

**DAILY
CURRENT
AFFAIRS
ANALYSIS**

LAKSHYA ACADEMY®

27 DECEMBER 2023

1 - Global Positioning System:

GS III

Science and Technology:

- **Context:**

- One of the few commonplace technologies that has had such a profound effect on urban, military, scientific, and civilian domains is the Global Positioning System (GPS), which has redefined our sense of location and affected numerous industries worldwide.

- **The Global Positioning System: What Is It?**

- **About:**

- The United States launched the GPS. Department of Defence in 1973, which are divided into three primary parts:
- **Space:** To provide further detail, the space segment consists of 24 satellites arranged in six orbits to provide global coverage. This enables receivers to receive signals from at least four satellites at the same time, which is essential for precise positioning.
- Each of the six orbits has four satellites at all times, and they are all positioned 20,200 kilometres above Earth. Every satellite spends a day completing two orbits.
- **Control:** Under the direction of ground-based stations, the control segment maintains the 2020 Standard Positioning Service (SPS) standards while guaranteeing satellite performance and signal accuracy. Globally, key stations oversee and maintain the integrity of the system.
- **Users and application developers worldwide might expect different features from the GPS system thanks to the SPS standard.**
- **User:** The user group spans a variety of industries, including military operations and agriculture. It is anticipated that there will be 6.5 billion GNSS (Global Navigation Satellite System) devices in use globally in 2021, and this number is projected to rise to 10 billion by 2031, demonstrating the system's widespread impact.

- **GPS functionality:**

- GPS receivers receive and triangulate radio signals provided by satellites at certain frequencies (L1 and L2 frequencies at 50 bits/second), which allow for precise location determination in three dimensions of space and one dimension of time.

- **Accuracy and Modifications:**

- GPS computations are extremely precise because error corrections, such as relativistic effects on satellite clocks and relative velocities, are taken into account to improve accuracy.
- Atomic clocks are used by satellites to keep exact time for GPS. These clocks are essential because minute timing discrepancies have the potential to create significant location inaccuracies.

- **Are There GNSS in Other Countries?**

- In addition to the GPS, a number of nations run their own Global Navigation Satellite Systems (GNSS). Australia, China, the European Union (EU), India, Japan, South Korea, Russia, and the United Kingdom now run these kinds of systems.
- Global systems include China's BeiDou, the EU's Galileo, and Russia's GLONASS.
- In 2006, the Indian government proposed the Indian Regional Navigation Satellite System, which was subsequently renamed as Navigation with Indian Constellation (NavIC). Seven satellites make up its space segment, three of which are in geostationary orbit and four of which are in geosynchronous orbit.
- By May 2023, four satellites at the very least could help with ground-based navigation. The master control facilities are situated in Bhopal, Madhya Pradesh, and Hassan, Karnataka.
- Newer satellites also communicate in the L1 band. The NavIC satellites employ rubidium atomic clocks to send data in the L5 and S bands.
- The Indian Space Research Organisation (ISRO) and the Airports Authority of India created and constructed the GPS-Aided Geo Augmented Navigation (GAGAN) system, which is also operated by India.
- "Safety-of-life civil aviation applications catering to the Indian airspace" and "correction and integrity messages for GPS" are GAGAN's main goals.

- **Source → *The Hindu***

2 - Quest for Simultaneous Elections in India:

GS II

Election related issues:

- **Context:**

- The Union Government formed a six-member team in September 2023 with the enormous responsibility of investigating the viability of holding simultaneous elections for the Lok Sabha, State assemblies, and local bodies. This was the first step towards electoral reform.

- **What are Elections Held Simultaneously?**

- **About:**

- The concept of simultaneous elections pertains to the conduct of polls simultaneously nationwide for the Lok Sabha, the lower house of Parliament, State legislative assemblies, and local governing organisations such as municipalities and panchayats.
- The purpose behind this notion is to coordinate the election cycles of these many levels of government, with the goal of holding all of the elections at the same time, ideally once every five years.
- Historical Simultaneous Elections in India: State Assembly and Lok Sabha elections were held in tandem throughout the country's first four general elections.
- Currently, Sikkim, Arunachal Pradesh, Odisha, and Andhra Pradesh assembly elections coincide with Lok Sabha elections.

