

**DAILY  
CURRENT  
AFFAIRS  
ANALYSIS**

**LAKSHYA ACADEMY**<sup>®</sup>

**06 JULY 2024**

# 1 – ULLAS Scheme:

## GS II

### Education related issues

- **Context:**

- India is grappling with a major literacy issue, as revealed by the Census 2011. There are 25.76 crore individuals aged 15 and above who are non-literate. This includes 9.08 crore males and 16.68 crore females. Despite the strides made by the Saakshar Bharat programme, which certified 7.64 crore individuals as literate between 2009-10 and 2017-18, there are still an estimated 18.12 crore adults in India who remain non-literate. This substantial number highlights the critical need to address the education gap and work towards universal literacy.

- **ULLAS - A Step Towards Literate India:**

- ULLAS - Nav Bharat Saaksharta Karyakram, or the New India Literacy Programme (NILP), is a centrally sponsored initiative that aligns with the National Education Policy (NEP) 2020. This programme aims to empower adults aged 15 and above from all backgrounds who missed out on formal education, helping them integrate into society and contribute to national development. ULLAS focuses on providing functional literacy, including reading, writing, and numeracy skills, and equips learners with essential life skills to promote lifelong learning. Implemented through volunteerism, ULLAS encourages social responsibility and a sense of duty ('Kartavya Bodh'), motivating learners to access educational content in regional languages via the DIKSHA Portal and the ULLAS mobile app. Certificates awarded to learners and volunteer teachers enhance confidence and motivation, driving continuous progress.

- **About ULLAS-Nav Bharat Saaksharta Karyakram:**

- **Introduction:**

- ULLAS stands for Understanding Lifelong Learning for All in Society and is a centrally sponsored scheme implemented from 2022 to 2027.
- The programme aligns with the National Education Policy (NEP) 2020 recommendations.

- **Objective:**

- To empower adults aged 15 years and above from all backgrounds who missed formal schooling.
- To integrate them into society, enabling them to contribute significantly to the country's growth.

- **Components of the Scheme:**

- Foundational Literacy and Numeracy
- Critical Life Skills
- Basic Education
- Vocational Skills
- Continuing Education

- **Implementation:**

- The ULLAS app facilitates the registration of learners and volunteers through self-registration or by surveyors.
- It serves as a digital gateway for learners to engage with diverse learning resources available on the DIKSHA portal of NCERT.

- **What is the DIKSHA Portal?**

- **Overview:**

- DIKSHA is a national platform for school education, an initiative by the National Council for Education Research and Training (NCERT), under the Ministry of Education.
- It offers e-content for schools through an online portal and a mobile application.

- **Principles:**

- Developed on core principles of open architecture, open access, open licensing, choice, and autonomy.
- Built on open-source technology, it is designed for India and incorporates internet-scale technologies, allowing a variety of use cases and solutions for teaching and learning.

- **Features:**

- DIKSHA's core building blocks include many components of the National Digital Education Architecture (NDEAR), enabling successful use-cases such as energized textbooks, online

courses, content authoring, content sourcing, interactive quizzes, question banks, chatbots, analytics, and dashboards.

- To support teaching and learning for Children With Special Needs (CWSN), a significant number of audiobooks, Indian Sign Language (ISL) videos, and a dictionary are available on DIKSHA for CWSN.
- *Source* → *The Hindu*

## 2 - NITI Aayog Launches 'Sampoornata Abhiyan':

### GS II

#### Government Policies and Interventions

- **Context:**
- NITI Aayog today launched a nationwide campaign namely Sampoornata Abhiyan with a focus to attain saturation in 12 key social sector indicators in 500 aspirational blocks and 112 aspirational districts. This comprehensive three-month campaign to be focused on themes including health, nutrition, agriculture, social development and education, will continue till September this year. As part of the campaign, district and block officials along with elected people's representatives will organise awareness activities including Gram Sabhas, Nukkad Natak, Paushtik Aahar Mela, Health camps, Exhibitions, Poster making and Poem competitions around 12 themes identified in all aspirational blocks and districts.
- **Overview of Sampoornata Abhiyan:**
- NITI Aayog has initiated a nationwide campaign called Sampoornata Abhiyan.
- The campaign spans over three months, aiming for completion by September this year.
- It focuses on achieving saturation in 12 critical social sector indicators.
- **Objectives:**
- The primary objective is to achieve saturation in 12 key social sector indicators.
- Target areas include 112 Aspirational Districts and 500 Aspirational Blocks.

