-member panel**. Among the newly nominated members is S.

Phangnon Konyak (She is the **first woman to be elected as a Member of the Rajya Sabha** from Nagaland in April 2022 and the **second woman from the State** to be elected to either House of the Parliament or the State Assembly.)

What is a Panel of Vice-Chairpersons?

The Panel of Vice-Chairpersons in Rajya Sabha is **headed by the Deputy Chairman**. The members are nominated from the members of the Rajya Sabha by the Chairperson. Its role is to **assist in passing bills and ensuring the effective functioning** of the government.

In case of the Chairman's absence, the same duty is delegated and executed by the deputy chairman of the house.

RULE 267 VS RULE 176 OF THE RAJYA SABHA

Context:

Monsoon Session's opening was disrupted due to disagreement on the Manipur discussion format. Govt agreed to a short-duration discussion (under Rule 176), but the Opposition demanded the PM's suo motu statement followed by a discussion **under Rule 267**.

Rule	Rule 267	Rule 176
Purpose	To suspend any rule's application related to the day's listed business and discuss an urgent issue of public importance .	To allow for a short-duration discussion not exceeding two-and-a-half hours on a matter of urgent public importance.
Process	An Opposition member can give notice under Rule 267 , requesting the suspension of all listed businesses for the day to discuss the urgent matter. If the Chairman consents and the motion is carried , the Rajya Sabha can suspend regular business and devote time to address the pressing issue.	A member can give notice in writing to the Secretary-General , supported by the signatures of at least two other members , stating the specific matter they wish to raise. The Chairman, in consultation with the Leader of the Council , will then fix a date and time for the short-duration discussion.
Format	The discussion can suspend all listed businesses , allowing time for in-depth debate.	The discussion is time-bound and limited to two-and-a-half hours .
Voting	No formal motion or voting is required.	No formal motion or voting is required.
Examples	Discussing the Manipur situation and other urgent matters of public importance.	Discussing the rising prices of essential commodities, border issues with China, etc.

Recent controversy:

The Opposition has expressed concern that none of their notices under Rule 267 are being taken up, even though previous Rajya Sabha Chairmen have allowed such discussions on various subjects.

INDIA HAS A 3–5-YEAR CHINA+1 WINDOW

Context:

World Bank President stated that **India has shown resilience and emerged stronger from the pandemic compared to other countries**. He expressed optimism, as the country's focus on growth and **job creation is crucial in reducing poverty**.

- Highlighted the **"China+1" opportunity**, where companies **seek alternative manufacturing sites to diversify supply chains post-Covid** and emphasized that **India has a three-to-five-year window to capitalize on this opportunity**.

India's advantage lies in its **significant percentage of GDP coming from local production**, which cushions the impact of global slowdowns caused by trade disruptions.

Key suggestions given:

- Private capital investments** to support global efforts for renewable energy funding, estimating that developing nations **will need \$1 trillion for the green energy transition**.
- The importance of **concessional capital, multilateral bank capital, and philanthropy capital** to enable blended finance.

NATO SUMMIT

The recent NATO summit held in Vilnius had several key takeaways:

- Ukraine's Presence:** The launch of the NATO-Ukraine Council aimed to engage and support Ukraine.
- New Members:** Finland and Sweden's approval as NATO members showcased the alliance's commitment to expansion and deterrence against potential threats, including Russia.
- U.S. Support:** U.S. President Joe Biden reaffirmed unwavering support for NATO and Ukraine, contrasting with former President Donald Trump's stance on the alliance.
- China's Threat:** The summit addressed **China's malicious cyber operations**, confrontational rhetoric, and disinformation, recognizing its emerging challenges to Euro-Atlantic security.
- Russia's Contestation:** While the summit discussed potential expansion, Russia launched a drone attack on Kyiv, highlighting the ongoing security contestation in Eurasia.

About NATO:



The North Atlantic Treaty Organization (founded: 1949; HQ: Brussels, Belgium), also called the **North Atlantic Alliance**, is an intergovernmental military alliance between **31 member states** (including Finland)– **29 European and two North American**.

Founding Members	Belgium, Canada, Denmark, France, Iceland, Italy, Luxembourg, the Netherlands, Norway, Portugal, the United Kingdom, and the United States
Article 5	A key provision of the NATO treaty states that an attack on one member is an attack on all members . It has been invoked only once after the 9/11 terrorist attacks in the United States. However, NATO's protection does not extend to members' civil wars or internal coups.
Alliances	Euro-Atlantic Partnership Council (EAPC), Mediterranean Dialogue, Istanbul Cooperation Initiative (ICI)

Note: Sweden is yet to be included in NATO.

GS3

CPTPP



Context: United Kingdom has officially signed a treaty to join the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP)

Aim: By joining the CPTPP, the UK aims to deepen its trade ties in the Pacific region and diversify its trading partners beyond the EU. The agreement is expected to come into effect in the second half of 2024

About CPTPP

CPTPP also known as TPP12 or TPP-12 (signed 8 March 2018) is a trade agreement between Australia, Brunei, Canada, Chile, Japan, Malaysia, Mexico, New Zealand, Peru, Singapore, Vietnam and United Kingdom.