- **Advantages of Concurrent Elections:**

- **Resource Efficiency:** A substantial amount of money is needed to hold elections at different levels. Election synchronisation would combine these costs, saving the government a significant amount of money.
- **Enhanced Administration:** Concurrent elections will simplify the deployment of security personnel and administrative staff, reducing interference from election-related tasks and enabling officials to concentrate more regularly on development and governance.
- **Continuity in Policies:** Since elections would take place at the same time, the Model Code of Conduct would prevent as many disruptions to policy implementation, resulting in more consistent and sustainable government.

- **Increased Voter Turnout:** By reducing the number of elections annually, it may be possible to counteract voter fatigue and boost turnout, which would result in more representative outcomes and greater credibility for elected officials.
- **Enhanced Accountability:** Voters who participate in several levels of government are making politicians answerable for their deeds at multiple levels, which promotes a more extensive accountability framework.
- **Decreased Polarisation:** By elevating national problems to the fore and promoting more inclusive campaigning and policy-making, simultaneous elections may lessen the impact of local, caste-based, or communal politics.

- **Related Difficulties:**

- **Constitutional Amendments:** A number of the clauses of the constitution must be changed in order to synchronise elections.
- Significant legal obstacles arise from shifting tenure rules, dissolving legislative bodies, and lining up election cycles.
- For instance, the term and dissolution of the Lok Sabha and State Assemblies are governed by Articles 83(2), 85(2), 172(1), and 174(2), which permit premature dissolution under specific conditions and would need to be repealed in order to allow for simultaneous elections.

- **Concerns about Federalism:**

- India is a federal country with several states and diverse political systems.
- States must come to a broad consensus before moving towards simultaneous elections, even though they may have different political goals.
- Additionally, as local government is a state matter and requires adjustments to a variety of state laws (56 legislative provisions from 28 states' Panchayati Raj Acts and Municipal Acts), there are obstacles to connecting general and local body elections.

- **Infrastructure and Technology:**

- Large-scale technological infrastructure upgrades, including those involving electronic voting machines (EVMs) and voter-verifiable paper audit trail devices (VVPATs), present difficulties with reliability assurance, maintenance, and procurement.
- **Legislative Council Elections and By-elections:** Coordinating all elections may leave out elections for legislative councils and by-elections, which could result in disparities in representation and governance.

- **Various Political Environments:**

- The multi-party system in India incorporates a range of regional agendas and political beliefs.
- Elections held at the same time may ignore local concerns and reduce the influence of smaller or local parties.
- What is the Law Commission's position regarding simultaneous elections?
- In August 2018, the Law Commission presented a draft report on simultaneous elections that looked at the difficulties and suggested ways to hold elections in India simultaneously.

- **A Suggested Structure for Election Timing Harmonisation:**

- **Limiting Election Cycles:** Suggested twice every five years for elections.
- **Organising All Elections in a Calendar Year:** In the event that holding elections simultaneously is not practical, suggest organising all elections to take place during the same calendar year.
- **Constructive Vote of No-Confidence Motion:** Suggested as a substitute for the "no-confidence motion," this motion would guarantee trust in a different administration prior to toppling the current one.
- **The Hung House Resolution** offers a procedure to resolve cases in which no party has enough votes to form a government. It gives the largest party or coalition a chance to try forming a government prior to the midterm elections.
- **Timely Disqualification:** Recommends changing anti-defection legislation to guarantee that disqualification disputes are promptly resolved by the presiding officer within six months.
- The Law Commission and the group entrusted with examining the viability of simultaneous elections met in late October 2023 to talk about the timeline for coordinating assembly and parliamentary elections by 2029.

- **Way Forward:**

- India needs to take a cautious, consensual approach to achieving simultaneous elections, weighing the advantages of simplified governance against the complexity of many regional dynamics. A synchronised electoral process that respects federal structures and increases administrative efficiency can be achieved through small steps, stakeholder engagements, and flexible frameworks.