- **Program Details:**

- **Background:**

- Aspirational Districts Programme (ADP): Launched in 2018 with a focus on transforming 112 districts through various developmental initiatives.
- Aspirational Blocks Programme (ABP): Launched in 2023 to extend the developmental framework to 500 blocks across the country.
- Both programs aim to uplift the socio-economic status by addressing specific developmental indicators in identified regions.

- **Aspirational Districts Programme (ADP):**

- Targets: 112 Aspirational Districts across the country.
- Focus areas: Health, nutrition, agriculture, social development, and education.

- **Key Indicators:**

- Distribution of Soil Health Cards.
- Provision of functional electricity in schools.
- Immunization of children aged 9-11 months.
- Early registration of pregnant women for Antenatal Care (ANC).
- Ensuring ICDS Supplementary Nutrition for pregnant women.
- Timely provision of textbooks in schools.

- **Aspirational Blocks Programme (ABP):**

- Targets: 500 Aspirational Blocks within 329 districts.
- Focus areas: Health, nutrition, agriculture, infrastructure, and social development.
- Key Indicators:
  - Screening for diabetes and hypertension.
  - Early registration of pregnant women for Antenatal Care (ANC).
  - Ensuring ICDS Supplementary Nutrition for pregnant women.
  - Generation of Soil Health Cards.
  - Support to Self-Help Groups (SHGs) through Revolving Funds.

- **Implementation Strategy:**

- The campaign encourages collaboration among district and block officials, elected representatives, and local communities.

- Activities include Gram Sabhas, street plays, health camps, exhibitions, and competitions to raise awareness.
- Aim is to achieve comprehensive development across identified sectors in all target blocks and districts.
- *Source → The Hindu*

### 3 – Biodiversity in India:

#### GS III

#### Environmental Conservation

- **Context:**
- Thazhakara grama panchayat in Alappuzha, Kerala, has taken significant steps towards documenting and conserving its rich biodiversity. Recently, the local body compiled the second volume of the People's Biodiversity Register (PBR), detailing the region's diverse flora and fauna.
- **Current Biodiversity Status:**
- **Declining Species:** The Indian black turtle, Indian garden lizards, barn owls, Indian flying foxes, henna, and palash plants have faced population declines primarily due to poaching and habitat loss.
- **Increasing Species:** Conversely, populations of rock pigeons, rufous treepies, and other species have shown an increase.
- **Natural Assets of Thazhakara:**
- The village boasts:
  - 38 sacred groves
  - 10 paddy polders
  - 35 ponds
- **Challenges in Biodiversity Conservation:**
- **Habitat Loss and Fragmentation:** Activities such as deforestation, agriculture, urbanization, and infrastructure development threaten natural habitats, impacting species survival.

- **Climate Change:** Changing climatic conditions alter ecosystems, affecting species distribution and behavior.
- **Invasive Species:** Introduction of non-native species disrupts local ecosystems and can lead to species displacement.
- **Overexploitation:** Unsustainable practices like overfishing and timber harvesting contribute to species decline.
- **Pollution:** Contamination of air, water, and soil poses significant threats to wildlife and habitats.
- **Lack of Awareness:** Insufficient understanding among the public about the importance of biodiversity hampers conservation efforts.
- **Poverty and Inequality:** Socioeconomic factors drive overexploitation of natural resources, exacerbating biodiversity loss.

- **Related Initiatives for Biodiversity Conservation:**

- **Green Growth Priority in Budget 2023:** Emphasizes reducing carbon intensity and promoting green job opportunities.
- **National Mission for a Green India:** Aims to increase forest cover on degraded lands and protect existing forests.
- **Green Credit Programme:** Incentivizes environmentally sustainable practices by various entities.
- **MISHTI Initiative:** Focuses on mangrove and coastal ecosystem conservation for climate change mitigation.
- **PM-PRANAM:** Promotes sustainable agriculture practices to reduce synthetic inputs.
- **Amrit Dharohar Scheme:** Encourages optimal use of wetlands for biodiversity and income generation.