Aim	Reducing trade barriers and promoting economic cooperation
Background	In 2005, a trade agreement between a small group of Pacific Rim countries comprising Brunei, Chile, New Zealand, and Singapore led to the formation of the Trans-Pacific Partnership (TPP) consisting of 12 nation-states. After the withdrawal of the US (2017), the remaining eleven signatories, known as the TPP-11 , continued talks and their efforts led to the formation of CPTPP.
Significance	CPTPP removes 99% of tariffs on goods and services . It also includes commitments to combat wildlife trafficking and prevent environmental abuses such as unsustainable logging and fishing, with trade penalties for non-compliance. All countries of CPTPP are also members of the Asia-Pacific Economic Cooperation (APEC) (except UK)
About Brexit	Brexit refers to the U.K.'s decision to leave the European Union. The country formally left the EU in January 2020, after a referendum in 2016.
Discussion about UK joining CPTPP	Supporters of Brexit argue that UK membership in the CPTPP will boost economic growth , while opponents believe the benefits are relatively small compared to trade with the European Union
India on CPTPP	India did not join CPTPP as the treaty places stricter labour and environmental standards

Visit Insights IAS Daily Current Affairs

EXPORT PREPAREDNESS INDEX (EPI) REPORT, 2022

Context:

NITI Aayog is releasing the third edition of the Export Preparedness Index (EPI) for States/UTs of India for the year 2022

The report discusses **India's export performance**, followed by an overview of the **country's sector-specific export performance**. The report further highlights the need to develop our **districts as export hubs in the country** and undertakes a **district-level analysis of merchandise exports in the country**.

About the Report:

EPI is a comprehensive tool that measures the export preparedness of the States and UTs in India .	
Aim	<p>To undertake a comprehensive analysis of States and UTs across export-related parameters in order to identify their strengths and weaknesses.</p> <p>To highlight the achievements of states/UTs and encourage peer learning among the states/UTs to uphold the spirit of competitive federalism.</p>
Pillars	<p>Policy Pillar: Evaluates state's and UTs' performance based on its adoption of the export-related policy ecosystem at a state and district level, as well as the institutional framework surrounding the ecosystem.</p> <p>Business Ecosystem: Assesses the prevailing business environment in a state/UT, along with the extent of business-supportive infrastructure and a state/UT's transport connectivity.</p> <p>Export Ecosystem: Focuses on the export-related infrastructure in a state/UT, trade support provided to exporters, and the prevalence of Research and Development in the state/UT to foster innovation.</p> <p>Export Performance: An output-based indicator that gauges the growth of a state's export over the previous year and analyzes its export concentration and footprint on the global markets.</p>

Related News

India's exports decline by 22% in June

In June, India's exports experienced a significant decline of 22% to about \$33 billion compared to \$42.28 billion in the previous year. This is the steepest monthly decline in exports in **3 years**.

Reasons for the decline: Global slowdown (e.g., the US and Europe); Inflationary pressure; Tightening of Monetary policies by developed countries; India's poor manufacturing sector's performance; Companies looking at a **China+1 policy** are moving to India's competitor countries like Vietnam

AGRI INFRA FUND

Context:

Ministry of Agriculture & Farmers Welfare, has launched a new campaign titled **BHARAT (Banks Herald Accelerated Rural & Agriculture Transformation)** under the **Agri Infra Fund (AIF)**.

- The **one-month-long campaign aims to raise Rs 7200 crore** and will run from July 15, 2023, to August 15, 2023.

About the AIF:

AIF is a financing facility launched in July 2020 to provide **all-around financial support** to farmers, agri-entrepreneurs, FPOs, PACS, Cooperatives, SHGs etc, to create **post-harvest management infrastructure and build community farming assets** throughout the country.

Features:

- Under it, **Rs. 1 Lakh Crore** will be provided by **banks and financial institutions** as loans with interest subvention of **3% per annum**.
- It also provides **credit guarantee support** through the Credit Guarantee Fund Trust for Micro and Small Enterprises (CGTMSE) scheme for loans of **up to Rs 2 crore**
- The fund will be managed and monitored through an **online Management Information System (MIS) platform**.
- It will enable **all the qualified entities** to apply for loans under the Fund.
- Duration:** FY2020 to FY2029 (10 years)
- The National, State and District level monitoring committees** will be set up to ensure real-time monitoring and effective feedback.

laboratory setting, allowing scientists to engineer or manipulate the genetic makeup of an organism.

- For example, scientists have synthesized genomes for bacteria like **Mycoplasma mycoides**, creating synthetic life forms capable of replication.