- **Source** → *The Hindu*

3 - Cooperative Sector Grain Storage Plan:

GS III

Indian Agriculture:

- **Context:**

- There has been information released by the Ministry of Cooperation regarding the "World's Largest Grain Storage Plan in Cooperative Sector."
- The goal of this project is to solve the nation's ongoing food grain storage capacity shortfall.

- **What is the Cooperative Sector's Grain Storage Plan?**

- **Entire Infrastructure Development:**

- In order to complete the project, different agricultural infrastructures including as processing units, warehouses, custom hiring centres, Fair Price Shops, etc. must be established at the Primary Agricultural Cooperative Societies (PACS) level.
- A strategic approach for the comprehensive development of the Plan is the convergence of various existing schemes of the Government of India (GoI), including the Agriculture Infrastructure Fund (AIF), Agricultural Marketing Infrastructure Scheme (AMI), Sub Mission on Agricultural Mechanisation (SMAM), Pradhan Mantri Formalisation of Micro Food Processing Enterprises Scheme (PMFME), Pradhan Mantri Kisan Sampada Yojana (PMKSY), and Mission for Integrated Development of Horticulture (MIDH).

- **Partners in Implementation and Advancement:**

- The Pilot Project is being carried out in many States and Union Territories (UTs) by the National Cooperative Development Corporation (NCDC) with assistance from the National Bank for Agriculture and Rural Development (NABARD), Food Corporation of India (FCI), and other organisations.
- Thirteen PACS in thirteen states and union territories have started construction, and 1,711 PACS have been chosen to be a part of the trial project.

- **Committees for Supervision of Implementation:**

- An Inter-Ministerial Committee (IMC) was established by the Ministry of Cooperation, and it has the power to approve policies and procedures for scheme convergence.

- A National Level Coordination Committee (NLCC) including representatives from pertinent ministries and departments is also entrusted with overseeing the implementation of the comprehensive plan and tracking its advancement.
- In order to guarantee efficient coordination and implementation, State and District Cooperative Development Committees (SCDC and DCDC) have been established at the state and district levels.
- **Effect on Agriculture:**
 - Godowns will be established by PACS, giving farmers the capacity to store produce and obtain bridging financing for upcoming crop cycles.
 - Choose to sell the entire harvest to PACS at the Minimum Support Price (MSP) to avoid distress sales, or sell the produce at the farmer's preferred time.
 - Post-harvest losses are reduced by decentralised storage capacity at the PACS level, allowing farmers to maximise their profits while maintaining the quality of their produce.
 - Transporting food grains might be significantly more affordable when PACS functions as procurement hubs and Fair Price Shops (FPS).
 - By guaranteeing the provision of diverse agricultural inputs and services at the village or Panchayat level, the approach lessens reliance on remote procurement hubs.
 - Farmers now have the ability to expand their enterprises beyond conventional farming practices and look into new revenue streams.
 - By increasing storage capacity and decreasing waste, the plan ensures a more durable and dependable food supply chain, which promotes national food security.
- **Primary Cooperative Societies for Agriculture (PACS):**
 - The State Cooperative Banks (SCB) at the state level are in charge of PACS, which are the grassroots branches of the short-term cooperative credit structure.
 - PACS works directly with borrowers in rural (agricultural) areas, provides loans to them, collects loan repayments, and handles distribution and marketing tasks.
- **What Steps Is the Ministry of Agriculture Taking to Address the Shortage of Food Grain?**
- **Agricultural Infrastructure Fund (AIF):**
 - Through financial support and incentives, AIF hopes to create assets for communal farming and post-harvest management.
 - It includes repayment of the credit guarantee charge if the project has credit guarantee cover under the Credit Guarantee Fund Trust for Micro and Small Enterprises (CGTMSE) Scheme, and interest subvention of 3% for loans up to Rs. 2 crore per project location for 7 years.

