

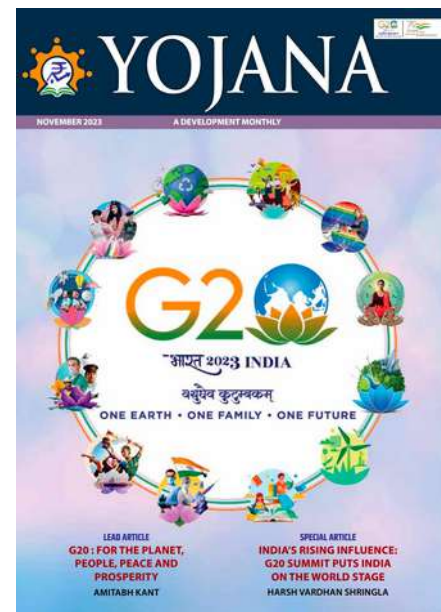
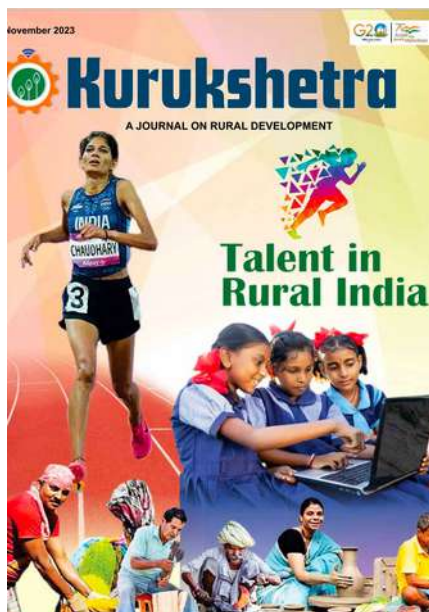
OFFICERS' Pulse

DIGEST

November 2023



DownToEarth Business Standard



OFFICERS IAS ACADEMY™

Current Affairs Monthly







The **PULSE** of UPSC at your fingertips.

Contents







Schemes..... 3	3) Euclid Space Telescope 25
1) APY enrolments cross the 6 crore mark..... 3	4) Generic drugs to treat rare diseases 27
2) DAY-NRLM..... 4	Reports and Indices 30
3) Nasha Mukh Bharat Abhiyaan 5	1) Adaptation Gap Report 30
4) Extension of Pradhan Mantri Garib Kalyan Ann Yojana 6	2) ILO report calls for countries to strengthen safety net..... 31
Initiatives..... 8	3) World Malaria Report 32
1) PM JANMAN..... 8	Polity 34
2) One Nation One Ration Card..... 8	1) High Court quashes Haryana's reservation to locals 34
Environment..... 10	2) Ethics Committee 34
1) National Green Tribunal 10	3) Land titles distributed under Forest Rights Act 35
2) Phased introduction of biogas blending..... 11	4) Special Category Status 37
Flora & Fauna 13	5) UAPA, 2019 38
1) One year of Project Cheetah 13	International Relations 39
Economy..... 15	1) India-Canada diplomatic standoff. 39
1) Social Stock Exchange 15	2) Agartala-Akhaura rail link..... 40
2) New regulatory framework for small and medium REITs 15	3) Philippines exit from BRI..... 41
3) Non-Fungible Tokens (NFTs) 16	4) Comprehensive Nuclear-Test-Ban Treaty..... 42
4) RBI enhances UPI payment limits for healthcare and education..... 17	Art & Culture 44
5) Insolvency and Bankruptcy Code (IBC) 18	1) Balban's Tomb..... 44
6) Direct listing on foreign exchanges 19	2) UNESCO Creative Cities Network... 44
Organisations 21	Defence..... 46
1) Brazil to join OPEC+..... 21	1) Indo-Tibetan Border Police Force 46
2) Energy Efficiency Services Limited 22	2) Indo-Pacific Regional Dialogue 47
3) Asia-Pacific Economic Cooperation 22	Miscellaneous 49
Science and Technology 24	1) Auroras 49
1) Zika Virus 24	2) Bletchley Park Declaration..... 50
2) Tantalum 25	3) Men's Cricket ICC World Cup..... 51


Schemes

1) APY enrolments cross the 6 crore mark





<p>About</p> 	<ul style="list-style-type: none"> • Atal Pension Yojana (APY) addresses the old age income security of the working poor. • It is focused on the unorganized sector workers. • It encourages the workers in the unorganized sector to voluntarily save for their retirement. • The Government had launched the scheme with effect from 1st June, 2015.
<p>Nodal Ministry</p> 	<ul style="list-style-type: none"> • Ministry of Finance
<p>Eligibility</p> 	<ul style="list-style-type: none"> • Any citizen of India can join the APY scheme. • The age of the subscriber should be between 18-40 years. The contribution levels would vary and would be low if a subscriber joins early and increases if she joins late. • The benefits of the scheme will arise to the subscribers on attaining the age of 60 years.
<p>Features</p> 	<ul style="list-style-type: none"> • Fixed pension for the subscribers ranging between Rs.1000 to Rs. 5000, if s/he joins and contributes between the age of 18 years and 40 years. • The same pension is payable to Spouse after death of Subscriber. • The minimum pension would be guaranteed by the Government, i.e., if the accumulated corpus based on contributions earns a lower than estimated return on investment and is inadequate to provide the minimum guaranteed pension, the Central Government would fund such inadequacy. • Alternatively, if the returns on investment are higher, the subscribers would get enhanced pensionary benefits.
<p>Implementation</p> 	<ul style="list-style-type: none"> • APY is administered by the Pension Fund Regulatory and Development Authority (PFRDA).
<p>Why in the news?</p> 	<ul style="list-style-type: none"> • The total enrollment under the Atal Pension Yojana (APY) has crossed 6 crore.

2) DAY-NRLM

<p>About</p> 	<ul style="list-style-type: none"> Deendayal Antyodaya Yojana-National Rural Livelihood Mission (DAY-NRLM) is a flagship poverty alleviation program.
<p>Aim</p> 	<ul style="list-style-type: none"> Launched in 2011, it aims to reduce poverty by enabling the poor household to access gainful self-employment and skilled wage employment opportunities resulting in sustainable and diversified livelihood options for the poor.
<p>Nodal Ministry</p> 	<ul style="list-style-type: none"> Ministry of Rural Development.
<p>Components</p> 	<ul style="list-style-type: none"> DAY-NRLM seeks to promote a comprehensive livelihoods approach encompassing four interrelated tasks: <ol style="list-style-type: none"> Mobilizing all rural, poor households into effective self-help groups (SHGs) and SHG federations; Enhancing access to credit and other financial, technical, and marketing services; Building capacities and skills for gainful and sustainable livelihoods; Improving the delivery of social and economic support services to the poor through convergence. The Mission seeks to reach out to around 10 crore rural poor households in a phased manner by 2022-23 and impact their livelihoods significantly.
<p>Eligible beneficiaries</p> 	<ul style="list-style-type: none"> NRLM's priority is to reach out to the poorest, most vulnerable and marginalized. It begins with targeting women and they are considered as representatives of their households. In case of extremely vulnerable persons like Persons with Disabilities (PwDs), elders etc., NRLM mobilizes both men and women.
<p>Implementation</p> 	<ul style="list-style-type: none"> It works towards bringing at least one member (preferably a woman) from all poor families into the Self Help Group (SHG) network. The SHGs and their federations offer their members microfinance services such as – savings, credit, bank linkages, insurance, remittances, equity etc. They also offer collectivization and group activities. As the Institutions of the Poor (IoP) mature, they are facilitated to take up livelihoods/income-generating activities. <ul style="list-style-type: none"> <i>SHGs, their federations at the village, cluster levels and</i>

	<p><i>beyond, and other collectives of the poor constitute IoP.</i></p> <ul style="list-style-type: none"> • DAY-NRLM adopts a demand driven approach, enabling the States to formulate their own State specific poverty reduction action plans.
<p>Why in the news?</p> 	<ul style="list-style-type: none"> • DAY-NRLM and the Small Industries Development Bank of India (SIDBI) signed a Memorandum of Understanding (MoU) towards promoting women-led enterprises among experienced members of Self Help Groups (SHGs). <ul style="list-style-type: none"> ◦ <i>SIDBI was established in 1990 under an Act of Parliament.</i> ◦ <i>It acts as the principal financial institution for promotion, financing and development of the MSME sector as well as for co-ordination of functions of institutions engaged in similar activities.</i>

3) Nasha Mukh Bharat Abhiyaan

<p>About</p> 	<ul style="list-style-type: none"> • The 'Nasha Mukh Bharat Abhiyaan' or the 'Drugs-Free India Campaign' is a campaign against substance abuse flagged off on 15th August 2020.
<p>Aim</p> 	<ul style="list-style-type: none"> • To create awareness about ill effects of substance abuse among the youth. • The campaign focuses on 272 districts in 32 states & UT's which are identified as most vulnerable in terms of usage of drugs and launches a three-pronged attack combining efforts of the Narcotics Bureau, Outreach/Awareness by Social Justice and Treatment through the Health Department.
<p>Nodal ministry</p> 	<ul style="list-style-type: none"> • Ministry of Social Justice and Empowerment.
<p>Components</p> 	<ul style="list-style-type: none"> • Awareness generation programmes; • Focus on Higher Educational Institutions, University Campuses and Schools; • Community outreach and Identification of dependent population; • Focus on Treatment facilities in Hospital settings; and • Capacity Building Programmes for Service Providers.
<p>Why in the news?</p>	<ul style="list-style-type: none"> • Nearly 10.71 crore people have become part of Nasha Mukh Bharat Abhiyaan.

4) Extension of Pradhan Mantri Garib Kalyan Ann Yojana

About NFSA

- The National Food Security Act, 2013 (NFSA) provides for **food and nutritional security** in the country, by ensuring access to adequate quantities of quality food at affordable prices for people to live a life with dignity.
- The Act enacted in **2013** marks a paradigm shift in the approach to food security from **welfare to rights based approach**.
- The Act is in line with **Goal Two of the Sustainable Development Goals** (which seeks sustainable solutions to end hunger in all its forms by 2030 and to achieve food security) set by the United Nations General Assembly.
- The implementation of the scheme comes under the ambit of the **Ministry of Consumer Affairs, Food and Public Distribution**.

Key Features

- The Act legally entitled up to **75% of the rural population and 50% of the urban population** to receive subsidized foodgrains under the **Targeted Public Distribution System (TPDS)**.
- The eligible persons (**Primary Households**) are **entitled to receive 5 Kgs of foodgrains per person per month at subsidised prices of Rs. 3/2/1 per Kg for rice/wheat/coarse grains**.
- The **Antyodaya Anna Yojana (AAY) households**, which constitute the poorest of the poor, receive **35 Kgs of foodgrains per household per month**.
- About two-thirds of the population, therefore, is covered under the Act to receive highly subsidized foodgrains.
- One of the guiding principles of the Act is its **life-cycle approach**

wherein special provisions have been made on the **nutritional support to women and children**.

- **Pregnant women and lactating mothers** will be entitled to meals and **maternity benefits of not less than Rs 6000**.
- **Children upto 14 years of age** will be entitled to **nutritious meals** as per the prescribed nutritional standards. In case of non-supply of entitled foodgrains or meals, the beneficiaries will receive **food security allowance**.
- The Act also contains provisions for setting up of **grievance redressal mechanism** at the District and State levels
- The **eldest women of the household** of age 18 years or above will be the head of the household for the purpose of issuing ration cards.

Beneficiaries

- Corresponding to the all India coverage of 75% and 50% in the rural and urban areas, **State-wise coverage** under NFSA was determined by the **erstwhile Planning Commission** (now NITI Aayog) by using the **NSS Household Consumption Survey data for 2011-12**.
- Within the coverage determined for each State, the **work of identification of eligible households** is to be done by **States/UTs**.

Implementation

- It is operated under the **joint responsibility of the Central and the State/Union Territory (UT) Governments**.
- The Central Government is responsible for procurement, allocation and transportation of food grains up to the designated depots of the Food Corporation of India.

- States/UTs hold the operational responsibilities for allocation and distribution of food grains.
- The NFSA currently covers **81 crore people** which was determined on the basis of the **2011 census**, and has not been revised since the law was passed in 2013.

About PMGKY

- The **Pradhan Mantri Garib Kalyan Anna Yojana (PMGKY)** was introduced in **2020** as a covid-pandemic relief measure to **provide food security** to the poor, needy and the vulnerable households/beneficiaries.

- Under the current version of the scheme, **five kg of free food grains** are being provided per month to over 81 crores poor (**Primary household beneficiaries**) in the country and **Antyodaya households get 35 kg of free food grains per month.**

Why in News?