- **Strategies for Future Conservation Efforts:**

- **Science-based Monitoring Programme:** Implementing robust monitoring systems to track biodiversity conservation efforts effectively.
- **Sustainability of Ecosystems:** Promoting modern sustainability concepts that value ecological, cultural, and sociological aspects of biological wealth.
- **Water Conservation:** Emphasizing sustainable water management to support wetland ecosystems.
- **Ecological Restoration:** Prioritizing ecological restoration over mere plantation drives to enhance landscape connectivity.
- **Selective Mangrove Initiatives:** Strategically selecting sites for mangrove conservation to preserve biodiversity and coastal integrity.
- **Community Engagement:** Involving local communities and integrating traditional knowledge into conservation plans.
- **Research and Education:** Advocating for significant funding towards biodiversity research and public education initiatives.

- **Conclusion:**
- Efforts like the People's Biodiversity Register in Thazhakar demonstrate the importance of local initiatives in biodiversity conservation. As India strives to meet global biodiversity goals, integrating scientific knowledge with community involvement and sustainable practices will be key to preserving the nation's biological wealth.
- This comprehensive approach not only safeguards natural ecosystems but also ensures a sustainable future for generations to come.
- *Source → The Hindu*

## 4 - Defence Production Hits Record High in 2023-24:

### GS II

#### Government Policies and Interventions

- **Context:**
- In a significant development reported by The Hindu, India's defence production for the financial year 2023-24 has reached a historic high of ₹1,26,887 crore. This marks a notable increase of 16.7% from the previous year's ₹1,08,684 crore, according to the Ministry of Defence. This surge underscores India's ongoing efforts towards bolstering indigenous defence manufacturing capabilities, reducing dependency on foreign imports, and enhancing self-reliance in the defence sector.
- **Background of Defence Production in India:**
- **Early Recognition of Need (1950s-1970s):**
- India's focus on indigenisation intensified post the Indo-China war of 1962 and subsequent conflicts.
- **Integrated Guided Missile Development Programme (IGMDP), 1983:**
- Led by Dr. APJ Abdul Kalam, aimed at developing strategic missile systems; concluded successfully in 2008.



- **Self-Reliance Index and Abdul Kalam's Initiative (1992):**

- Initiated with a Self-Reliance Index of 0.3, aimed to reach 0.7 by 2005 through strategic planning.

- **Responsibility Transfer (2000s):**

- Shifted from Department of Defence Production (DDP) to Ordnance Factories Board (OFB) and Services; devised 15-year Perspective Plans for Indigenisation.

- **Need for Defence Production:**

- India's defence production efforts are driven by several critical imperatives:

- **India's Share in Global Arms Market:**

- Accounts for only 0.2% of global arms exports; aims to enhance global footprint.

- **India as the Largest Importer of Arms:**

- Despite efforts, remains the largest importer globally, with 11% of global arms imports during 2018-22.

- **Development of Military Industrial Complex:**

- Focus on increasing national military spending; crucial for self-reliance and reducing foreign dependency.

- **Technology Transfer and Independence:**

- Facilitates critical defence capabilities through technology collaborations and exports.

- **Exports:**

- Initiatives like Brahmos Cruise Missiles to the Philippines exemplify expanding export capabilities.

- **Research and Development:**

- Promotes significant R&D investments, fostering a robust defence industrial ecosystem.

- **Government's Initiative towards Defence Indigenisation:**

- Recent policy measures highlight the government's commitment to indigenous defence manufacturing:

- **Defence Procurement Policy, 2016:**

- Introduced categories like "Buy (Indian-IDDMM)" to streamline acquisitions.

- **Innovations for Defence Excellence (iDEX), 2018:**

- Engages industries, MSMEs, and startups in defence innovation and R&D.

- **SPRINT Challenges:**

- Introduced by NIIO and DIO to integrate new technologies into the Indian Navy.

- **Indigenous Manufacturing:**

- Simplification of industrial licensing, liberalising FDI policies, and increasing domestic procurement share.

- **Defence Industrial Corridors:**

- Established in Uttar Pradesh and Tamil Nadu to boost regional defence hubs.

- **Positive Indigenisation Lists:**

- Prioritises domestic procurement under the Buy Indian (IDDMM) category.

- **E-Biz Portal:**

- Digitisation of industrial license processes for efficiency.

- **Custom Duty and FDI Policy:**

- Uniform customs duties and enhanced FDI limits aim to level the playing field.

- **Vendor Development Guidelines:**

- Guidelines to bolster private sector participation in defence manufacturing.