Significance of Evolution of Synthetic Genome:

Significance	Examples
Enhanced understanding of life processes	Synthesis of JCVI-syn1.0 , the first synthetic life form, helped unravel molecular mechanisms of life
Industrial Applications and Biotechnology	Synthetic genomes can be engineered for the production of chemicals and biologicals at an industrial scale
Advancements in medicine and healthcare	Synthetic genomes enable the development of new therapies, gene therapies, and personalized medicine
Study of natural evolutionary processes	The evolution of synthetic life forms provides insights into the natural adaptation and evolution of organisms
Understanding antimicrobial resistance	Synthetic genome research contributes to studying how pathogens evolve and develop resistance to drugs
Environmental applications	Synthetic genomes can be used to engineer organisms that can remediate pollution or degrade waste products

CHINA EVENT RAISES CONCERN OVER INDIA'S ONLY APE

Context:

The conservation **status of the hoolock gibbon**, India's **only ape species**, has become a matter of concern at a global event on gibbons held in China.

About Gibbons:

It is the **smallest and fastest ape** and is found in **tropical and subtropical forests** in Southeast Asia. The hoolock gibbon, **unique to India's northeast**, is **one of the 20 gibbon species on Earth**, with an estimated population of **12,000**.

- All 20 gibbon species, including the **hoolock gibbon**, are at a **high risk of extinction due to dramatic declines in their distribution and populations since 1900**, leaving only **small populations in tropical rainforests**.
- Threats:** The primary threat to the hoolock gibbon in India is the **felling of trees for infrastructure projects**.
- Initiatives:** The **Global Gibbon Network (GGN)** aims to **protect and conserve gibbons** and their habitats by **promoting participatory conservation policies and actions**.
 - Aaranyak**, a non-profit conservation organization based in Assam, India, is **one of the**

EVOLUTION OF SYNTHETIC GENOMES

Context:

Recent research demonstrates that synthetic life forms with minimal genomes can evolve and out-compete non-evolved versions.

What is evolution?

Evolution is the process of **gradual change and development in living organisms over time**. It involves the **passing on of traits from one generation to the next**, leading to the diversity and adaptation of species to their environment.

What is Synthetic Genome?

A synthetic genome is **an artificially created or modified genetic material** that can be inserted into a living organism. It involves **designing and constructing DNA sequences** in a

founder organizations of the GGN from seven countries.



Controversy regarding conservation status:

Initially believed to be two separate species, a genetic analysis by the Centre for Cellular and Molecular Biology (CCMB) in Hyderabad in 2021 revealed that there is **only one species of ape in India, the hoolock gibbon**.

However, the **International Union for Conservation of Nature's Red List** classifies the western hoolock gibbon as **endangered** and the eastern hoolock gibbon as **vulnerable**, which adds complexity to their conservation status.

For example,

Let us consider a scenario where a **company in India exports goods** to a company in the United Arab Emirates (UAE). With the LCSS in place, the Indian exporter can issue an invoice in Indian rupees (INR), and the UAE importer can make the payment in UAE dirhams (AED).

Advantages:

Advantages	Examples
Reduction in foreign exchange costs	An Indian exporter can invoice in INR , and a UAE importer can pay in AED , eliminating the need for currency conversion to a third-party currency like USD.
Mitigation of exchange rate risks	Companies can hedge exchange rate risks by transacting in local currencies, limiting losses caused by fluctuations in exchange rates.
Improved transaction efficiency	Transaction processes can be streamlined as parties can invoice and settle payments in their domestic currencies , reducing complexities and time delays.
Enhanced trade and investment opportunities	The use of LCSS promotes bi-lateral trade and investment between India and UAE by facilitating easier and more efficient cross-border transactions.
Optimized remittances	Indian residents in the UAE can send remittances in INR , benefiting from lower transaction costs and faster settlement times .

Other agreements between India and UAE:

- The two countries agreed to **link India's Unified Payments Interface (UPI) with UAE's Instant Payment Platform (IPP)**.
- The two countries agreed to **link their respective Card Switches** vis-a-vis RuPay switch and UAESWITCH to enable **mutual acceptance of domestic cards** and processing of these card transactions.
- **India's Structured Financial Messaging System (SFMS)** will be linked with messaging system in UAE to ease their financial messaging.
- Also, India will establish an **IIT-Delhi campus in Abu Dhabi**, which would be the second IIT abroad after Tanzania.

For overall India-UAE relations: [Click here](#)

LOCAL CURRENCY SETTLEMENT SYSTEM (LCSS)

Context:

India and the United Arab Emirates (UAE) signed a Memorandum of Understanding (MoU) to establish **Local Currency Settlement System (LCSS)** for using local currencies, the **Indian rupee (INR)**, and the **UAE Dirham (AED)**, for cross-border transactions.

- **LCSS will promote the use of INR and AED for current accounts and permitted capital account transactions between the two countries.**
- India-UAE trade was approx **USD 85 billion in 2022**. UAE is **India's third-largest** trading partner while India is UAE **2nd** largest trading partner.

What is a Local Currency Settlement System (LCSS)?