- **PM-AASHA stands for Pradhan Mantri Annadata Aay Sanrakshan Abhiyan:**
- The mission of PM-AASHA is to give farmers the Minimum Support Price (MSP) for oilseeds, pulses, and copra that have been notified.
- It consists of the Private Procurement and Stockist Scheme (PPSS), Price Deficiency Payment Scheme (PDPS), and Price Support Scheme (PSS).
- **Programme for Price Support (PSS):**
- executed as requested by the relevant State Government.
- exempts from the mandi tax purchased pulses, oilseeds, and copra.
- When prices drop below MSP, central nodal agencies directly purchase from pre-registered farmers.
- **The Payment Deficiency Scheme (PDPS):**
- involves paying the difference directly between the selling/model price and the MSP.
- In notified market yards, pre-registered farmers who sell oilseeds meeting the Fair Average Quality (FAQ) standards enjoy the advantages of an open auction procedure.
- **The PPSS, or Private Procurement and Stockist Scheme:**
- States may choose to use PPSS for the purchase of oilseeds.
- In certain districts or APMCs, procurement is done on a trial basis from pre-registered farmers (s).
- **Market Intervention Scheme (MIS):**
- To prevent growers of perishable agricultural and horticultural commodities from having to make distress sales in the case of a bumper crop—when prices tend to drop below the economic level or cost of production—MIS comprises purchasing perishable goods for which the MSP is not disclosed.
- **BBSSL, or Bhartiya Beej Sahakari Samiti Limited:**
- BBSSL has been established as an umbrella organisation for the manufacture, distribution, and growing of enhanced seeds under a single brand name under the Multi-State Cooperative Societies Act, 2002.
- This society will make better seeds more widely available to farmers, increase crop output, and raise farmers' incomes.
- **Source → The Hind**

4 – India Infrastructure Report 2023:

GS III

Infrastructure Related Issues:

- **Context:**

- The India Infrastructure Report (IIR) 2023 on Urban Planning and Development, a thorough report covering many facets of infrastructure planning, financing, and governance in the nation, was just issued.
- The IDFC Foundation, the National Institute of Urban Affairs (NIUA), and Infrastructure Development Corporation (Karnataka) Ltd. (iDeCK) worked together to create the IIR 2023.

- **About:**

- The non-profit IDFC Foundation promotes advocacy, research, and social infrastructure in India.
- It disseminates papers and studies with fresh perspectives and ideas for infrastructure development.
- Working on sustainable infrastructure projects, the Government of Karnataka, the IDFC Foundation, and HDFC jointly own iDeCK. Via the IDFC Foundation and ICAP Trust, it funds research and initiatives aimed at enhancing capacity.

- **Which aspects of the India Infrastructure Report stand out the most?**

- **Metro Area Issues as a Theme:**

- India's urban concerns are centred around many core themes that are methodically addressed by the IIR.
- Urban redevelopment, public service delivery, smart initiatives, housing and migration, public-private partnerships (PPPs) and funding, and planning and governance are a few of these.

- **Evaluation of the Planning Mechanism:**

- criticises the planning laws now in place, especially the prohibitions on building construction, for making cities "unlivable" and fostering the growth of slums.
- draws attention to how inadequate planning contributes significantly to urban problems.

- **Urban sprawl and Low Floor Space Indices (FSIs):**

- highlights how low floor space indices (FSIs) and floor area ratios (FARs) have an adverse effect on high-density development and urban sprawl, which is the fast growth of cities and towns into undeveloped land.
- A lower Floor Space Index (FSI) indicates that a plot will be built over a smaller area. In urban planning, this parameter is used to calculate the highest permitted building density on a given piece of land.
- focuses on planning flaws that result in forced high population density and connects low FSI to the development of slums.
- According to the paper, cities should implement a redevelopment policy that prioritises reclaiming property from private owners in return for increased floor space indices (FSIs) and better access to public transportation.
- proponents of dynamic city planning emphasise the necessity for carrying capacity to rise in step with urbanisation.