- The Union Cabinet has announced an **extension of the Pradhan Mantri Garib Kalyan Anna Yojana (PMGKY)** free ration scheme for **another five years.**
- The scheme was to end on December 31.

Initiatives

1) PM JANMAN

What's in the news?

- The Union Cabinet has approved Pradhan Mantri Janjati Adivasi Nyaya Maha Abhiyan (PM JANMAN) with total outlay of Rs 24,000-crore (Central Share Rs.15,000 crore and State Share: Rs 9,000 crore) to **ensure last-mile welfare scheme delivery and protection for Particularly Vulnerable Tribal Groups (PVTGs).**
 - **75 communities** located in **18 states and the Union Territory of Andaman and Nicobar Islands** have been categorised as PVTGs. These PVTGs continue to face vulnerability in social, economic and education sectors.
 - *Refer Pulse June 2023 Digest edition for details about PVTGs.*
 - PM JANMAN focuses on 11 critical interventions through 9 line Ministries to uplift these tribal communities.
 - The Union Cabinet approved the Mission on **Janjatiya Gaurav Diwas.**
 - Janjatiya Gaurav Divas is celebrated on **15th November**, to **remember the contribution of tribal freedom fighters.**
 - The day has been announced in the memory of **Bhagwan Birsa Munda**, the tribal freedom fighter from Jharkhand.
3. Providing piped water supply & community water supply;
 4. Providing mobile medical units with medicine cost;
 5. Construction of hostels & vocational education centres;
 6. Construction of anganwadi centres;
 7. Construction of multipurpose centres (MPCs);
 8. Energization of households (Last mile connectivity);
 9. Solar lighting in streets & MPCs;
 10. Setting up of Van Dhan Vikas Kendras (VDVKs);
 11. Installation of mobile towers.
- These 11 interventions, which are part of existing schemes, will be implemented on the ground by nine Ministries, including the Ministry of Tribal Affairs.

2) One Nation One Ration Card

PDS in India

- Under the **National Food Security Act, 2013**, about 81 crore persons are entitled to buy subsidized foodgrain — **rice** at Rs 3/kg, **wheat** at Rs 2/kg, and **coarse grains** at Re 1/kg — from their **designated Fair Price Shops (FPS)** of the **Targeted Public Distribution System (TPDS).**
- PDS is operated under the **joint responsibility** of the **Central and the State Governments.**

What is the one 'One Nation, One Ration Card' system?

- Earlier, a ration cardholder can buy food grains only from an FPS that

Interventions under the Mission

- The **11 crucial interventions** to be carried out by the PM-JANMAN include:
 1. Provision of pucca houses;
 2. Connecting roads;

has been assigned to her in the locality in which she lives.

- However, under the One Nation, One Ration Card (ONORC) initiative launched in **2019**, the beneficiary will be able to buy subsidised foodgrains from **any FPS across the country**.
- The biggest beneficiaries will be **migrant workers** who move to other states to seek better job opportunities.
- The scheme is a step towards achieving the goal of a **universal and equitable public distribution system** for all citizens of India.

How will the system of ration card portability work?

- Ration card portability is aimed at providing **intra-state as well as inter-state portability** of ration cards.
- This system, based on a technological solution, will identify a beneficiary through **biometric authentication** on electronic Point of Sale (ePoS) devices installed at the FPSs, and enable that person to purchase the quantity of foodgrains to which she is entitled under the NFSA.
- The **Integrated Management of Public Distribution System (IM-PDS) portal** of the **Department of Food & Public Distribution** provides the technological platform

for the inter-state portability of ration cards.





- Once the 'one nation one ration card' system takes effect in a given state, the beneficiary family **can purchase food grains from different locations**.
- For example, a migrant worker staying in a different state can buy his or her share of the subsidized food grains from any FPS in the state where they work while the remaining family members will be able to buy their quota of the supplies back at home.




Why in News?

- An awareness drive workshop was held in Jammu & Kashmir for raising awareness for the One Nation, One Ration Card (ONORC) initiative.
- **All 36 states/UTs in India have now implemented ONORC.** Assam, the last remaining state, joined the scheme in June 2022, making food security portable throughout the country.

Environment

1) National Green Tribunal

<p>About</p> 	<ul style="list-style-type: none"> The National Green Tribunal (NGT) is a statutory body established in 2010 under the National Green Tribunal Act 2010. It is a specialized body equipped with the necessary expertise to handle environmental disputes involving multi-disciplinary issues.
<p>Powers and Functions</p> 	<ul style="list-style-type: none"> The Tribunal shall not be bound by the procedure laid down under the Code of Civil Procedure, 1908, but shall be guided by principles of natural justice. The Tribunal is vested with the powers of a civil court under the Code of Civil Procedure for discharging its functions but it can make its own rules. It provides speedy environmental justice and helps reduce the burden of litigation in the higher courts. The Tribunal is mandated to make and endeavour for disposal of applications or appeals finally within 6 months of filing of the same.
<p>Tribunal's composition</p> 	<ul style="list-style-type: none"> The Tribunal has a presence in five zones: North, Central, East, South and West. The Principal Bench is situated in the North Zone, headquartered in Delhi. The Central zone bench is situated in Bhopal, East zone in Kolkata, South zone in Chennai and West zone in Pune. The Tribunal is headed by the Chairperson who sits in the Principal Bench and has at least ten but not more than twenty judicial members and at least ten but not more than twenty expert members.
<p>Jurisdiction</p> 	<ul style="list-style-type: none"> The NGT deals with civil cases under the seven laws related to the environment, these include <ul style="list-style-type: none"> The Water (Prevention and Control of Pollution) Act, 1974 The Water (Prevention and Control of Pollution) Cess Act, 1977 The Forest (Conservation) Act, 1980 The Air (Prevention and Control of Pollution) Act, 1981 The Environment (Protection) Act, 1986 The Public Liability Insurance Act, 1991 and The Biological Diversity Act, 2002 The Tribunal has jurisdiction over all civil cases involving a substantial question relating to the environment. Additionally, any person aggrieved by an order/direction of any of the Appellate Authorities under the legislations mentioned above can also challenge them before the National Green Tribunal.

<p>Are decisions of the court binding?</p> 	<ul style="list-style-type: none"> • Yes. The Tribunal's orders are binding and it has power to grant relief in the form of compensation and damages to affected persons.
<p>Are decisions of the Tribunal final?</p> 	<ul style="list-style-type: none"> • The Tribunal has powers to review its own decisions. If this fails, the decision can be challenged before the Supreme Court within ninety days.
<p>Why in the news?</p> 	<ul style="list-style-type: none"> • The National Green Tribunal has issued notices to coastal management authorities of all the coastal states and Union Territories to understand the country's preparedness for sea level rise. • The tribunal is probing the matter on the basis of news reports highlighting submergence of low-lying islands.

2) Phased introduction of biogas blending

What is CNG?

- Compressed Natural Gas (CNG) is **natural gas compressed under pressure** so that more of it occupies lesser volume in the fuel tank.
- CNG is compressed to a pressure of 200 to 250 kg/cm². In this compressed form, it **occupies less than 1 per cent of its volume at atmospheric pressure.**
- **CNG differs from Liquefied Petroleum Gas (LPG)** in its constituents. CNG is **gaseous**, consisting of about **80 to 90 per cent methane**, whereas LPG is a **liquid**, consisting of a **compressed mixture of propane and butane in liquid form.**
- Commonly referred to as the **green fuel** because of its **lead and sulphur free character**, CNG **reduces harmful emissions.**

- Due to the absence of any lead or benzene content in CNG, **lead or benzene pollution is eliminated.**

Compressed BioGas (CBG)

- Compressed Biogas consists mainly of **methane** (more than 90%) and other gases like **carbon dioxide** (less than 4%), etc.
- CBG is produced by **anaerobic digestion of biomass and waste sources** like agricultural residue, cattle dung, sugarcane press mud, municipal solid waste, sewage treatment plant waste, etc.
- This Biogas can be **purified to remove hydrogen sulphide (H₂S), carbon dioxide (CO₂), water vapor** and when this purified biogas (methane content more than 90%) is **compressed to maximum 250 bar** and filled up in cascades (group of high pressure cylindrical vessels), it is called Compressed Biogas or CBG.

CBG vs. CNG

- CBG has **calorific value and other properties similar to CNG** and hence can be utilized as green renewable automotive fuel.
- The difference is that while **CNG is a by-product of petroleum, CBG can be produced from any biomass**, be it crop residue, cattle dung, sugarcane press mud, municipal wet waste or effluents from a sewage treatment plant.
- This makes CBG a **commercially viable option** as it can be directly used to replace CNG in transportation fuel. Just like CNG, CBG too can be transported through cylinders or pipelines to retail outlets.

Why in News?

- The Government of India has announced a roadmap for **mandatory blending of compressed biogas (CBG) with compressed natural gas (CNG) for transportation and piped natural gas (PNG) for households** starting 2025-26 (FY26).
- The mandatory phased introduction will start at 1% for use in automobiles and households from April 2025. The share of mandatory blending will then be increased to around 5% by 2028.
- A **Central Repository Body (CRB)** will be responsible for monitoring and implementing the blending mandate.

Rationale

- The key objectives of the compulsory blending programme

are to **stimulate demand for CBG, import substitution** for liquefied natural gas (LNG), **saving in forex, promoting circular economy** and to assist in achieving the **target of net-zero emission by 2070, etc.**

- India is a major consumer of natural gas and **depends on imports to meet around half of its requirement.**
- The country's natural gas consumption is only set to rise in the coming years given the government's aim to **increase the share of natural gas in the primary energy mix to 15 per cent by 2030** from a little over 6 per cent at present.
- Increased production of CBG could help India in **reducing reliance on natural gas imports.**

SATAT Scheme

- In 2018, the government had launched the **Sustainable Alternative Towards Affordable Transportation (SATAT) scheme**, under which **5,000 CBG plants** were envisaged by 2023 to produce 15 million tonnes of CBG.
- The scheme's objective was to encourage entrepreneurs to set up CBG plants across the country and supply the gas to public sector oil companies.
- SATAT, however, has so far **failed to attract enough entrepreneurs.** As per latest official data, just 48 CBG units have been set up under the scheme.

Flora & Fauna

1) One year of Project Cheetah

Asiatic Cheetah

- Asiatic cheetah (*Acinonyx jubatus venaticus*) is classified as a “**critically endangered**” species by the IUCN Red List, and is believed to survive only in **Iran**.
- Asiatic cheetahs were once widespread across India but were eradicated in the country as they were hunted for sport.
- In 1952, Asiatic cheetah was **declared extinct** from India, after decades of **human intervention, hunting and habitat degradation**.
- Asiatic cheetahs are almost identical in appearance to their better known African cousins. However, there are subtle differences.
 - The Asiatic cheetah is slightly smaller and paler than its African cousin.



African Cheetah

- The African cheetah (*Acinonyx jubatus jubatus*) is spread out across Africa from Northwest Africa, East Africa, and Southern Africa.
- With a bigger territory, the African cheetahs have higher populations compared to Asiatic cheetahs.

- They are categorised as **Vulnerable** in the IUCN Red List.

Project Cheetah

- Project Cheetah is India's ambitious attempt to **introduce African cats in the wild in the country**.
- The translocation of African Cheetah is a part of Government of India to reintroduce the **fastest land animal** in India after extinction of the Asiatic cheetah in the 1950s.
- The goal of the introduction of African cheetahs is to **establish viable cheetah metapopulation in India**.

Why do conservationists want to reintroduce cheetahs?

- A section of conservationists has long advocated the reintroduction of the species in the country.
- They argue that introductions of large carnivores have increasingly been recognised as a **strategy to conserve threatened species and restore ecosystem functions**.
- Cheetahs dwell on open plains and it is mainly a **grassland species**. Conserving cheetahs will lead to the **conservation of all grassland species**.
- The cheetah is the **only large carnivore to have gone extinct in India**, mainly by over-hunting in India in historical times.
- India now has the **economic ability** to consider restoring its lost natural heritage for ethical as well as ecological reasons.

Concerns

- One of the major concerns of the reintroduction project is whether the **arriving cheetahs would bring diseases that could threaten other feline species**. Transmission of these to the

endemic tiger population is a cause for concern.

- Another issue is the **larger debate on coexistence**. More aggressive predators such as tigers and leopards will compete with the cheetahs. They may be driven to the outskirts of the park, where they could come into **conflict with humans**.

Why in News?