The Local Currency Settlement System (LCSS) is a mechanism that enables **cross-border transactions between two countries** to be conducted in their respective domestic currencies.

- It allows **exporters and importers to invoice** and make payments in their local currencies, reducing the reliance on a third-party currency such as the US dollar.

CRIMEAN-CONGO HAEMORRHAGIC FEVER (CCHF) VIRUS

Context:

Climate change is aiding the **spread of the deadly Crimean-Congo haemorrhagic fever (CCHF) virus** in Europe, according to the World Health Organization (WHO).

What is CCHF?

Crimean-Congo haemorrhagic fever (CCHF) is a viral disease transmitted by ticks (Hyalomma ticks). It can also be contracted through contact with infected animal tissues.

- **Background:** Congo fever was **first discovered in Crimea in 1944** and was later named as **Crimean-Congo haemorrhagic fever**.
- **Threat:** CCHF outbreaks pose a public health threat, as the virus can lead to **epidemics** and has a **high fatality rate**.
- **Symptoms:** It includes fever, muscle ache, headache, and bleeding.
- **Vaccine:** There is currently **no vaccine for CCHF**, and treatment involves **managing symptoms** and using **antiviral drugs in some cases**.
- **Region:** It is endemic to Africa, the Balkan countries, the Middle East, and parts of Asia.

How Climate change is contributing to its spread?

Rising temperatures and disrupted climate patterns have **created favourable conditions** for viruses not typically found in colder climates. Climate change contributes to the spread of diseases by expanding the habitat of disease-carrying insects, altering water habitats, and causing changes in animal migration patterns, increasing human contact with infected animals.

UNIVERSE EXPANSION DISPUTE

Context:

Researchers from the International Centre for Theoretical Sciences (ICTS), Bengaluru, the Inter-University Centre for Astronomy and Astrophysics (IUCAA), Pune, and the University of California, Santa Barbara (UCSB), have proposed a **new method to determine the Hubble constant**, a value critical in understanding the universe's expansion rate.

About the Universe:

The universe, **born from the Big Bang around 13.8 billion years ago**, has been expanding, with its expansion rate initially rapid and then slowing down. However, **about five to six billion years ago**, dark energy caused the universe's expansion to accelerate again.

What is Universe Expansion Dispute?

The dispute surrounding the expansion of the universe centres on determining the **precise rate at which it is expand-**

ing, known as the Hubble constant. Multiple methods have been used to calculate this constant, including analyzing the **brightness of supernovae**, studying the cosmic microwave background, and observing gravitational waves.

However, these methods have **provided conflicting results**, with some measurements reporting **higher values than others**. This discrepancy has led to a **crisis in cosmology**, as scientists seek to reconcile these differing measurements and understand the true rate of expansion.

What is the new method?

In an effort to address this dispute, researchers from various institutions have proposed new methods, such as **using lensed gravitational waves**, to independently estimate the Hubble constant. The researchers believe that **upcoming gravitational-wave detectors** could identify lensed gravitational waves, which can then be used to calculate the Hubble constant more accurately.

LOW-COST PEROVSKITE SOLAR CELLS

Context:

Indian scientists at the **International Advanced Research Centre for Powder Metallurgy and New Materials (ARCI), Hyderabad**, have developed highly **stable, low-cost Carbon-based perovskite solar cells (CPSCs)**.

- These solar cells overcome the challenges of degradation during operation, **making them suitable for large-scale commercialization**.

What are Perovskite solar cells (PSCs)?

Perovskite solar cells (PSCs) are a **type of solar cell that utilizes perovskite materials as the light-harvesting active layer to convert sunlight into electricity**. The most commonly used perovskite material in solar cells is methylammonium lead iodide (MAPbI₃).

Issues with PSCs?

Perovskite solar cells (PSCs) face stability issues when exposed to heat, moisture, and other environmental factors.

Solution:

The scientists engineered **MaPbI₃** to enhance thermal stability by incorporating **Guanidinium iodide (Gul)** and moisture stability by using **5-amino valeric acid iodide (5-AVAI)** for surface passivation. This breakthrough can **resolve stability concerns** and reduce fabrication costs, potentially **accelerating the commercialization of perovskite-based niche products**.

Significance of PSCs:

They have gained significant attention in recent years due to their potential to revolutionize the solar energy industry, **offering advantages such as low-cost manufacturing, high**

efficiency, and the ability to be printed onto flexible substrates.

RBI'S SOPS TO BANKS FOR RUPEE TRADE

Context:

The Reserve Bank of India (RBI) is set to **issue a standard operating procedure (SOP)** to banks in order to expedite the **issuance of proofs of inward remittances** for exporters.

Aim:

This move aims to address the challenges faced by exporters in the **rupee-based trading mechanism for foreign trade**.

Issues with FIRC (Foreign Inward Remittance Certificate)?

The issue with Foreign Inward Remittance Certificates (FIRC) arises when the **certificate from one bank is not being sent to another**, which hampers the generation of **electronic bank realisation certificates (e-BRCs)**. This creates a problem for exporters as e-BRCs serve as proof of payment for their exports and make them eligible for benefits under the Foreign Trade Policy.