- **Municipal Financial Management in Urban Areas:**

- draws attention to the report's examination of urban local government financial management, highlighting the critical requirement for financial sustainability.
- PPPs and municipal bonds are promoted in the report as crucial instruments for funding urban development initiatives.
- While India has led the world in PPPs, particularly in the areas of highways, ports, airports, and energy, the research pointed out that the urban sector has seen relatively few PPPs.

- **The Infrastructure Report (IIR) for India:**

- Twenty-five chapters on the current status of urban development in India are included in the IIR 2023, written by well-known figures in the policy and urban development ecosystem.
- Identification and analysis of the legal, financial, regulatory, technological, social, and conceptual facets of current issues pertinent to infrastructure development have been made possible by this yearly publication.
- For those interested in the growth of India's infrastructure and urbanisation, including policymakers, investors, scholars, financiers, and multilateral agencies, this makes it a priceless tool for those creating urban policy.

- **What is India's current urban environment like?**

- India's economy is among the fastest-growing in the world, and its cities are the main driver of this expansion.

- By 2050, cities are predicted to account for 80% of the country's GDP, up from their current 66% share.
- India's urbanisation process has been very sluggish; between 2001 and 2011, the percentage of the population residing in officially recognised urban settlements increased at a pace of little more than 1.15% annually.
- Mumbai, Delhi, Bangalore, Kolkata, Chennai, Hyderabad, and Ahmedabad are India's seven biggest metropolises.
- *Source* → *The Hindu*

5 - The Garba Dance of Gujarat Receives UNESCO Recognition:

GS I

Indian Culture:

- **Context:**
- During its 18th session of the Intergovernmental Committee in Botswana, the United Nations Educational, Scientific and Cultural Organisation (UNESCO) has included the famous Garba dance from Gujarat to its prestigious Representative List of Intangible Cultural Heritage (ICH) of Humanity.
- The Garba dance form is the fifteenth Indian cultural artefact to be included on the UNESCO list. The final Durga Puja to be added in 2021 was in Kolkata.
- **The Garba Dance: What Is It?**
- Gujarati folk dance known as garba is performed during the nine-day Navratri celebration, which honours the triumph of good over evil.
- The Sanskrit term for womb, which denotes creation and life, is where the name Garba originates.
- Garba dances honour mother deities, celebrate fertility, and pay tribute to women in general.
- In addition, the dance typically signifies a girl's impending marriage and her first menstrual cycle.
- The Goddess Shakti, who stands for the feminine energy of the cosmos, is either depicted as a portrait or statue at the centre of the dance.
- Garba is performed to the sounds of clapping, singing, and rhythmic music. Anybody, regardless of age, gender, or socioeconomic standing, can do the dance.

- Dandiya Raas is a traditional male-performed dance that has a strong influence on modern Garba. The exuberant Garba dance of today was created by combining these two dances.
- By weakening rigid sect, gender, and socioeconomic hierarchies, garba promotes societal equality.
- Community ties are strengthened by its continued inclusivity and participation from marginalised and varied communities.

- **UNESCO Intangible Cultural Heritage (ICH): What is it?**

- **About:**

- The practices, representations, expressions, knowledge, skills, and cultural spaces that are acknowledged as a component of a community, group, or individual's cultural heritage are referred to as UNESCO ICH.
- "The mainspring of humanity's cultural diversity and its maintenance a guarantee for continuing creativity" is how UNESCO describes ICH.
- The Convention for the Safeguarding of the Intangible Cultural Heritage (ICH), which was ratified by UNESCO in 2003, represents a commitment to preserve, advance, and disseminate the various manifestations of human culture.
- Two essential lists for ICH are established by the convention.
- Representative List: This list draws attention to the relevance and importance of ICH by showcasing its global variety.
- List of Urgent Safeguarding: This list, which identifies ICH that are under danger, demands that quick action be taken to protect them.

- **ICH examples include:**

- Poetry, literature, oral traditions, and languages.
- performing arts, including theatre, dance, and music.
- Social customs, holidays, and celebrations.
- Understanding and methods related to the natural world and cosmos.
- artisanal crafts like metalworking, weaving, and ceramics.

- **Source → *The Hindu***