- Project Cheetah, India's cheetah introduction programme, has completed one year after the first batch of eight Namibian cheetahs was released in **Madhya Pradesh's Kuno National Park (KNP)**.
- Under the initiative, in total, 20 adult African cheetahs have been imported so far.

Economy

1) Social Stock Exchange

What is a Social Stock Exchange?

- Stock exchanges are generally the platforms where **shares of companies are traded**.
- Social Stock Exchange (SSE) is a separate segment created by stock exchanges to **help social enterprises raise funds from the public**.
- SSE will provide a platform for social enterprises, such as Non-Profit Organizations (NPOs) or For-Profit Social Enterprises (FPEs), to raise funds to finance their social initiatives.
- However, a key difference between SSE and a normal stock exchange is that since the money being invested in an SSE listed entity is a **donation, investors can neither make returns on such securities nor trade them like normal shares**.

How does it work?

- When a donor makes the donation to a firm listed on SSE, the firm issues the donor what is called a **zero-coupon zero-principal (ZCZP) instrument**.
- This is akin to bonds except that the instrument **doesn't carry any principal or interest** with it.
- These instruments come with **tax benefits** that are identical to donations made to charity trusts currently.

Why is it required?

- Currently, raising money for charity is a big challenge for many social enterprises.
- SSE brings together social enterprises and investors on a single platform. Through SSE, a social service firm will be able to reach out to a wide range of donors.

- SSEs can be **credible platforms** for donations since the **transparency norms** put in place by the **Securities and Exchange Board of India (SEBI)** ensure that firms disclose all relevant information including where proceeds are used and how.

Why in News?

- SEBI has approved flexibility in the framework for Social Stock Exchanges to provide impetus to fund raising by Not for Profit Organizations (NPOs) on the SSE.

2) New regulatory framework for small and medium REITs

What are REITs?

- REIT or Real Estate Investment Trust can be described as a **company that owns and operates real estate properties to generate income**.
- They **pool money from the investors and invest it in commercial real estate projects** like workspaces, malls, etc.
- For instance, they lease properties and collect rent thereon. The rent thus collected is later **distributed among shareholders** as income and dividends.
- REITs **operate similarly to shares**, being listed on stock exchanges, enabling investors to buy or sell them at any time on the exchange.
- Currently, India has **only three REIT funds** - Embassy Office Parks REIT, Mindspace Business Parks REIT, and Brookfield India Real Estate Trust.

Why in News?

- Securities & Exchange Board of India (SEBI) has approved amendments to the SEBI (Real Estate Investment Trusts)

Regulations 2014 (REIT Regulations) to create a **new regulatory framework for small and medium REITs**.

- The key change is the **reduction of the minimum asset value** required for these trusts. Previously set at **₹500 crore**, now it stands at **₹50 crore**.
- This move aims to make real estate investments more accessible to a broader range of investors.

3) Non-Fungible Tokens (NFTs)

About

- **Anything that can be converted into a digital form can be an NFT (non-fungible token).**
- Everything from one's drawings, photos, videos, GIF, music, in-game items, selfies, and even a tweet can be turned into an NFT, which **can then be traded online using cryptocurrency**.
- But what makes NFTs unique from other digital forms is that they are **backed by Blockchain technology**.
 - Blockchain is a **distributed ledger** where all transactions are recorded. It is like one's bank passbook, except all transactions are transparent and can be seen by anyone and cannot be changed or modified once recorded.
- NFTs are gaining massive popularity now because they are becoming an increasingly popular way to showcase and sell one's digital artwork.
- Billions of dollars have been spent on NFTs since its inception—which date back to 2014.

How do NFTs work?

- **NFT works on blockchain as it gives users complete ownership of a digital asset.**

- For instance, if you're a sketch artist, and if you convert your digital asset to an NFT, what you get is proof of ownership, powered by Blockchain.

Examples of NFT marketplaces:

- OpenSea
- NBA Top Shot
- Nifty Gateway
- Rarible.

Why are people willing to spend millions on something they could easily screenshot or download?

- When you list your NFT on a marketplace, you pay something called a **gas fee** (transaction fee) for using the Blockchain, following which your digital art is then recorded on Blockchain, mentioning that you (your address) own the particular NFT.
- This gives you **full ownership**—which **cannot be edited or modified by anyone, including the marketplace owner**.
- An NFT is thus created, or "**minted**", to get exclusive ownership rights.
- **NFTs can have only one owner at a time**. Apart from exclusive ownership, NFT owners can also **digitally sign** their artwork and **store specific information** in their NFTs metadata. This will be only viewable to the individual who bought the NFT.

How is an NFT different from cryptocurrency?

- NFTs and cryptocurrencies are very different from each other. While **both are built on Blockchain, that is where the similarity ends**.
- Cryptocurrency is a **currency and is fungible**, meaning that it is interchangeable. For instance, if you hold one crypto token, say one Ethereum, the next Ethereum that you hold will also be of the same value.

- But **NFTs are non-fungible**, that means the value of one NFT is not equal to another. Every art is different from other, making it non fungible, and unique.

Why in News?

- After a significant dip in early 2023, the NFT market has shown signs of recovery, with some high-profile sales fetching millions of dollars.
- While NFTs debuted in 2014, it wasn't until 2021 that they exploded onto the scene, driven by their popularity as a platform for trading digital art.

4) RBI enhances UPI payment limits for healthcare and education

About UPI

- Unified Payments Interface (UPI) is a system that **powers multiple bank accounts into a single mobile application** (of any participating bank), merging several banking features, seamless fund routing & merchant payments into one hood.
- This system enables lightning-fast money transfers between bank accounts through a mobile application, effectively bypassing the need for conventional approaches such as net banking or the manual entry of credit card information.
- UPI is an initiative of the **National Payments Corporation of India (NPCI)**.
- NPCI launched the pilot programme of UPI in 2016.
 - *NPCI was incorporated in 2008 as an umbrella organization for operating retail payments and settlement systems in India.*
 - *It is an initiative of the RBI and Indian Banks'*

Association (IBA) under the provisions of the Payment and Settlement Systems Act, 2007, for creating a robust Payment & Settlement Infrastructure in India.

- *It has been incorporated as a "Not for Profit" Company under the Companies Act 2013.*

How is it unique?

- **Immediate money transfer** through mobile device **round the clock 24*7 and 365 days.**
- Single mobile application for accessing different bank accounts.
- **Single Click 2 Factor Authentication.**
- Raising complaints from mobile app directly.
- It also caters to the **"Peer to Peer" collect request** which can be scheduled and paid as per requirement and convenience.

Why in News?

- The Reserve Bank of India (RBI) has **increased the UPI transaction limit for education and healthcare facilities to Rs 5 lakh.** Earlier, the transaction limit was Rs 1 lakh.
- This change will enable users to conveniently make larger payments for healthcare and education expenses through the widely used UPI platform.

Transaction limits

- The UPI transaction limit for normal payments is up to **Rs 1 lakh** per transaction.
- For some **specific categories of transactions** in UPI, like capital markets, collections, insurance, and foreign inward remittances, the transaction limit is **up to 2 lakh.**
- For **Initial Public Offering (IPO) and Retail Direct Scheme**, the limit is up to **Rs 5 lakh per transaction.**

- *Retail Direct scheme is a one-stop solution to facilitate investment in Government Securities by Individual Investors. Under this scheme Individual Retail investors can open Gilt Securities Account - "Retail Direct Gilt (RDG)" Account with the RBI.*

5) Insolvency and Bankruptcy Code (IBC)

About Insolvency and Bankruptcy Code, 2016

- **Insolvency** is a situation where individuals or companies are unable to repay their outstanding debt.
- The Insolvency and Bankruptcy Code (IBC) provides a time-bound process for resolving the insolvency of corporate debtors called the **corporate insolvency resolution process (CIRP)**.
- Earlier, the **minimum amount of default** after which the creditor or debtor could apply for insolvency was ₹1 lakh, but considering the stress on companies amid the covid pandemic, the government increased the minimum amount to **₹1 crore**.
- Under CIRP, a **committee of creditors** is constituted to decide on the insolvency resolution. The committee may consider a **resolution plan** which typically provides for the payoff of debt by merger, acquisition, or restructuring of the company.
- If a resolution plan is not approved by the committee of creditors within the specified time, the company is **liquidated** (the assets of the borrower will be sold to repay creditors).
- During CIRP, the affairs of the company are managed by the

Resolution Professional (RP), who is appointed to conduct CIRP.

- The **National Company Law Tribunal (NCLT)** adjudicates insolvency resolution for companies and Limited Liability Partnerships. The **Debt Recovery Tribunal (DRT)** adjudicates insolvency resolution for individuals and partnership firms.
- The **Insolvency and Bankruptcy Board of India (IBBI)** regulates the functioning of IPs, IPAs and IUs.
- The code was amended in 2019 which mandated a deadline for the completion of the resolution process **within 330 days, including all litigation and judicial processes.**

Insolvency and Bankruptcy Code (Amendment) Act, 2021

- In 2021, the Parliament passed the Insolvency and Bankruptcy Code (Amendment) Act, 2021 to expedite and provide an efficient **alternate insolvency resolution process for corporate persons classified as micro, small and medium enterprises (MSMEs)** under IBC.

Highlights of the Act

Pre-packaged insolvency resolution

- The Act introduces an **alternate insolvency resolution process for MSMEs**, called the **pre-packaged insolvency resolution process (PIRP)**.
- Unlike CIRP, **PIRP may be initiated only by debtors**. The debtor should have a **base resolution plan** in place.
- During PIRP, the **management of the company will remain with the debtor**.

Minimum default amount

- Application for initiating PIRP may be filed in the event of a **default of at least one lakh rupees**.

Debtors eligible for PIRP

- PIRP may be initiated in the event of a default by a corporate debtor classified as an MSME under the **MSME Development Act, 2006**.
 - Currently, under the 2006 Act, **an enterprise with an annual turnover of up to Rs 250 crore, and investment in plant and machinery or equipment up to Rs 50 crore**, is classified as an MSME.
- In terms of value, the IBC has helped **resolve ₹3.16 lakh crore of debt** stuck in 808 cases in the past seven years.
- Importantly, it has set such **deterrence** that large bad-loan cases are getting sorted before reaching the IBC gates.
- The fear of losing companies has led to over ₹9 lakh crore of filed debt being settled before the cases arrived at the IBC doorstep.

Why in News?

- According to a report by CRISIL, a credit rating agency, **falling recovery rates (32%)** and an **increase in the average resolution time (653 days** opposed to the stipulated 330 days) have emerged as impediments to the success of the IBC.
- The rating agency said there are **two reasons** for this: First, **limited judicial bench strength and delays in identification and acknowledgement of default**.
- Second, **significant delay in the pre-IBC admission stage**.

Recommendations

- The rating agency said the IBC's effectiveness can be increased using the **CDE approach**, where C stands for **Capacity augmentation** such as expanding bench strength of judges, D for **Digitalisation** of IBC platforms and E for **Expansion of pre-pack resolutions to large corporates**.

Performance of IBC

- CRISIL said since its inception in 2016, the IBC has **improved credit culture** in India by resolving a significant amount of stressed assets with **better recovery rates** compared with the previous mechanisms, such as the Debt Recovery Tribunal, the SARFAESI Act and Lok Adalat.

6) Direct listing on foreign exchanges

Context

- The government recently **permitted certain Indian companies to directly list on select foreign stock exchanges**, including GIFT IFSC, Ahmedabad, which will allow these companies to access global capital and boost capital outflows.

How do companies currently list on foreign bourses?

- Domestic listed companies would use **depository receipts** — such as American Depository Receipts (ADR) — to list in the overseas market.

What are depository receipts?

- A depository receipt is a negotiable certificate **representing shares in a foreign company traded on a local stock exchange**.
- Depository receipts allow investors to hold equity shares of foreign companies without the need to trade directly on a foreign market.
- DRs constitute an important mechanism through which **issuers can raise funds outside their home jurisdiction**.
- DRs are issued for tapping foreign investors who otherwise may not be able to participate directly in the domestic market.

- One of the most common types of DRs is the **American depository receipt (ADR)**, which is a certificate issued by a U.S. bank that represents shares of a foreign company's stock and trades on U.S. stock exchanges.
- An **Indian Depository Receipt (IDR)** is a **depository receipt denominated in Indian rupees** issued by a domestic depository in India.
- With the new provision, **domestic companies can tap foreign markets to raise funds.**
- It will offer them **better valuation and exposure** to trade in foreign currency such as the dollar.
- It may also **benefit the startup and unicorn community** as another avenue to raise funds and increase their profile globally.
- It will also **add to India's foreign exchange kitty.**

How will direct foreign listing benefit Indian companies?