For example, **if an exporter in India receives a payment for their exports from a foreign buyer through a bank**, they require a FIRC from that bank as evidence of the inward remittance. However, if the FIRC is not transmitted to the exporter's bank, the exporter cannot obtain the necessary e-BRC, which may prevent them from accessing benefits or incentives provided by the government for export transactions.

What is FIRC (Foreign Inward Remittance Certificate)?

FIRC is a document that acts as a **testimonial for all the inward remittances entering India**.

What is an Electronic Bank Realization Certificate(e-BRC)?

An Electronic Bank Realization Certificate(e-BRC) is a vital digital certificate for export businesses. A bank issues the e-BRC to **confirm that the buyer made payment to the exporter against the export of services or goods**. The BRC is the proof of realization of payment against exports.

STEEL SLAG ROADS

Context:

India has developed the **world's latest Steel Road technology by using steel slag**.

What is Steel Slag Road?

Steel slag is a **byproduct of steelmaking**, and is produced during the **separation of molten steel from impurities in steel-making furnaces**. Steel slag roads are roads constructed using steel slag. Instead of discarding this waste material,

it is processed and used as an aggregate in road construction. The steel slag is mixed with other materials and technologies to create a **durable and sustainable road surface**.

Developed by:

The technology, **pioneered by CSIR-Central Road Research Institute (CRRI)**, allows for the **large-scale utilization of waste steel slag** from steel plants in road construction.

Benefits:

- It is part of the **"Waste to Wealth"** initiative and addresses environmental degradation caused by waste steel slag.
- **Steel slag roads** are well-suited to India's terrain, offering **cost savings of 30%** and three times the lifespan of traditional roads.
- It is **resistant** to weather conditions.
- The success of steel slag roads has been demonstrated in various projects, including in **Surat, Arunachal Pradesh, and on National Highway NH-66**.

93% DPT3 IMMUNISATION COVERAGE IN 2022: WHO

Context:

According to the **World Health Organization (WHO)**, India's coverage rate for the **DPT3 vaccine (diphtheria, pertussis, and tetanus)** reached an **all-time high of 93% in 2022**.

- This surpassed the **pre-pandemic best of 91% in 2019 and showed a significant increase from the 85% recorded in 2021**. In the **WHO South-East Asia Region**, the DPT3 coverage rate also recovered to pre-pandemic levels at 91% in 2022, up from 82% in 2021.

Key Findings:

- The region also witnessed **improvements in the coverage of the measles vaccine, which rose to 92% in 2022 from 86% in 2021**.
- The **number of zero-dose children** (those who have not received any dose of the DPT vaccine) **halved to 2.3 million in 2022 from 4.6 million in 2021**, while the number of partially vaccinated children decreased to 650,000 in 2022 from 1.3 million in 2021.
- **India and Indonesia were credited for the region's strong immunization recoveries**, as they made significant efforts to improve vaccination rates.
- The report highlighted the **importance of closing gaps in immunization coverage at the subnational level to prevent outbreaks of vaccine-preventable diseases**.

About DTP:

DTP vaccine can prevent diphtheria, tetanus, and pertussis. Diphtheria and pertussis spread from **person to person**. **Tetanus enters the body through cuts or wounds**.

- **DIPHTHERIA (D)** can lead to **difficulty breathing, heart failure, paralysis, or death.**
- **TETANUS (T)** causes painful stiffening of the muscles. Tetanus can lead to serious health problems, including being unable to open the mouth, having trouble swallowing and breathing, or death.
- **PERTUSSIS (aP)**, also known as **“whooping cough,”** can cause uncontrollable, violent coughing that makes it hard to breathe, eat, or drink. Pertussis can be extremely serious especially in babies and young children, causing pneumonia, convulsions, brain damage, or death. In teens and adults, it can cause weight loss, loss of bladder control, passing out, and rib fractures from severe coughing.

CICADA SPECIES

Context:

A cicada species commonly found in **several parts of South India** has been identified as a **new species and named Purana cheeveeda (after its Malayalam name Cheeveedu).**

- Previously, it was mistaken for **Purana tigrina, a species described in Malaysia in 1850.** The Association for Advancement in Entomology has corrected this **long-standing error in taxonomic identification, distinguishing Purana cheeveeda from the Malaysian species.**
- The team noticed **differences in the structure of the male genitalia and operculum, leading to the reclassification.**



GAMBUSIA

Context:

The Andhra Pradesh government released around **10 million Gambusia fish, also known as mosquitofish,** into the state's water bodies to **combat mosquito-borne diseases like malaria and dengue.**

- The fish is used as a **biological agent to control mosquito larvae and has been part of mosquito-control strategies in India since 1928.**
- Gambusia fish are known **for their high breeding capacity and adaptability,** allowing them to **survive in diverse environments.**

ZOMBIE FIRES

Context:

As global temperatures rise, fires are spreading farther north and into the Arctic, leading to a rise in **“zombie fires.”**

What are Zombie Fires?