- **Defence Acquisition Procedure 2020:**

- Streamlines defence procurement, supports Make in India initiatives.

- **Recent Rise in Exports of Indian Defence Products:**

- **Current Status of Exports and Trend:**

- Exports surged to ₹16,000 crore in FY 2022-23, a significant rise supported by policy reforms.

- **Export Deals with Countries:**

- Exporting to over 85 countries, including strategic deals with the Philippines for BrahMos missiles.

- **Reasons for Recent Increase in Exports:**

- Private sector involvement, policy reforms, and simplified export procedures contributed to export growth.

- **Challenges Faced by Defence Production and Exports:**

- **Lesser Defence Budget and Modernisation:**

- Budget concerns impacting modernisation efforts and preparedness.

- **Insufficient Infrastructure and Capacity:**

- Despite progress, inadequate infrastructure remains a challenge.

- **Limited Private Sector Participation:**

- Dominance of DPSUs in defence production; efforts ongoing to increase private sector involvement.

- **Inadequate Investments in R&D:**

- Long-term success hinges on sustained R&D investments.

- **Establishment of Economies of Scale:**

- Crucial for enhancing productivity and reducing costs in defence production.
- **Measures to be Taken in Future:**
- Strategies to achieve India's defence production and export goals include:
- **Export High-Value Weapon Systems:**
- Focus on exporting advanced platforms like LCA-Tejas and BrahMos missiles.
- **Comprehensive Export Deals:**
- Offer integrated solutions including training and maintenance services.
- **Leverage Defence Lines of Credit (LoC):**
- Extend LoCs to Friendly Foreign Countries to facilitate defence exports.
- **Enhance Private Sector Contribution:**
- Incentivise and allocate significant projects to private companies.
- **Establish a Dedicated Export Promotion Body:**
- Coordinate efforts to promote defence exports effectively.
- **Defence Modernisation Fund:**
- Propose a non-lapsable fund to bridge budget shortfalls in modernisation efforts.
- *Source → The Hindu*

## 5 - Reserve Bank's Concerns and Women Entrepreneurship in India:

### GS III

#### Indian Economy

- **Context:**

In a recent address, Reserve Bank's executive director Neeraj Nigam highlighted the challenges faced by women in accessing credit, attributing this to their low labor force participation. This issue not only impedes financial inclusion efforts but also hampers broader economic growth.

- **Status of Women Entrepreneurs in India:**

- **Bain & Company Report:**

- Approximately 20% of enterprises in India are owned by women.

- **Women in India's Startup Ecosystem Report (WISER):**

- Women-led startups have risen to 18% since 2017.

- **Mastercard Index of Women Entrepreneurs:**

- India ranks 57th out of 65 countries, indicating substantial room for improvement.
- Funding for women-led startups increased to 18% of the total in 2022.

- **Current Scenario:**

- India boasts nearly 14% women entrepreneurs, totaling 8.05 million.
- Women lead over 20% of the MSME sector.

- **Importance of Women Entrepreneurs in India**

- **Foundational Role:**

- Women are integral to sustainable development across social, economic, and political spheres.

- **Economic Gender Disparity:**

- Women earn only two-thirds of men's expected lifetime income, highlighting the need to reduce economic inequalities.
- **Challenging Stereotypes:**
- Overcoming traditional perceptions and empowering women financially is crucial for societal progress.
- **Economic Targets:**
- Supporting women entrepreneurs is vital as India aims for a USD 5 trillion economy by 2024-25.
- **Financial Management:**
- Women's involvement in financial decisions can significantly impact wealth management and inheritance patterns.
- **Influence and Empowerment:**
- Educated women play a pivotal role in influencing future generations through their decisions.
- Government Initiatives Supporting Women Entrepreneurs
- **Constitutional Provisions:**
- India's Constitution ensures gender equality and empowers the state to adopt measures favoring women.
- **Legal Framework:**
- Various laws and policies since the fifth five-year plan (1974-79) have aimed at empowering women entrepreneurs.
- **Key Schemes:**
- **Mission Shakti:**
- Focuses on women's empowerment through skill development, capacity building, and microcredit access.

- **SAMARTH Scheme:**

- Provides opportunities for women's self-employment and independence.

- **Mudra Loan Scheme:**

- Offers financial support to women starting small businesses like beauty parlors and tuition centers.