Organisations

1) Brazil to join OPEC+

About OPEC

- The Organization of the Petroleum Exporting Countries (OPEC) is a group consisting of **13 of the world's major oil-exporting nations**.
- Countries that belong to OPEC include **Iran, Iraq, Kuwait, Saudi Arabia, and Venezuela** (the five founders), plus the **United Arab Emirates, Libya, Algeria, Nigeria, Angola, Congo, Equatorial Guinea and Gabon**.
- OPEC was founded in **1960** to coordinate the petroleum policies of its members and to provide member states with technical and economic aid.
- OPEC is used to work as a **cartel** and fix prices in a favourable band.

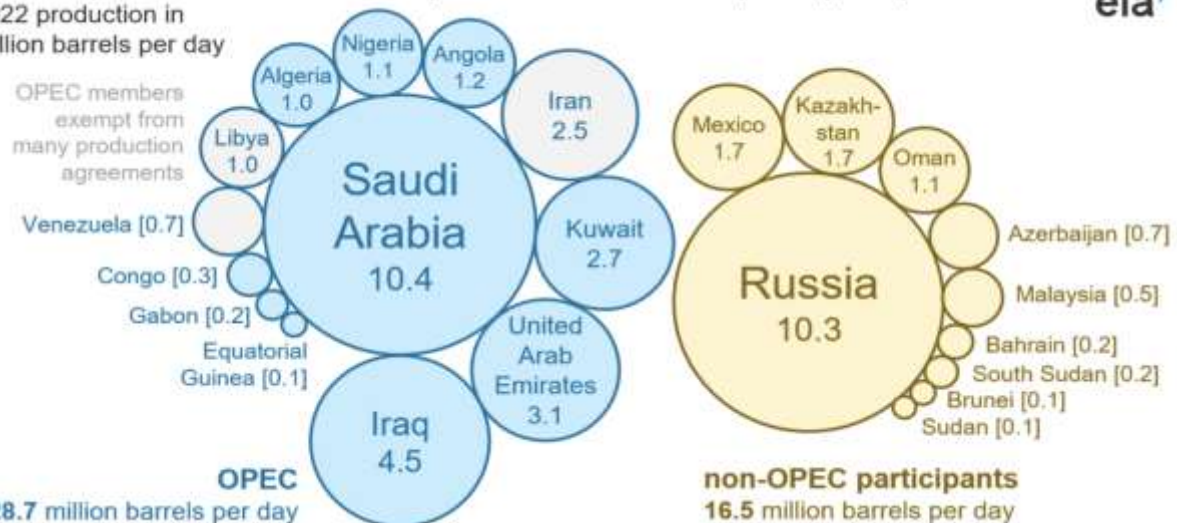
It could bring down prices by increasing oil production and raise prices by cutting production.

OPEC Plus

- The 2014 oil crisis, which was accentuated by oversupply of crude, brought down prices below \$30 a barrel. Since then, OPEC has been working with **non-OPEC countries** like **Russia, Azerbaijan, Bahrain, Brunei, Kazakhstan, Malaysia, Mexico, Oman, Sudan and South Sudan** to fix the global prices and supply.
- Known as the **"OPEC Plus" arrangement**, this alliance kept production lower and pumped up the prices.
- Together, these nations produce about **40% of the entire world's crude oil**.

Total oil production from OPEC+ (OPEC and non-OPEC participants)

2022 production in million barrels per day



Why in News?

- One of the world's fastest-growing oil producers, **Brazil** is set to join the OPEC+ oil bloc in 2024.

2) Energy Efficiency Services Limited

About EESL

- Energy Efficiency Services Limited (EESL) is a **joint venture of Public Sector Undertakings under the Ministry of Power.**
- EESL was formed in **2009** to create and sustain market access of energy efficient technologies, particularly in the public facilities and to implement several schemes of the Bureau of Energy Efficiency, Ministry of Power and Ministry of New & Renewable Energy.
- EESL is also leading the market-related activities of **National Mission for Enhanced Energy Efficiency (NMEEE)**, one of the eight national missions under **National Action Plan on Climate Change (NAPCC)**.
 - *Refer Pulse July 2023 Digest edition for details about NMEEE & NAPCC.*
- EESL is the **world's largest energy service company (ESCO)** that is driving numerous initiatives that are potential game-changers in building a conducive ecosystem for energy efficient technologies, across geographies.
 - *ESCOs develop, design, build, and arrange financing for projects that save energy, reduce energy costs, and decrease operations and maintenance costs at their customers' facilities.*

Why in News?

- Energy Efficiency Services Limited has launched its **National Efficient Cooking Programme (NECP) and Energy Efficient Fans Programme (EEFP)**.
- These initiatives are aimed at **revolutionizing cooking**

practices in India and emphasizing on the importance and urgency of energy efficient fans.

- NECP introduces **induction-based cook-stoves**, offering a cost advantage of 25-30% over traditional cooking methods, promising both energy savings and cost-effective cooking solutions.
- EEFP focuses on deploying **energy-efficient BLDC (Brushless Direct Current) fans**, with the goal of distributing 1 crore ceiling fans.
- These initiatives will reduce energy consumption and environmental impact and enhance consumer comfort while lowering electricity bills.

3) Asia-Pacific Economic Cooperation

About APEC

- The Asia-Pacific Economic Cooperation (APEC) is a **regional economic forum** established in **1989** to leverage the growing interdependence of the Asia-Pacific.
- APEC operates as a **cooperative, multilateral economic and trade forum**.
- In APEC, **all economies have an equal say and decision-making is reached by consensus**.
- There are **no binding commitments or treaty obligations**. Commitments are undertaken on a voluntary basis and capacity building projects help members implement APEC initiatives.
- The APEC Secretariat is based in **Singapore** and operates as the core support mechanism for the APEC process.

APEC Member Economies (21)



Membership of APEC

- There are **21 member economies** at present. It includes Australia; Brunei Darussalam; Canada; Chile; People's Republic of China; Hong Kong, China; Indonesia; Japan; Republic of Korea; Malaysia; Mexico; New Zealand; Papua New Guinea; Peru; The Philippines; The Russian Federation; Singapore; Chinese Taipei; Thailand; United States of America; Viet Nam.

- The word '**economies**' is used to describe APEC members because the APEC cooperative process is predominantly concerned with trade and economic issues.

- **India is not a member of APEC.**

Why in News?

- The Asia-Pacific Economic Cooperation (APEC) group recently met in San Francisco, United States.

Science and Technology

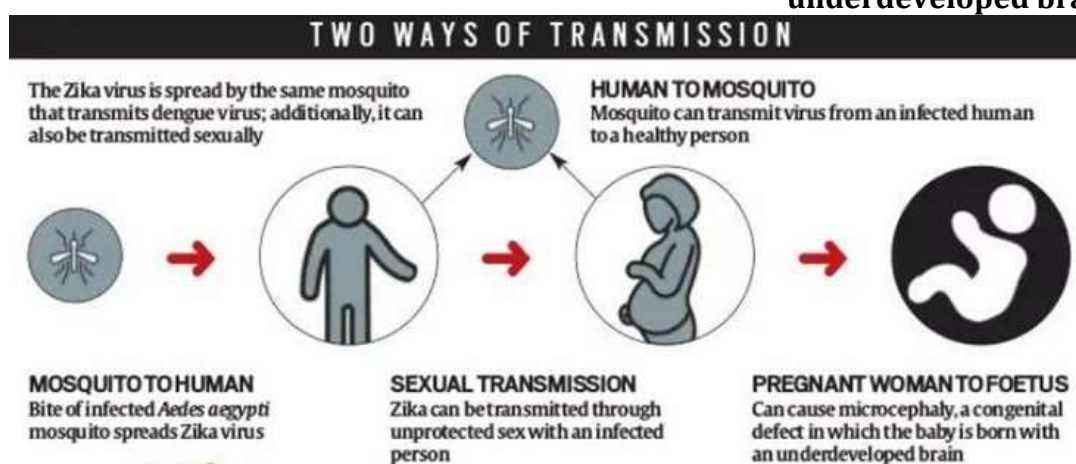
1) Zika Virus

What is Zika virus?

- Zika is a **viral infection, spread by mosquitoes**. The **vector is the *Aedes aegypti* mosquito**, which also spreads **dengue and chikungunya**.
- Zika virus is also transmitted from **mother to fetus during pregnancy**, through **sexual contact, transfusion of blood and**

blood products, and organ transplantation.

- First identified in **Uganda** in 1947 in monkeys, Zika was detected in humans five years later. In India, Zika virus was first recorded in 1952-53.
- In 2015, a major outbreak in Brazil led to the revelation that Zika can be associated with **microcephaly**, a condition in which **babies are born with small and underdeveloped brains**.



What are the symptoms of Zika virus?

- Most people infected with the virus **do not develop symptoms**.
- When they are manifested, the symptoms are **similar to those of flu**, including fever, bodyache, headache etc.
- Additional symptoms can include the occasional rash like in dengue, while some patients also have conjunctivitis.
- The **incubation period** (the time from exposure to symptoms) of Zika virus disease is estimated to be **3-14 days**.

Treatment

- Zika has **no treatment or vaccine**.
- The symptoms of Zika virus are mild and usually require rest, consumption of plenty of fluids, and common pain and fever medicines, according to the WHO.

Control Measures

- Governments take **mosquito control measures** such as spraying of pesticides, use of repellents etc. Because of the possibility of congenital abnormalities and sexual transmission, there is also **focus on contraceptives**.
- The WHO requires countries to counsel sexually active men and women on the matter to minimise chances of conception at the time of an outbreak.

Why in News?

- Following the recent detection of Zika Virus Disease cases in Kerala and Maharashtra, the Centre has written to all States asking them to strengthen entomological surveillance and intensify vector control activities.

2) Tantalum

Context

- A team of researchers from the Indian Institute of Technology (IIT), Ropar has found the **presence of tantalum, a rare metal, in the Sutlej river sand in Punjab.**
- The presence of tantalum is significant not only for Punjab but also India as the metal is **widely used in electronics and semiconductors.**

What is tantalum?

- Tantalum is a **rare metal** with the **atomic number 73** — the number of protons found in one atom of the element.
- It's **grey, heavy, very hard, and one of the most corrosion-resistant metals** in use today.
- It possesses high corrosion resistance because when exposed to air, it forms an **oxide layer** that is extremely difficult to remove, even when it interacts with strong and hot acid environments.
- When **pure**, tantalum is **ductile**, meaning it can be stretched, pulled, or drawn into a thin wire or thread without breaking.
- Moreover, it is **almost completely immune to chemical attack** at temperatures below 150°C, and is attacked only by hydrofluoric acid, acidic solutions containing the fluoride ion, and free sulphur trioxide.
- Notably, tantalum also has an **extremely high melting point**, exceeded only by tungsten and rhenium.

What are the uses of tantalum?

- Tantalum is most prominently used in the **electronic sector**. They are ideal for use in portable electronic devices such as smartphones, laptops, and digital cameras.

- As tantalum has a high melting point, it is frequently used as a **substitute for platinum**, which is more expensive.
- The rare metal is also used to make **components for chemical plants, nuclear power plants, aeroplanes and missiles.**
- Tantalum **does not react with bodily fluids** and is **used to make surgical equipment and implants**, like artificial joints.

3) Euclid Space Telescope

About

- The Euclid space telescope is a **wide-angle space telescope with a 600-megapixel camera** designed to **explore the composition and evolution of the dark universe.**
- It was launched by the **European Space Agency (ESA)** from Florida by a **SpaceX Falcon 9 rocket** in **July 2023.**



- The space telescope aims to create a **great map of the large-scale structure of the universe across space and time** by observing billions of galaxies up to 10 billion light-years away.
- Euclid will explore **how the universe has expanded and how structure has formed over cosmic history**, revealing more about the **role of gravity** and the **nature of dark energy and dark matter.**

Why in News?

- The European Space Agency has released the first images from the newly launched Euclid space



- The images were the sharpest of their kind, showcasing the telescope's ability to monitor billions of galaxies up to 10 billion light years away.
- The images spanned four areas of the relatively nearby universe, including 1,000 galaxies belonging to the massive **Perseus cluster** just 240 million light years away, and more than 100,000 galaxies spread out in the background.
- Scientists believe vast, seemingly organised structures such as Perseus **could only have formed if dark matter exists.**
- Euclid will now start piecing together a **3D map** encompassing about a third of the sky to detect tiny variations attributable to the dark universe.
- By gaining new insights into dark energy and matter, scientists hope to **better grasp the formation and distribution of galaxies across the so-called cosmic web of the universe.**

telescope, designed to unlock the secrets of dark matter and dark energy.