Zombie fires are **underground wildfires that smoulder beneath the surface, burning slowly** and releasing large amounts of smoke. They can persist through winter, re-emerging in the following spring. These fires are **difficult to detect and extinguish,** making them a challenging firefighting task. Zombie fires occur in **carbon-rich peatlands** and can have significant environmental impacts, contributing to climate change and air pollution.

Reason for it:

The Arctic's **warming conditions make the forest and tundra more susceptible to wildfires,** and changes in atmospheric circulation, including **more frequent lightning strikes,** contribute to fire outbreaks.

The increasing prevalence of zombie fires underscores the urgent need to address climate change and its impact on wildfire risks.

Related Term:

Zombie ice, also known as “polar ice zombie,” is a term used to describe Arctic or Antarctic ice that appears to be melting and disappearing during the warmer months but later reappears and refreezes during the colder months. However, the ice is no longer getting replenished by parent glaciers

SOVEREIGN GREEN BONDS

Context:

The **Pension Fund Regulatory and Development Authority (PFRDA)** will allow pension funds to **invest in sovereign green bonds** that the government is expected to issue in the second half of the current financial year.

What are Sovereign Green Bonds?

Sovereign Green Bonds are **government-issued bonds** used to fund projects that have positive environmental impacts and contribute to sustainability goals.

- It was announced in **the Union Budget 2022-23** and the framework for SGrBs was issued by the **Ministry of Finance in 2022.** Investors in these bonds **do not**

bear project-related risks.

Last year, the government raised Rs 16,000 crore from the issuance of Sovereign Green Bonds to fund projects aimed at reducing carbon emissions. Currently, there are 10 pension fund managers under the National Pension System, and the move aims to encourage investment in environmentally friendly projects.

About PFRDA:

Pension Fund Regulatory and Development Authority (Statutory organization; founded 2003; HQ: New Delhi) is the regulatory body for the overall supervision and regulation of pensions in India. It operates under the jurisdiction of the Ministry of Finance.

ADVANCE AUTHORISATION SCHEME

Context:

The Directorate General of Foreign Trade (DGFT) has implemented the Advance Authorisation Scheme under the Foreign Trade Policy, which allows duty-free import of inputs for export purposes. The eligibility of inputs is determined by Sector-specific Norms Committees based on input-output norms.

- To streamline the norms fixation process, the DGFT has created a user-friendly and searchable database of Ad-hoc Norms fixed in previous years. These norms can be used by any exporter without requiring a Norms Committee review, as outlined in the Foreign Trade Policy 2023.
- This trade facilitation measure simplifies the advance authorisation and norms fixation process, leading to shorter turnaround times for exporters, improved ease of doing business, and reduced compliance burden.

About Advance Authorization Scheme:

- It allows the duty-free import of inputs, which are physically incorporated into an export product.
- In addition to any inputs, packaging material, fuel, oil, and catalyst which is consumed/utilized in the process of production of export product, is also allowed.
- DGFT provides a sector-wise list of Standard Input-Output Norms (SION) under which the exporters may choose to apply.
- Advance Authorization is valid for 12 months from the date of issue of such Authorization.

PLANT SPECIES THAT CAN WITHSTAND EXTREME DEHYDRATION

Context:

The Western Ghats, a biodiversity hotspot in India, is home

to 62 Desiccation-Tolerant (DT) Vascular plant species, capable of surviving extreme dehydration by losing up to 95% of their water content and reviving when water becomes available again.

- This unique ability allows them to thrive in harsh, arid environments that would be unsuitable for most other plants. These DT plants have potential applications in agriculture, especially in water-scarce regions.

Key Findings:

- The study highlights that DT plants are predominantly found in rock outcrops, a common landscape feature in the Western Ghats, but they also inhabit tree trunks in partially shaded forests.
- Of the 62 species identified, 16 are exclusive to India, and 12 are unique to the Western Ghats outcrops, emphasizing the area's significance as a global DT hotspot.

AIRBUS C-295 AIRCRAFT

Context:

Airbus and Tata Advanced Systems Limited (TASL) are working together to establish an aircraft manufacturing facility in Vadodara (Gujarat).

Under a ₹22,000-crore deal with the Indian Air Force, 56 C-295MW transport aircraft will be procured to replace the Avro aircraft. Of these, 16 aircraft will be manufactured in Spain, and 40 will be produced in India by Airbus and Tata jointly.

- This is the first time a private sector company would be manufacturing a full aircraft in India.

About C-295:

The C-295 is a modern transport aircraft with a capacity of 9 tonnes and can carry up to 71 troops or 50 paratroopers. It has a flight endurance of up to 11 hours, enabling multi-role operations in all weather conditions.

It will replace the Indian Air Force's ageing Avro-748 planes, which are British-origin twin-engine turboprops with a 6-tonne freight capacity.