- **Annapurna Yojana and Udyogini Scheme:**

- Support catering businesses and promote entrepreneurship among rural women.

- **Challenges Faced by Women Entrepreneurs in India:**

- **Autonomy and Representation:**

- Women face hurdles in achieving economic autonomy and are underrepresented in decision-making roles.

- **Societal Pressures:**

- Cultural and societal norms often discourage women from pursuing entrepreneurial ventures.

- **Access to Finance:**

- Limited access to formal financial institutions and collateral poses significant barriers.

- **Technological Exposure:**

- Rural women face challenges due to limited exposure to technology, hindering their entrepreneurial success.

- **Way Forward to Strengthen Women Entrepreneurship in India:**

- **Enhance Support Systems:**

- Increase access to capital and support for women entrepreneurs in funding and development.

- **Gender-Neutral Policies:**

- Promote entrepreneurship as a gender-neutral endeavor for economic development.
- **Addressing Inequalities:**
- Implement interventions to bridge gender gaps in funding and opportunity spaces.
- **Awareness and Education:**
- Improve financial literacy and awareness among women to promote gender parity in financial decision-making.
- **Conclusion:**
- Women entrepreneurship in India not only drives economic growth but also serves as a catalyst for societal transformation. With continued support from government initiatives and enhanced awareness, fostering an environment conducive to women's entrepreneurial success is imperative for achieving broader economic and social goals.
- *Source → The Hindu*

## 6 – Agniveer Yojna:

### GS II

## Government Policies and Interventions

- **Context:**
- Recently, the issue of compensation for Agniveer Ajay Kumar's family has sparked controversy after allegations by Rahul Gandhi, Leader of Opposition in Lok Sabha. He claimed that the family did not receive adequate financial assistance from the government. Defence Minister Rajnath Singh refuted this, stating that Agniveers killed in action receive Rs 1 crore as compensation. However, discrepancies arose when the Army later announced that the compensation was actually Rs 1.65 crore. This incident has highlighted concerns regarding the implementation and transparency of the Agnipath scheme.
- **About the Agnipath Scheme:**
- Launched in 2022 by the central government.



- Aimed at recruiting individuals below officer rank into the armed forces.
- Emphasizes deployment of young, fit troops on four-year contracts, enhancing frontline capabilities.
- **Eligibility Criteria:**
  - Age requirement: 17.5 to 21 years.
  - Open to both genders, subject to specified age limits.
  - Recruitment through biannual rallies; rigorous selection criteria maintained.
- **Pay and Benefits:**
  - Lump sum compensation of Rs 1 crore to families of deceased Agniveers.
  - Additional benefits include full pay for the period the soldier could not serve.
  - Disability compensation up to Rs 44 lakh based on disability percentage attributed to military service.
- **Distinct Features:**
  - Agniveers do not receive pensions post-retirement, except for 25% who may qualify after four years of regular service.
  - Aims to reduce permanent force levels and the defence pension bill.
- **Current Status of Recruitment:**
  - Army: Two batches of 40,000 Agniveers trained, third batch of 20,000 undergoing training.
  - Navy: Three batches of 7,385 completed training.
  - Indian Air Force (IAF): 4,955 Agniveers trained.
- **Why Agnipath was Introduced:**
- **Objectives:**
  - To lower the average age of armed forces personnel from 32 to 26 years.
  - Transform the armed forces into a youthful, technologically advanced entity.
  - Facilitate transition of Agniveers into civil society with enhanced skills and discipline.
- **Government's Perspective:**
  - Projected benefits include improved workforce quality, productivity, and GDP growth.
  - Seeks to modernize armed forces and align with contemporary defence needs.

- **Opposition and Concerns:**
- **Criticism:**
  - Critics argue Agniveers perform duties akin to regular soldiers but with reduced pay, benefits, and career prospects.
  - Recent calls for equal compensation for fallen Agniveers' families compared to regular soldiers.
- **Public Dissatisfaction:**
  - Some view military service as a path to economic stability and social advancement.
  - Disparity in benefits seen as undermining morale and commitment among Agniveers.
- **Conclusion and Way Forward:**
  - The Agnipath scheme represents a significant reform effort aimed at rejuvenating India's armed forces with younger personnel while addressing longstanding fiscal challenges. However, recent controversies over compensation highlight the need for greater clarity and equity in policy implementation. As the scheme continues to evolve, it is crucial for stakeholders to address concerns regarding benefits, career progression, and support for Agniveers and their families. Ensuring transparency and fairness will be key to maintaining public trust and the effectiveness of this transformative initiative in bolstering national security.
- *Source → The Hindu*

## **7 – China Myanmar Relations**

### **GS II**

#### **International Relations**

- **Context:**
  - During his visit to Malaysia last week, Chinese Premier Li Qiang said China was willing to study a plan to connect its railway projects in the Southeast Asian countries of Malaysia, Laos, and Thailand for “enhancing regional connectivity”.