Related Information About Dark matter

- Dark Matter refers to the **hypothetical matter** that scientists have not been able to locate in the universe - either through telescopes or using any other technological method.
- Dark matter works like an **attractive force** — a kind of cosmic cement that holds our universe together.
- Unlike normal matter, **dark matter does not interact with the electromagnetic force.** This means it **does not absorb, reflect or emit light, making it extremely hard to spot.**
- In fact, researchers have been able to infer the existence of dark matter only from the gravitational effect it seems to have on visible matter.
- In the 1930s, astronomer **Fritz Zwicky** speculated about the presence of “dark matter” for the first time.

Dark energy

- Dark energy is a **repulsive force** — a sort of anti-gravity — **hypothesised to be responsible for the accelerated expansion of the Universe.**
- Like Dark Matter, Dark Energy is **not directly observed**, but rather inferred from observations of gravitational interactions between astronomical objects.
- It is **distributed evenly throughout the universe, not only in space but also in time** – in other words, its effect is not diluted as the universe expands.
- The even distribution means that dark energy **does not have any local gravitational effects, but rather a global effect on the universe as a whole.** This leads to a **repulsive force**, which tends to **accelerate the expansion of the universe.**
- Dark energy is the far more dominant force of the two, accounting for roughly **68 percent of the universe's total mass and energy. Dark matter makes up 27 percent.** And the rest — a measly 5 percent — is all the regular matter we see and interact with every day.
- Current hypotheses propose dark energy might emerge from the bubbling of empty space, a small effect that is also widespread, making it powerful enough to drag apart clusters of galaxies without ripping them apart from within.

4) Generic drugs to treat rare diseases

What is a rare disease?

- A rare disease is a health condition of **low prevalence that affects a small number of people** compared with other prevalent diseases in the general population.

- Rare diseases include **genetic diseases, rare cancers, infectious tropical diseases and degenerative diseases.**
- **80% of rare diseases are genetic in origin** and hence disproportionately impact children.

Definition of a rare disease

- There is **no universally accepted definition** of rare disease.
- These diseases have **differing definitions** in various countries and range from those that are prevalent in 1 in 10,000 of the population to 6 per 10,000.
- According to the **Indian Council of Medical Research (ICMR)** registry definition, “A disease or disorder is defined as Rare in India when it **affects fewer than 1 in 2500 individuals**”.
- So far about 450 rare diseases have been recorded in India and it is estimated that about 6-8% of the country's population is affected by a rare disease.

Challenges associated with rare diseases

- There are 7,000-8,000 classified rare diseases, but **less than 5% have therapies available to treat them.** About 95% rare diseases have no approved treatment and less than 1 in 10 patients receive disease-specific treatment.
- Rare diseases are also **difficult to research upon** as the patients pool is very small and it often results in inadequate clinical experience.
- The **cost of treatment of rare diseases is prohibitively expensive.**

Why in News?

- Providing relief to patients with rare diseases across India, the Union Health Ministry has made available **generic drugs** to support the care and treatment of four

ailments: **Tyrosinemia-Type 1, Gauchers Disease, Wilson's Disease, and the Dravet-Lennox Gastaut Syndrome.**

- *Refer Pulse May 2023 Digest edition: "Pradhan Mantri Bhartiya Janaushadhi Pariyojana" topic - for details about generic drugs.*
- This means that the cost of these drugs will be slashed by anywhere between 60 and 100 times of their current market value.

Related Information

National Policy for Rare Diseases 2021

- To address the challenges related to treating rare diseases, the Union Health & Family Welfare Ministry approved the "National Policy for Rare Diseases 2021" in 2021.

Highlights of the Policy

- In the policy, rare diseases have **not been defined but classified into three groups.**
 - **Group 1** has disorders amenable to **one-time curative treatment**, including osteopetrosis and Fanconi anaemia.
 - **Group 2** has diseases **requiring long-term or lifelong treatment with relatively lower cost of treatment** and benefit has been documented in literature, including galactosemia, severe food protein allergy, and homocystinuria.
 - **Group 3** has diseases for which definitive treatment is available, but **challenges are to make optimal patient selection for benefit, and very high cost and lifelong therapy**, covering diseases such as spinal muscular atrophy

(SMA), Pompe disease, and Hunter syndrome.

Lowering the Cost of Treatment

- The Rare Diseases Policy aims to lower the high cost of treatment for rare diseases with **increased focus on indigenous research** with the help of a **National Consortium** to be set up with the Department of Health Research, Ministry of Health & Family Welfare as convenor.
- Increased focus of research and development and local production of medicines will lower the cost of treatment for rare diseases.

National Hospital Based Registry

- The policy also envisages creation of a **national hospital based registry of rare diseases** so that adequate data is available for definition of rare diseases and for research and development related to rare diseases within the country.

Screening, Prevention & Treatment

- The Policy also focuses on **early screening and prevention through primary and secondary health care infrastructure** such as Health and Wellness Centres and District Early Intervention Centres (DEICs) and through counselling for the high-risk parents.
- Screening will also be supported by **Nidan Kendras** set up by the Department of Biotechnology.
 - *Nidan Kendras provide counselling, prenatal testing and diagnosis, management, and multidisciplinary care in Government Hospitals wherein the influx of patients is more.*
- Policy also aims to **strengthen tertiary health care facilities** for prevention and treatment of rare diseases through **designating 8 health facilities as Centre of Excellence (CoEs)** and these CoEs will also be provided one-time

financial support of up to Rs 5 crores for upgradation of diagnostics facilities.

Crowd Funding Mechanism

- Besides, the Policy also envisages a **crowd funding mechanism** in which corporates and individuals will be encouraged to extend financial support through a robust IT platform for treatment of rare diseases.
- Funds collected will be utilized by Centres of Excellence for treatment of all three categories of rare diseases as first charge and then

the balance financial resources could also be used for research.

Financial Assistance

- **Financial support up to Rs 50 lakh** shall be provided to the patients suffering from **any category of rare diseases**. The financial support will be provided to the patients for the treatment in any of the **Centre of Excellence** mentioned in NPRD-2021.

Reports and Indices

1) Adaptation Gap Report

About the Report

- The Adaptation Gap Report is an annual publication by the **United Nations Environment Programme (UNEP)** that assesses the **gap between the need for climate change adaptation and the current state of adaptation efforts worldwide.**
 - The cost of adaptation is the amount needed for **planning, preparing for, facilitating and implementing measures** to reduce harm or exploit beneficial opportunities arising from **climate change.**
- The report provides updated information and analysis to reflect the evolving landscape of climate change adaptation.

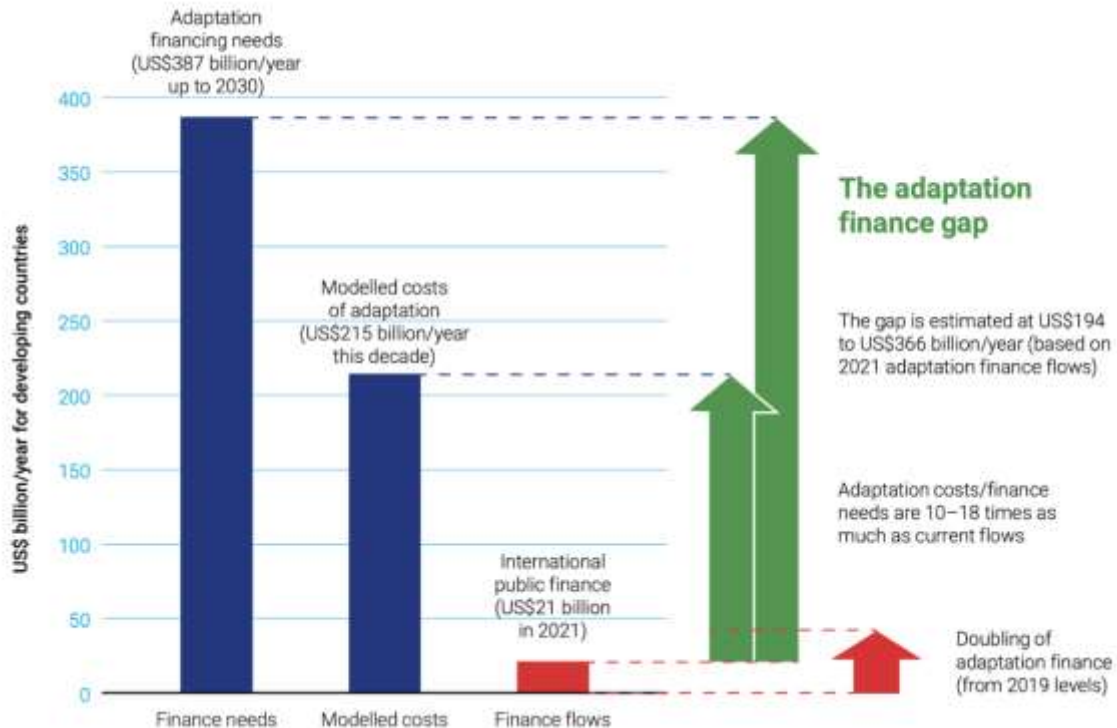
Why in News?

- The United Nations Environment Programme has released its Adaptation Gap Report 2023.

- *The UNEP is the **leading environmental authority in the United Nations system.***
- *It was founded as a result of the UN Conference on the Human Environment (also known as the **Stockholm Conference**) in 1972.*

Highlights of the Report

- The **global adaptation gap** (difference between needs and actual financial flows) — is **growing** even as climate change continues to wreak havoc.
- The report has estimated that the current global adaptation finance gap is **\$194-366 billion per year.** For **developing countries**, the total cost of adaptation amounts to **\$215 billion per year.**
 - Adaptation measures such as river flood protection, infrastructure and coastal protection demand the highest adaptation costs in regions of East Asia and the Pacific as well as Latin America and the Caribbean.



- The adaptation finance needs are **10-18 times as high as the current international public adaptation fund flows**.
- **Climate adaptation finance flows** from public multilateral (like the World Bank) and bilateral sources (from a developed to a developing nation) **declined by 15 per cent to around \$21 billion** in 2021.
- This dip is despite pledges that were made at the 26th Conference of Parties to the United Nations Framework Convention on Climate Change in Glasgow to **double 2019 adaptation finance support to around \$40 billion per year by 2025**.
- **Multilateral development banks**, including the World Bank, are the **largest providers of adaptation finance**. However, their financial commitments **decreased by 11 per cent** in 2021 after seeing an increase from 2017 to 2020.
- The second biggest providers are **bilateral sources**, for example, from a developed country to a developing country. Financing

through these sources also saw a **decrease** in 2021.

2) ILO report calls for countries to strengthen safety net

About ILO

- The International Labour Organisation was created in 1919, as part of the **Treaty of Versailles** that ended World War I.
- In **1944**, ILO adopted the **Declaration of Philadelphia** which embodies basic principles of economic justice.
- It became the **first specialized agency of the UN** in 1946.
- ILO is the **only tripartite U.N. agency which brings together governments, employers and workers** of 187 member States, to set labour standards, develop policies and devise programmes promoting decent work for all women and men.
- **India is a founder member** of the ILO.
- It is headquartered in **Geneva, Switzerland**.

Why in News?

- According to a new report prepared by the International Labour Organization, **nearly 30 lakh workers die every year globally due to work-related accidents and diseases.**
- More than 63% of these deaths are reported from the **Asia-Pacific region.**
- According to the report titled ‘**A Call for Safer and Healthier Working Environments**’, **exposure to long working hours (55 hours or more per week) was the biggest “killer”,** with almost 7.45 lakh people dying of it in 2016, followed by **exposure to occupational particulate matter, gases, and fumes and occupational injuries.**
- Citing the data on the fatal occupational injury rate, the report said **mining and quarrying, construction, and utilities sectors were the three most hazardous sectors globally.**

Recommendations

- The report also recommended **five categories of “Fundamental Principles and Rights at Work”** for ensuring safety and health at work.
- These are
 - freedom of association and the effective recognition of the right to collective bargaining,
 - elimination of all forms of forced or compulsory labour,
 - abolition of child labour,
 - elimination of discrimination in respect of employment and occupation, and
 - a safe and healthy working environment.