CREDIT GUARANTEE SCHEME FOR LIVESTOCK SECTOR

Context:

The Ministry of Fisheries, Animal Husbandry, and Dairying has launched the "Credit Guarantee Scheme" under the Animal Husbandry Infrastructure Development Fund (AHIDF) to support the rural economy by leveraging Micro, Small & Medium Enterprises (MSMEs) in the Livestock sector.

What is Credit Guarantee Fund?

The Credit Guarantee Fund is a financial mechanism that

provides risk mitigation for lending institutions, by lending to individuals or businesses, even **without sufficient collateral**. If the borrower defaults, the **fund reimburses the lending institution** for the guaranteed portion of the loan.

The **Credit Guarantee Fund Trust**, established in **March 2021**, is India's **first-ever fund trust** under the Credit Guarantee Scheme for the agriculture and Animal Husbandry sector. It aims to significantly **increase the number of MSMEs benefiting** from the **AHIDF scheme** and strengthen the **ecosystem for collateral-free credit from banks**.

Features of the Scheme:

Under the scheme, the Department of Animal Husbandry & Dairying has established a **Credit Guarantee Fund Trust of Rs. 750.00 crores** (under **NABARD**), which **provides credit guarantee coverage of up to 25% for credit facilities** extended to MSMEs by eligible lending institutions.

Advantages:

This initiative aims to improve access to finance for underserved livestock entrepreneurs, especially first-generation and underprivileged individuals who lack collateral security.

About AHIDF

It is a **Central Sector Scheme** launched by the Ministry of Animal Husbandry, Fisheries, and Dairying. Its aim is to **encourage investments** in dairy and meat processing infrastructure, as well as animal feed plants.

INVEST INDIA

Context:

Ms Nivruti Rai has been appointed as the Managing Director & CEO of Invest India.

Ms Rai, a recipient of the **prestigious Nari Shakti Puraskar**, brings a wealth of experience from her 29-year tenure at Intel, where she led Intel India as Country Head for the past seven years.

Invest India (est. 2009), is a **non-profit venture under the Department for Promotion of Industry and Internal Trade**, Ministry of Commerce and Industry, Government of India. It serves as **the national investment promotion and facilitation agency**, targeting specific sectors and fostering partnerships for sustainable investments in India.

BIOFORTIFIED FOODS

Context:

The Indian industry aims to **create separate branding for biofortified foods**, similar to "organic" products, to **enhance their popularity**.

- To promote access to nutrient-rich crops, the gov-

ernment is **seeking the assistance of the private sector**.

About Biofortification:

- Biofortification is a **process of enhancing the nutritional content of crops by increasing the levels of essential vitamins and minerals**.
- It is a targeted approach to **address nutrient deficiencies in populations**, particularly in regions where people have limited access to diverse and nutritious diets.

The main objective of biofortification is to **improve the nutritional status of vulnerable populations**, especially in **developing countries where malnutrition and micronutrient deficiencies are prevalent**. By enhancing the nutrient content of staple crops, such as **rice, wheat, maize, and beans**, biofortification aims to provide a sustainable and cost-effective solution to **combat malnutrition and related health issues**.

FOSSIL SHOWS A PUGNACIOUS MAMMAL ATTACKING A DINOSAUR

Context:

A remarkable fossil discovered in north-eastern China sheds **light on the complex interactions between mammals and dinosaurs during the Mesozoic Era**, around 125 million years ago.

- The fossil shows a small badger-like **mammal called Repenomamus robustus attacking a medium-sized, plant-eating dinosaur named Psittacosaurus lujiatunensis**.
- The fossil provides evidence of a **smaller mammal preying on a larger dinosaur**, challenging the **traditional belief that dinosaurs always ate smaller mammals**.

The discovery suggests that **Mesozoic food webs were more complex than previously thought**, with some mammals being **active predators rather than just prey**. This find also challenges the idea that **mammals only scavenged dinosaur carcasses**. The interaction between **Repenomamus and Psittacosaurus** is a **unique example of a mammal preying on a dinosaur**.

SPORTS CORNER

WIMBLEDON: CARLOS ALCARAZ

Carlos Alcaraz defeated Novak Djokovic in a **thrilling five-set final** to win his first Wimbledon title.

What is Wimbledon?

It is one of the **four major tennis tournaments known as Grand Slam events**. It is held annually in London, England, and is the **oldest tennis tournament in the world**. The other three Grand Slam tournaments are the **Australian Open, the French Open, and the US Open**. They feature **singles, doubles, and mixed doubles matches**, and determine the champions in each category.

Grand Slam refers to the accomplishment of winning all four major championships of Australia, France, Britain (Wimbledon), and the United States in the **same calendar season**.

Significance: The result sparks speculation about a potential generational shift in men's tennis.