- **Introduction:**

- China's ambitious plans to expand its railway network across Southeast Asia have garnered significant attention due to their potential impact on regional connectivity and economic integration. Premier Li Qiang's recent proposal during his visit to Malaysia underscores China's strategic interest in enhancing regional infrastructure ties, particularly through projects like the East Coast Rail Link (ECRL).

- **ECRL Project Overview:**

- Investment: Nearly \$10 billion project linking Kota Bharu to Port Klang.
- Objectives: Boost economic benefits, facilitate freight movement, and promote tourism.
- Significance: Termed as a key economic cooperation initiative between China and Malaysia.

- **ECRL Project Challenges and Progress:**

- Initiation and Suspension: Started in 2017 but halted due to funding issues and high costs, suspended by former Malaysian PM Mahathir Mohamad.
- Political Impact: Domestic political factors, including financial scandals, influenced project delays.
- Resumption: Resumed in 2020 under a revised agreement to lower costs and streamline operations.

- **Pan-Asian Rail Network Concept:**

- Historical Context: Originating from colonial-era proposals, the network aims to link Kunming through Myanmar, Laos, and Vietnam to Thailand, Malaysia, and Singapore.
- Goals: Enhance regional economic growth and cooperation through improved connectivity.

- **Current Status of the Pan-Asian Railway Project:**

- Operational Section: Laos-China segment operational since 2021, connecting key regions.
- Challenges: High costs and governmental reluctance in Thailand pose potential delays.
- Feasibility Concerns: Varied railway track standards and competing transport modes challenge project viability.

- **China's Interest in Regional Connectivity:**

- Geopolitical Context: Predating the Belt and Road Initiative (BRI), China's engagement in Southeast Asia is driven by economic ties and geographical proximity.

- Trade Relations: Extensive trade volumes with ASEAN countries, reaching USD 911.7 billion in 2023.
- Strategic Goals: Utilize infrastructure investments to strengthen regional ties amidst territorial disputes in the South China Sea.
- **Conclusion:**
- China's proposal to extend its railway network to Singapore via Malaysia reflects its broader strategy to deepen regional integration and economic partnerships in Southeast Asia. While the project faces challenges, its potential benefits in terms of economic growth and connectivity underscore its strategic importance in China's regional diplomacy efforts.
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- *Source → The Hindu*

## 8 - Flooding and Its Causes:



**GS III**  
**Disaster Management**

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- **Context:**
- Assam is currently grappling with severe flooding caused by heavy rains, leading to the swelling of the Brahmaputra River. This natural calamity has adversely affected nearly 1.34 lakh individuals, including over 33,760 children, across seven districts.
- **Causes of Floods in India**
- **Heavy Rainfall**
- Monsoon season from June to September brings intense and erratic rainfall.
- Excessive rain can overwhelm soil absorption and drainage systems, leading to flooding.
- Example: Delhi experienced significant rainfall in July 2023, causing widespread inundation.

- **Snowmelt**

- Melting snow and glaciers increase water levels in rivers.
- Downstream areas can experience floods due to sudden inflow of water.
- Example: Uttarakhand faced a devastating flash flood in February 2021.

- **Cyclones and Storms**

- Coastal areas are susceptible to floods from cyclones and storm surges.
- High winds and low atmospheric pressure elevate sea levels, causing inundation.
- Example: Cyclone Amphan in May 2020 impacted West Bengal and Odisha severely.

- **River Overflow**

- Excessive inflow upstream or restricted outflow downstream can cause river overflow.
- Factors include heavy rainfall, snowmelt, cyclones, dams, barrages, or siltation.
- Example: Yamuna River overflowed in 2023 due to upstream rainfall and ineffective barrages.