ILO Conventions

- The report said that so far 79 out of the 187 member countries have ratified the **ILO Occupational Safety and Health Convention (No. 155)**, while 62 countries have ratified the **Promotional Framework for Occupational Safety and Health Convention, 2006 (No. 187).**
- **India has not ratified both the conventions.**

3) World Malaria Report

About Malaria

- Malaria is a life-threatening disease caused by ***Plasmodium* parasites.**
- There are **5 parasite species** that cause malaria in humans, and 2 of these species – ***P. falciparum*** and ***P. vivax*** – pose the greatest threat.
- The parasites are spread to people through the bites of infected **female *Anopheles* mosquitoes.**
- Children aged under 5 years are the most vulnerable group affected by malaria.
- **Symptoms:** Fever, tiredness, vomiting, headaches, seizures, chills, etc.
- **Diagnosis:** Examination of blood films or by antigen-based rapid diagnostic tests (RDT).
- **Prevention: Vector control** is the main way to prevent and reduce malaria transmission. Two forms of vector control – **insecticide-treated mosquito nets and indoor residual spraying** – are effective in a wide range of circumstances.
- **Treatment:** Antimalarial medications depending on the type of malaria.
- **Vaccine: RTS,S** (trade name **Mosquirix**) is the world's first malaria vaccine shown to provide partial protection against malaria

in young children. In 2021, WHO recommended widespread use of the RTS,S vaccine.

Why in News?

- According to the **World Malaria Report 2023** released by the **World Health Organization (WHO)**, contrasting the global trend, India continued to witness a decline in malaria cases and deaths in 2022.
- There were around 33 lakh malaria cases and 5,000 deaths in India last year, a **decrease of 30% and 34 % respectively compared with 2021.**
- Globally, there were 249 million cases in 2022, 5 million more than in 2021.
- The number of global malaria deaths was also higher: 608,000 deaths in 2022 compared with 576,000 in 2019.
- This is due to **good preventive and case management strategies and availability of effective vector control tools** as well as point of **care diagnostics and prompt treatment at community level.**

Polity

1) High Court quashes Haryana's reservation to locals

Context

- The Punjab and Haryana High Court has **quashed a law** enacted by the Haryana government in 2021 that **guaranteed 75% reservation to locals in private sector jobs in Haryana**.
- The court ruled that the **Haryana State Employment of Local Candidates Act, 2020**, was **unconstitutional and violated Part III of the Constitution** that envisages fundamental rights.
- The Act made it mandatory for employers in the State to reserve 75% of jobs paying a monthly salary of less than ₹30,000 for local residents in the State.

High Court Ruling

- While declaring the law to be unconstitutional, the court observed a **legislative mandamus could not be imposed that treats non-residents of Haryana as secondary citizens**.
- Placing reliance on **Article 35** of the Constitution, the court outlined that the provision **bars the State legislature from making laws on matters that fall within the purview of Article 16(3)** of the Constitution (equality of opportunity in matters of public employment) since this is **exclusively within the domain of the Parliament**.
- The court underscored that the Act was **unconstitutional** to the extent that a person's right to carry on occupation, trade, or business under **Article 19(1)(g)** of the Constitution was being impaired.

Have other States enacted similar laws?

- Other States such as **Maharashtra** (up to 80%), **Karnataka** (up to 75%), **Andhra Pradesh** (up to 75%) and **Madhya Pradesh** (up to 70%) have also enacted similar laws providing reservations for their local residents in the private sector.
- In most States, these laws have however **not yet been implemented** owing to opposition from companies who have refused to lower their hiring standards and due to the absence of any effective enforcement mechanisms.

2) Ethics Committee

Context

- The Lok Sabha expelled a Member of Parliament (MP) after approving a motion supporting her expulsion from the house.
- Earlier, the **ethics committee** of the Lok Sabha recommended the expulsion for the MP's "unethical conduct" of asking questions to target a leading business house at the behest of a businessman in exchange for cash.

History of Ethics Committees

- A **Presiding Officers' Conference** held in Delhi in **1996** first mooted the idea of ethics panels for the two Houses.
- Then Vice President (and Rajya Sabha Chairman) **K R Narayanan** constituted the **Ethics Committee of the Upper House** in 1997 to **oversee the moral and ethical conduct of members and examine cases of misconduct referred to it**.
- In the case of Lok Sabha, the **Committee of Privileges** recommended the constitution of an **Ethics Committee** during the **13th Lok Sabha (1999–2004)**.

- The late Speaker, **G M C Balayogi**, constituted an **ad hoc Ethics Committee** in **2000**, which became a **permanent part** of the House only in **2015**.

How does the Ethics Committee function?

- The ethics committee **oversees the moral and ethical conduct of members and examines cases of 'unethical conduct' referred to it.**
- The Committee examines complaints filed against members of the House **by other members; outsiders through a member; or referred by the Speaker.**
- The Committee **does not entertain complaints based only on media reports or on matters that are sub judice.**
- The Committee makes a **prima facie inquiry** before deciding to examine a complaint and **presents its report to the Speaker**, who places it before the House for consideration.
- It must be noted that the **term 'unethical' is not defined.** It is left to the Committee to decide whether any act is unethical or not.

Privileges Committee

- The work of the Ethics Committee and the Privileges Committee **often overlap.** An allegation of corruption against an MP can be sent to either body, but usually more **serious accusations go to the Privileges Committee.**
- The mandate of the Privileges Committee is to safeguard the **"freedom, authority, and dignity of Parliament"**.
- These privileges are **enjoyed by individual Members as well as the House as a whole.**
- An **MP** can be examined for breach of privilege; a **non-MP** too can be accused of breach of privilege for

actions that attack the authority and dignity of the House.

- The **Ethics Committee** can take up **only cases of misconduct that involve MPs.**

3) Land titles distributed under Forest Rights Act

About the Act

- The **Scheduled Tribes and Other Forest Dwellers (Recognition of Forest Rights) Act, 2006** is a people-centric law for forests, which **recognises the rights of forest-dwelling communities to use and manage forest resources.**
- With more than 150 million forest dwellers, the scope of FRA is immense to protect their livelihoods, and engage them in sustainable forest management.

Rights under FRA

- **Title rights** – Ownership to land that is being farmed by tribals or forest dwellers subject to a maximum of **4 hectares**; ownership is only for land that is actually being cultivated by the concerned family, meaning that no new lands are granted.
- **Use rights** – to minor forest produce (also including ownership), to grazing areas, to pastoralist routes, etc.
- **Relief and development rights** – to rehabilitation in case of illegal eviction or forced displacement; and basic amenities, subject to restrictions for forest protection.
- **Forest management rights** – to protect forests and wildlife.

Objective of the Act

- To **undo the historical injustice** occurred to the forest dwelling communities;
- To **ensure land tenure, livelihood and food security** of the forest

dwelling Scheduled Tribes and other traditional forest dwellers;

- To **strengthen the conservation regime of the forests** by including the responsibilities and authority of Forest Rights holders for sustainable use, conservation of biodiversity and maintenance of ecological balance.

Eligibility

- To qualify as **Other Traditional Forest Dweller (OTFD)** and be eligible for recognition of rights under FRA, two conditions need to be fulfilled:
 - Primarily resided in forest or forests land for three generations (75 years) prior to 13-12-2005, and
 - Depend on the forest or forest land for bonafide livelihood needs.
- To qualify as a **Forest Dwelling Scheduled Tribe (FDST)** and be eligible for recognition of rights under FRA, three conditions must be satisfied by the applicant/s, who could be **“members or community”**:
 - Must be a Scheduled Tribe in the area where the right is claimed; and
 - Primarily resided in forest or forests land prior to 13-12-2005; and
 - Depend on the forest or forest land for bonafide livelihood needs.
- The FRA provides that a forest right conferred under the Act shall be **heritable but not alienable or transferable**, and shall be registered jointly in the name of both the spouses in case of married persons and in the name of the single head in the case of a household headed by a single person.

Process of recognition of rights

- The Act provides that the **gram sabha**, or village assembly, will initially pass a resolution recommending whose rights to which resources should be recognised.
- This resolution is then screened and approved at the **level of the sub-division** (or taluka) and subsequently at the **district level**.
- The **screening committees** consist of three government officials (Forest, Revenue and Tribal Welfare departments) and three elected members of the local body at that level. These committees also hear appeals.
- The Scheduled Tribes and other Traditional Forest Dwellers (Recognition of Forest Rights) Rules, 2008, notified by the Ministry of Tribal Affairs for implementing the provisions of the Act, provide for **constitution of Forest Rights Committee** by the **Gram Sabha** for assisting it in its functions to –
 - prepare a list of claimants on forest rights;
 - verify claims as provided in the rules;
 - present their findings on the nature and extent of the claim before the Gram Sabha for its consideration;
 - prepare the claims on behalf of Gram Sabha for community forest rights in the prescribed form.

Why in News?

- As per the information submitted by the State Governments, 23,43,009 land titles totaling around 1,80,70,577.43 acres have been distributed (individual and community rights) across States, upto 31.10.2023, under the Scheduled Tribes and Other

Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006.

4) Special Category Status

Context

- The state government of Bihar passed a resolution seeking the grant of special category status (SCS) to Bihar.
- The demand comes in the backdrop of the findings from the “**Bihar Caste-based Survey, 2022**”, which revealed that nearly one-third of Bihar’s population continues to live in poverty.

What is a special category status?

- It is a classification **granted by the Centre to assist the development of States that face geographical or socio-economic disadvantages.**
- The SCS was introduced in **1969** on the recommendation of the **fifth Finance Commission (FC).**
- **Five factors** such as
 - (i) hilly and difficult terrain
 - (ii) low population density and/or sizeable share of tribal population
 - (iii) strategic location along international borders
 - (iv) economic and infrastructural backwardness and
 - (v) non-viable nature of state finances, are considered before granting SCS.
- In 1969, **three States** — Jammu & Kashmir, Assam and Nagaland — were granted the SCS. Subsequently, **eight more States** including Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Sikkim, Tripura, Himachal Pradesh, and Uttarakhand were given the SCS by the **erstwhile National Development Council.**

What are the benefits attached?

- The SCS States used to **receive grants based on the Gadgil-Mukherjee formula**, which earmarked nearly **30% of the total central assistance for States to the SCS States.**
- However, after the abolition of the Planning Commission and the recommendations of the 14th and 15th FC, this **assistance to SCS States has been subsumed in an increased devolution of the divisible pool funds** for all States (increased to **41%** in the 15th FC from 32%).
- Additionally, in the SCS States, the **Centre-State funding of centrally sponsored schemes is divided in the ratio of 90:10**, far more favourable than the 60:40 or 80:20 splits for the general category States.
- Besides, there are **several other incentives available** to the SCS States in the form of concession in customs and excise duties, income tax rates and corporate tax rates to attract investments to set up new industries etc.

Do other States also want SCS?

- Since its bifurcation in 2014, **Andhra Pradesh** has asked for a grant of SCS on the grounds of revenue loss due to Hyderabad going to Telangana.
- Additionally, **Odisha** has also been requesting for the SCS, highlighting its vulnerability to natural calamities such as cyclones and a large tribal population (nearly 22%).
- However, the Central government citing the **14th FC report**, which made a **recommendation to the Centre that no State be accorded the SCS, has repeatedly denied their demands.**

5) UAPA, 2019

About the Act

- The Unlawful Activities (Prevention) Amendment Act, 2019 was passed by the Parliament in 2019. It amends the **Unlawful Activities (Prevention) Act, 1967**.
 - The amendment act **empowers the central government** to designate an **individual a “terrorist”** if they are found committing, preparing for, promoting, or involved in an act of terror. Earlier, the Central Government was having powers only to designate **organisations as terrorist organisations**.
 - The UAPA law of 1967 requires an investigating officer to take **prior permission of the Director General of Police of a state** for conducting raids, and seizing properties that are suspected to be linked to terrorist activities.
 - The **amendment act of 2019 however, removes this requirement** if the **investigation is conducted by an officer of the National Investigation Agency (NIA)**. The investigating officer, under the 2019 act, **only requires sanction from the Director General of NIA**.
- Central agencies such as the **Central Bureau of Investigation (CBI) are required to obtain prior permission** from the state government since law and order is a state subject under the Constitution.
- The UAPA law of 1967 specifies that only officers of the rank of Deputy Superintendent or Assistant Commissioner of Police of the NIA shall have the **power to investigate offences** under the UAPA law. The amendment act seeks to allow **NIA officers of Inspector rank to carry out investigations**.

Why in News?

- The Union Ministry of Home Affairs (MHA) has extended the ban under Unlawful Activities Prevention Act (UAPA) against eight “Meitei extremist organisations” for advocating secession of Manipur from India through armed struggle.
- It declared the eight outfits as “unlawful association” for inciting indigenous people of Manipur for such secession.

International Relations

1) India-Canada diplomatic standoff

Context

- The ties between India and Canada have been strained after Canada alleged the involvement of "agents of the Indian government" in the killing of Khalistani terrorist Hardeep Singh Nijjar in June this year.
- India on the other hand has rejected the claims and called the allegations as "absurd and motivated."
- Following this, Canada declared an Indian official posted at the Toronto consulate *persona non-grata*.
- It also said that intelligence gained by the "Five Eyes" network led to Canada's accusation.