MANIPUR

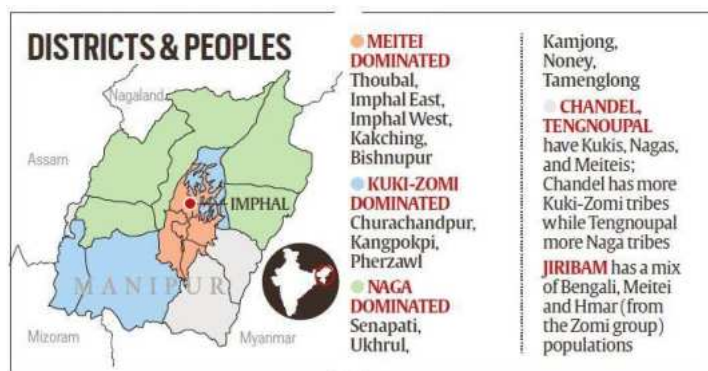
The violence in Manipur, which resulted in deaths and displacement, has drawn international attention and scrutiny. Recently, an EU Parliament resolution mistakenly framed the conflict as having a religious basis, pitting **Hindus against Christians**. However, experts say, the violence was sparked by a court order to **include Meiteis in the list of Scheduled Tribes** in the state, which angered the Naga community as well.

MAPPING

NORTH KOREA

North Korea **conducted a test of its new Hwasong-18 inter-continental ballistic missile (ICBM) using solid propellants**. The test has drawn reactions from neighbouring countries, with Japan, South Korea, and the United States expressing concerns about regional stability and emphasizing the need for closer cooperation and denuclearization of the Korean Peninsula.

North Korea is a country in East Asia. It constitutes the **northern half of the Korean Peninsula and borders China and Russia to the north at the Yalu and Tumen rivers**, and South Korea to the south at the Korean Demilitarized Zone. The war between North Korea and South Korea began in 1950 and both governments claimed to be the **sole legitimate government of all of Korea**, and neither **accepted the border as permanent**.



KERCH BRIDGE (CRIMEA)

The Kerch Bridge (also called Crimean Bridge), opened in 2018, is a **crucial transportation route between Russia and Crimea**, which was annexed by Russia in 2014. It has come **under attack twice in recent years**.

The bridge is a **pair of parallel bridges**, one for a four-lane road and one for a double-track railway, spanning the **Kerch Strait between the Taman Peninsula of Krasnodar Krai in Russia and the Kerch Peninsula of Crimea**.



SWEDEN

Protesters in Baghdad, Iraq, stormed the **Swedish Embassy** in response to an anticipated **Koran-burning event in Stockholm, Sweden**. **Sweden's laws protect the right to hold public demonstrations**, and blasphemy laws were abandoned in the country in the 1970s. Recently, Turkey removed its objection to Sweden joining NATO.

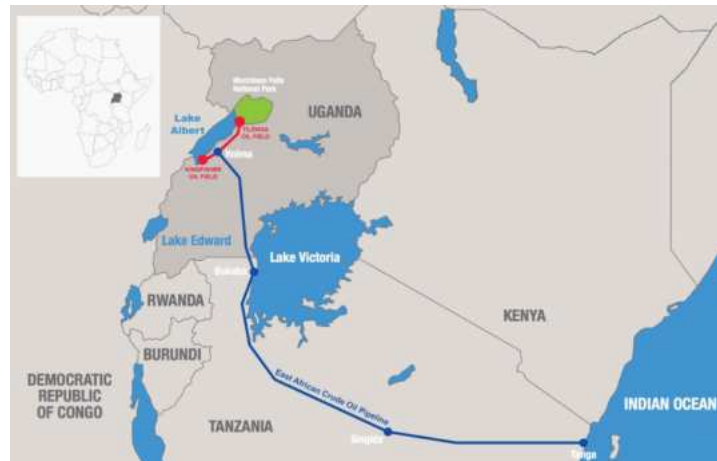
Sweden is a **Scandinavian nation with thousands of coastal islands and inland lakes**, along with vast boreal forests and glaciated mountains. It borders Norway to the west and north, Finland to the east, and is connected to Denmark in the southwest by a bridge-tunnel across the Öresund.



EAST AFRICA CRUDE OIL PIPELINE (EACOP) PROJECT

The East Africa Crude Oil Pipeline (EACOP) project, connect-

ing the **Tilenga and Kingfisher oilfields** in western Uganda with the port of Tanga in eastern Tanzania, has raised concerns over its impact on ecosystems and exacerbating the **global climate crisis**. The pipeline's construction will **disrupt sensitive ecosystems**, including **Uganda's Murchison Falls National Park** and the **Murchison Falls-Albert Delta Ramsar site**.



SURAT

Context:

The **Surat Diamond Bourse (SDB)** is claimed to be the **world's largest office space** in a single project, with an area of 66 lakh square feet. The main objective of the SDB is to **expand and shift the diamond trading business from Mumbai to Surat**, the hub of diamond cutting and polishing, and to provide **all diamond-related activities and infrastructure under one roof**. Surat is the world's biggest centre for cutting and polishing, accounting for **90% of the diamonds traded globally**.