What is the Khalistan movement?

- Khalistan is the name of the proposed state envisioned by some Sikhs, incorporating the Indian state of Punjab as well as other Punjabi-speaking areas of northern India to establish a **Sikh nation**.
- The ethno-religious liberation movement gained traction in the 1970s and early 80s in India.
- It later died down but has developed momentum among the Sikh diaspora in recent years.

What is persona non grata?

- Persona non grata is a Latin phrase which means "**unwelcome person.**"
- In diplomacy, it refers to a **diplomat or foreign person whose entering or remaining in a certain country has been prohibited by that country.**
- The designation received diplomatic meaning at the **1961**

Vienna Convention for Diplomatic Relations.

- **Article 9** of the treaty mentions that a country can declare any member of a diplomatic staff persona non grata "**at any time and without having to explain its decision.**"
- Soon after the declaration, the person concerned usually returns to their home nation. In case they fail to do so within a reasonable period, the country "may refuse to recognise the person concerned as a member of the mission."
- The article also says that a person can be declared persona non grata even before arriving in a country.

When is it used?

- There **aren't any fixed rules** regarding when a country can declare a foreign person persona non grata as it doesn't need to give an explanation according to Article 9 of the Vienna Convention.
- Historically speaking, countries have used it to **express their discontent** with the actions of other nations.
- Notably, the imposition of persona non grata designation **isn't just limited to diplomats.**

1961 Vienna Convention for Diplomatic Relations

- The 1961 Vienna Convention on Diplomatic Relations **outlines the rules of diplomatic law.**
- The Convention codifies the **rules for the exchange and treatment of envoys between states.** It ensures that diplomats can conduct their duties without threat of influence by the host government.
- The Convention establishes the following:

- rules for the appointment of foreign representatives;
- protection for the diplomat and his or her family from any form of arrest or detention;
- protection of all forms of diplomatic communication;
- that diplomats must respect the laws of the host state.
- The purpose of such privileges and immunities is **not to benefit individuals** but to ensure the **efficient performance** of the functions of diplomatic missions.

About Five Eyes Alliance

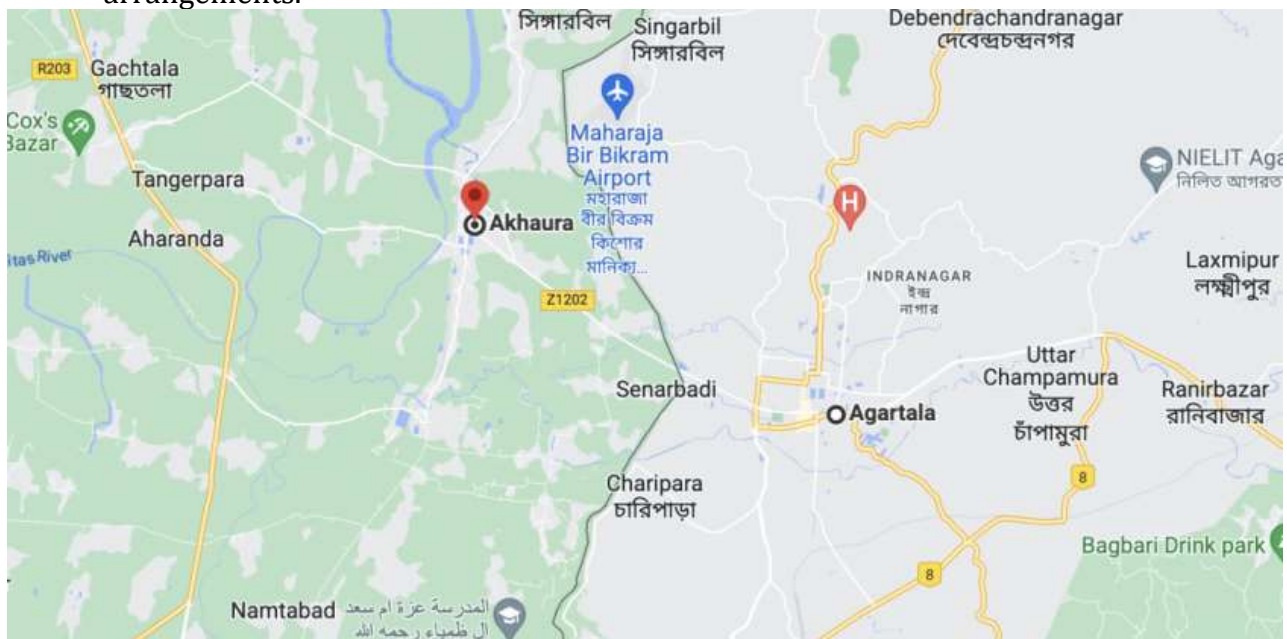
- “Five Eyes” refers to an **intelligence-sharing alliance of the United States, United Kingdom, Australia, Canada and New Zealand.**
- These partner countries share a broad range of intelligence with one another in one of the world’s most unified multilateral arrangements.

- The alliance’s origins can be traced back to the **Second World War.**
- Under the alliance, countries often **engage with each other on matters of intelligence gathering and security.** In recent years, common interests, such as balancing the rise of China, have led to a closer alignment among the Five Eyes countries.

2) Agartala-Akhaura rail link

What’s in the news?

- **India and Bangladesh** have inaugurated the rail link between **Agartala (in Tripura) and Akhaura (in Bangladesh).**
- It serves to **re-establish connectivity between Bangladesh and India’s northeast through Tripura.**
- Through this link, States of northeast India can also be connected to ports of Bangladesh.



What is the significance of the project?

- The **15-km rail link** (5 km in India and 10 km in Bangladesh) will **significantly reduce the travel time between Agartala and Kolkata via Dhaka.**
- The rail link will also enable goods trains to reach the north eastern region via Bangladesh at a much lesser transportation cost.
- Further, it will also provide a **direct access between**

landlocked north eastern India and Chittagong port of Bangladesh.

- The project also is in continued adherence to the Central government's 'Act East Policy' and 'Neighbourhood First Policy'.

How are India and Bangladesh connected by road?

- Tripura shares an 856 km-long international border with Bangladesh, parts of which are still unfenced owing to local disputes.
- The state's only road connectivity with the rest of the country is through Assam and a narrow strip of land in West Bengal's Siliguri.
- Akhaura used to be the railway link for Agartala during the colonial era.

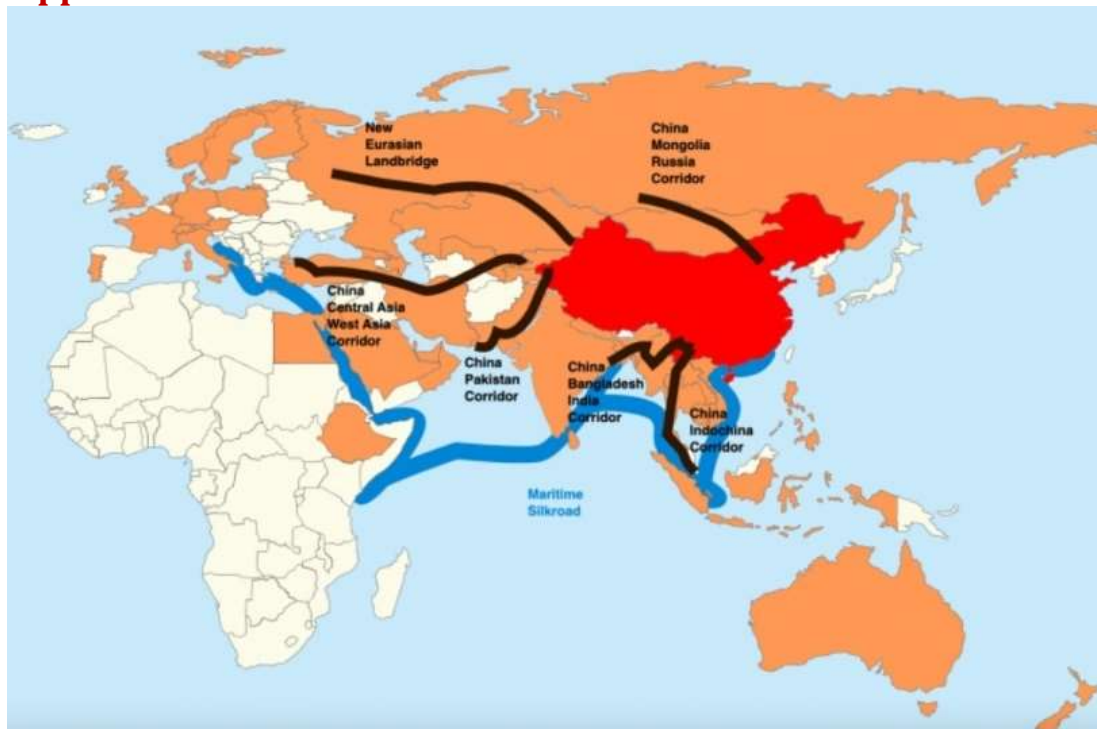
Context

- The Philippines has announced its exit from China's Belt and Road Initiatives (BRI).
- The Philippines' withdrawal from BRI is grounded in long standing bilateral concerns related to disputed territories in the South China Sea.
 - Refer Pulse September 2023 Digest edition for details about the South China Sea dispute.

Idea behind the BRI and its evolution

- Chinese President Xi Jinping announced the Silk Road Economic 'Belt' in 2013.
- The 'Belt' plan was to revitalise a series of trading and infrastructure routes between Asia and Europe. Connectivity through Central Asia was a key element of the initiative.

3) Philippines exit from BRI



- Subsequently, President Xi announced a sea trade infrastructure called 'Road'. This maritime 'Road' would connect

China with Southeast Asia, Europe and Africa.

- The major focus has been to build ports, bridges, industry corridors and other

infrastructure throughout South East Asia and the Indian Ocean.

- For some time, together these initiatives were referred to as the **One Belt One Road Initiative (OBOR)**. Since 2015, it has been mostly referred to as the **BRI**.
- The Organisation for Economic Co-operation and Development (OECD) estimated that the BRI investment projects were likely to add **\$1 trillion** in funding between 2017 and 2027.

Criticism

- Some countries in Africa have praised the project, whereas the likes of India and the United States have accused China of engaging in **'debt trap diplomacy'** – aiming to own countries' assets if they are unable to repay the loans.
- **India** was the first to point out issues **concerning debt trap, lack of transparency and sustainability** of BRI projects. Later, the US and the EU also raised similar concerns.
- But there continues to be a **huge infrastructure deficit** in the Global South. So despite the criticism, BRI is still an attractive proposition to

many developing countries in Asia, Africa and Latin America.

4) Comprehensive Nuclear-Test-Ban Treaty

About CTBT

- The Comprehensive Nuclear-Test-Ban Treaty (CTBT) **bans all nuclear explosions, whether for military or peaceful purposes.**
- It comprises a preamble, 17 articles, two annexes and a Protocol with two annexes.
- In order to verify compliance with its provisions, the treaty establishes a global network of monitoring facilities and allows for on-site inspections of suspicious events.

Which key countries haven't ratified CTBT?

- Notably, for the treaty to enter into force, it must be **signed and ratified by 44 specific nuclear technology holder countries, eight of which have yet to ratify the agreement: China, Egypt, India, Iran, Israel, North Korea, Pakistan and the United States.**
- In 2021, UN Secretary-General António Guterres urged these countries to ratify CTBT.



Why in News?

- Russia's President Vladimir Putin has revoked his country's ratification of the Comprehensive Nuclear Test Ban Treaty.
- Russia said that revoking the ratification of CTBT would "mirror" the stand taken by **the U.S.**, which has **signed but not ratified the nuclear test ban.**
- The 1996 treaty outlaws all nuclear explosions, including live tests of nuclear weapons, though it was **never effective because some key countries did not ratify it.**

Why has India not signed the CTBT?

- India views nuclear weapons as a **deterrent against potential threats.** India believes the CTBT could **hinder its development of a credible minimum nuclear deterrent**, leaving it vulnerable.
- India has expressed **concerns about the CTBT's verification system**, arguing it might not be able to effectively detect clandestine tests by other countries.
- India advocates for a **comprehensive approach to nuclear disarmament**, where all nuclear-armed nations disarm simultaneously.

Art & Culture

1) Balban's Tomb

About Balban

- Ghiyas-ud-din Balban, the **Sultan of Delhi from 1266 to 1287 AD**, was a prominent ruler of the **slave dynasty** during the reign of the Delhi Sultanate in India.
- Balban was sold as a **slave** to the then-ruler Iltumish in 1232 CE, who later released him.
- Balban's reign was marked by efforts to **strengthen the central authority** and **maintain stability** in the face of internal and external challenges.
- Balban implemented administrative reforms to centralize power. He **reduced the influence of the nobility** and strengthened the position of the monarch.
- During Balban's rule, the Delhi Sultanate faced threats from the **Mongols**, who were making incursions into the Indian subcontinent. Balban took measures to **fortify the northern frontiers and defend against Mongol invasions**.
- Ghiyas ud-din Balban died in 1287, and his grandson, **Kaiqubad**, succeeded him as the ruler of the Delhi Sultanate.

Why in news?

- The Delhi government recently unveiled the tomb of Balban after renovation.



For free learning, visit www.officerspulse.com

Balban's Tomb

- Balban's Tomb is located in **Mehrauli, Delhi**.
- The tomb reflects the **architectural style of the Delhi Sultanate period**, characterized by the **use of red sandstone**.
- It is also referred to as **Dar-ul-Amaan (Haven of Safety)**.
- The tomb is a very important structure as it shows us the **first use of the true arch construction in India**. From here on, true arches become a common feature of the Indo-Islamic architecture of Delhi.
- Unlike the corbelled arches of Qutub Complex, the true arches of Balban's tomb have the **keystone placed at the centre**, which evenly distributes the weight of the superstructure.

2) UNESCO Creative Cities Network

About UCCN

- The UNESCO Creative Cities Network (UCCN) was created in 2004 to **promote cooperation with and among cities that have identified creativity as a strategic factor for sustainable urban development**.
- The cities which currently make up this network work together towards a common objective: **placing creativity and cultural industries at the heart of their development plans at the local level and cooperating actively at the international level**.
- The Network covers seven creative fields:
 - **Crafts and Folk Arts,**
 - **Media Arts,**
 - **Film,**
 - **Design,**
 - **Gastronomy,**

- **Literature and**
- **Music.**
- By joining the Network, cities commit to sharing their best practices and developing partnerships involving the public and private sectors as well as civil society.

Why in News?

- UNESCO has announced that **Gwalior and Kozhikode** are among 55 new cities to join the Creative Cities Network.
- While **Gwalior in Madhya Pradesh** has made it to the coveted list in the '**Music**' category, **Kozhikode in Kerala** has earned the place in the '**Literature**' category.
- With the latest additions, the UCCN now counts **350 cities** in more than a hundred countries, representing seven creative fields.
- Other Indian cities that have joined UCCN:
 - **Mumbai – Film**
 - **Hyderabad – Gastronomy**
 - **Chennai – Creative city of Music**
 - **Jaipur – Crafts and Folk Arts**
 - **Varanasi – Creative city of Music**
 - **Srinagar – Crafts and Folk Arts.**

Kozhikode

- **Kozhikode city** has been included in the category of **literature**.
- The first Malayalam novel **Kundalatha** was born in Kozhikode in 1887. It was authored by **Appu Nedungadi**.
- The city has also produced many film and theatre professionals in the last half a century.

Gwalior

- Gwalior, which has been included under the music category, is considered to be the **birthplace of the Dhrupad form of singing** and is also famous for the '**Gwalior gharana**' or **school of Indian classical music**.
- Gwalior hosts one of the biggest annual music festivals of India, the **Tansen Sangeet Samaroh**.
- It is the city of legendary musicians like **Tansen and Baiju Bawra**.

Defence

1) Indo-Tibetan Border Police Force

About ITBP

- The Indo-Tibetan Border Police (ITBP) Force was raised in **1962** for reorganizing the frontier intelligence and security set up along the Indo-Tibetan border.
- ITBP was initially raised under the CRPF Act. However, in 1992, parliament enacted the **ITBPF Act** and the rules there under were framed in 1994.
- At present, the ITBP guards **3,488 km long India-China borders ranging from the Karakoram Pass in Ladakh to Jachep La in Arunachal Pradesh.**
- Apart from this, the Force also has important roles in many **internal**

security duties and operations against the **Left Wing Extremism** in the state of Chhattisgarh.

- ITBP is a **specialized Armed Police Force** of the Nation which trains its personnel in various disciplines including mountaineering and skiing apart from intensive tactical training, thereby creating a distinctive image of the Force.
- ITBP also conducts relief and rescue operations as '**First Responders**' for **natural calamities in the Himalayan region.**

Why in News?

- Prime Minister Narendra Modi greeted ITBP personnel on the raising day of ITBP.



Source: Annual report of Ministry of Home Affairs, 2021-22

2) Indo-Pacific Regional Dialogue About IPRD

- The “Indo-Pacific Regional Dialogue” (IPRD) is the **Indian Navy’s yearly, recurring, top-level international conference.**
- The IPRD **reviews the current geopolitics** in the Indo-Pacific region and identifies opportunities, dangers, and problems that might be present.
- The **National Maritime Foundation (NMF)** is the **chief organiser of each edition of the IPRD.**
 - *NMF is an independent and autonomous think-tank. Its*

intellectual and organisational development is supported by the Ministry of Defence and the Indian Navy.



IPRD & Goa Maritime Conclave

- The IPRD follows hard on the heels of the **Goa Maritime Conclave 2023**, which had been conducted by the Indian Navy in October 2023 in Goa.
- In terms of conceptual positioning, the Goa Maritime Conclave seeks to **project the Indian Navy's cooperative engagement** at the strategic-operational level, by providing a forum for the Chiefs-of-Navy and Heads of Maritime Agencies in the Indian Ocean Region.
- The IPRD, on the other hand, is the **principal manifestation of the**

Navy's international engagement at the strategic-level, addressing 'holistic' maritime security issues across the Indo-Pacific.

Why in News?

- The Indian Navy and National Maritime Foundation recently hosted the Indo-Pacific Regional Dialogue (IPRD) in **New Delhi**.
- The overarching theme of IPRD-2023 is **"Geopolitical Impacts upon Indo-Pacific Maritime Trade and Connectivity"**.

Miscellaneous

1) Auroras

What is an Aurora?

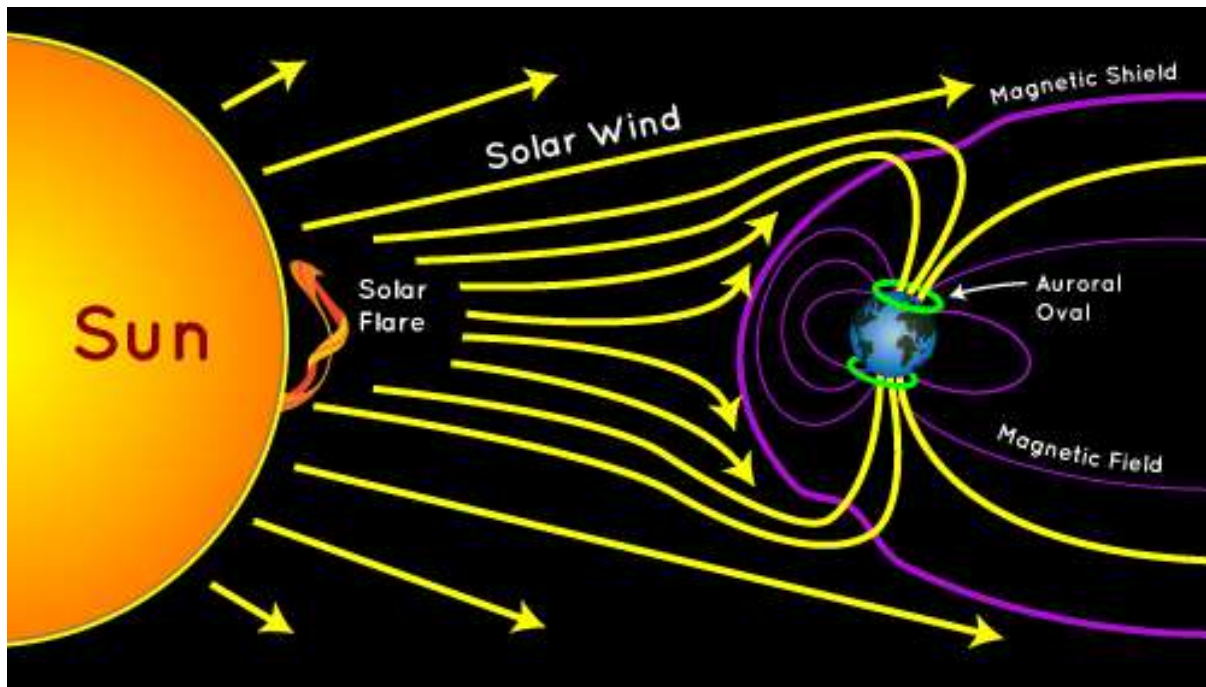
- An aurora is a natural phenomenon which is characterized by a **display of a natural-coloured (green, red, yellow or white) light in the sky.**
- It is a light show which is caused when **electrically-charged particles from the sun collide with particles from gasses** such as oxygen and nitrogen present in the Earth's atmosphere.
- Aurora is sometimes referred to as '**polar light**'. It is predominantly seen in the regions of **high altitudes like the Arctic and Antarctic.**



What causes an Aurora?

- An aurora is caused by the **streams of electrified particles** (which are emitted by the sun) **trapped in the magnetic field of the earth.**

- It is produced when this **magnetosphere is disturbed by the solar wind carrying the charged particles.**
- Auroras are seen in latitudes of **around 70 degrees.** They generally **occur in a band** known as '**auroral zone**'.
- The auroral zone is **3 to 6 degrees wide** in latitude. It lies between **10 and 20 degrees from the geomagnetic poles.**
- This is visible quite clearly during the night. Auroras can sometimes be seen at latitudes below the actual auroral zone.
- Auroras can appear in various forms like **streamers, patches, arcs, scattered light, diffused light etc.**
- The brightest and the most distinctive of all forms of auroras are the ones which are curtain-like in the shape of an arc, extending in the east-west direction.
- This natural light effect is known as '**aurora borealis**' in northern altitudes, while the effect in the southern latitudes is known as '**aurora australis**'.
- Aurora borealis is also known as '**Northern lights**'. Similarly, aurora australis is also known as '**Southern lights**'.



Why in News?

- It was mentioned in the news recently.

2) Bletchley Park Declaration

What's in the news?





- Twenty-eight major countries including the **United States, China, Japan, the United Kingdom, France, and India, and the European Union** agreed to sign on a declaration - **The Bletchley Park Declaration** - to address the critical issues surrounding AI.
- The declaration was signed during the "**AI Safety Summit 2023**" at the historic Bletchley Park in the UK.

About the Declaration

- At its core, the Bletchley Declaration embodies the **spirit of international diplomacy**, where nations come together to address the most complex and transformative technological advancements of our time.
- It highlights the **shared responsibility of governments, the private sector, and the global community** in ensuring that AI serves as a **force for good**.

- The **focus on AI safety and responsible development** underscores the acknowledgment that the potential benefits of AI should be harnessed while mitigating the associated risks.
- The Bletchley Declaration also highlights the **global recognition of the need for robust international collaboration**.
- It also places a significant responsibility on companies developing "**Frontier AI systems**" to ensure their safety through testing, evaluation, and appropriate measures.
 - "Frontier AI" is defined as highly capable general-purpose AI models that can perform a wide variety of tasks and match or exceed the capabilities present in today's most advanced models.

3) Men's Cricket ICC World Cup

<p>History</p> 	<ul style="list-style-type: none"> • Founded in 1971, the ICC World Cup is the premier event for One Day International (ODI) cricket, held every four years. • The inaugural tournament took place in 1975 in England, with eight teams participating. • Since then, the tournament has grown in size and popularity.
<p>Recent tournament</p> 	<ul style="list-style-type: none"> • The most recent edition, held in India in 2023, saw Australia won the title against India in the final. • The next edition of the Men's ICC Cricket World Cup is scheduled for 2027, with the host country yet to be announced.
<p>Trophies</p> 	<ul style="list-style-type: none"> • Australia has dominated the tournament, winning it a record six times (1999, 2003, 2007, 2015, 2019, 2023). • India (1983, 2011) and West Indies (1975, 1979) have won the trophy twice, while Pakistan, Sri Lanka, and England have each claimed one title.
<p>India as a Host</p> 	<p>India has hosted/co-hosted the ICC Men's Cricket World Cup on four occasions:</p> <ul style="list-style-type: none"> • 1987: India and Pakistan jointly hosted the tournament. • 1996: India co-hosted the World Cup with Sri Lanka and Pakistan. • 2011: India, Sri Lanka, and Bangladesh co-hosted the World Cup. • 2023: India solely hosted the World Cup.