- **Impacts of Floods in India**

- **Loss of Life**

- Drowning, injuries, infections, and electrocution are common causes of fatalities.
- On average, floods claim about 1,600 lives annually in India.
- Example: North India witnessed over 60 confirmed flood-related deaths in early 2023.

- **Damage to Property**

- Infrastructure such as houses, roads, bridges, and utilities suffer extensive damage.
- Agricultural losses and damage to public property are significant economic impacts.
- Example: Delhi landmarks like the Red Fort were damaged in the 2023 floods.

- **Displacement of People**

- Floods force people to evacuate, disrupting livelihoods and causing humanitarian crises.
- Access to essentials like food, water, sanitation, and healthcare is compromised.
- Example: Thousands were displaced in Himachal Pradesh and Punjab due to floods in 2023.

- **Environmental Degradation**

- Floods erode soil, alter habitats, pollute water sources, and increase landslide risks.
- Ecological balance in rivers and wetlands is threatened, impacting biodiversity.
- Example: Endangered species like the Gangetic dolphin are at risk in flooded areas.

- **Economic Losses**

- Floods impede economic activities, affecting agriculture, industry, trade, and tourism.
- Annual direct losses due to floods in India are estimated at \$14 billion.
- Example: The tourism sector and cultural heritage suffer from flood-induced damages.

- **Solutions for Flood Management in India**

- **Structural Measures**

- **Storage Reservoirs**

- Artificial reservoirs store excess water during peak flows.
- Water release during low-flow periods helps manage flood peaks.
- Example: Bhakra Nangal Dam serves flood control and supports irrigation.

- **Embankments**

- Raised structures along rivers confine water flow and protect adjacent areas.
- Enhances river carrying capacity and directs excess water to safer zones.
- Example: Kosi embankment project in Bihar aims to prevent riverine flooding.

- **Diversions**

- Structures redirect water from one channel to another to manage flood risk.
- Transfers excess water to less vulnerable areas or storage reservoirs.
- Example: Indira Gandhi Canal diverts water for irrigation in Rajasthan.

- **Non-structural Measures**

- **Flood Forecasting and Warning**

- Early warning systems use meteorological and hydrological data to predict floods.
- Facilitates timely evacuation and operational planning for flood management.
- Example: Central Water Commission issues flood alerts across India.

- **Flood Plain Zoning**

- Regulatory measures restrict development in flood-prone areas to minimize risks.
- Promotes conservation of natural flood buffers like wetlands and forests.
- Example: NDMA guidelines classify flood-prone lands into restricted zones.

- **Flood Insurance**

- Financial measures compensate flood-related losses through insurance schemes.
- Reduces government burden on relief efforts and encourages risk mitigation.
- Example: Pradhan Mantri Fasal Bima Yojana covers agricultural losses due to floods.

- **Flood Awareness and Education**

- Social initiatives educate communities on flood risks and preparedness measures.
- Builds resilience and improves response capabilities during flood emergencies.
- Example: NDMA conducts awareness campaigns on flood management.

- **Way Forward**

- **Integrated Approach to Flood Management**

- Implement a mix of structural and non-structural measures for effective flood control.
- Incorporate grey, blue, and green infrastructure solutions tailored to local conditions.

- **Water Resource Management**

- View floodwaters as a resource for future use, promoting water security initiatives.
- Adopt a river basin approach to flood management while prioritizing environmental conservation.

- **Enhanced Infrastructure**

- Invest in upgrading hydro-infrastructure to manage increasing climate variability and flood risks effectively.
- By adopting these comprehensive strategies, India can mitigate the impact of floods, safeguard lives and property, and promote sustainable development amidst climate challenges.

- **Source → The Hindu**

## 9 - Understanding Aphelion and Perihelion:

### Prelims Specific Topic

- What exactly are Aphelion and Perihelion?
- Aphelion: Occurs annually around July 4th, marking the point in Earth's elliptical orbit where it is farthest from the Sun.
- Distance from Earth to the Sun: Approximately 152.5 million kilometers.
- Perihelion: Happens around January 3rd each year, representing the moment when Earth is closest to the Sun.
- Distance from Earth to the Sun: Approximately 147.5 million kilometers.
- **Understanding the significance of Aphelion and Perihelion**
- The subtle yet crucial distance difference between Aphelion and Perihelion, approximately 5 million kilometers, plays a pivotal role in shaping Earth's climate and seasonal variations.
- **Kepler's Second Law and the Speed Differential**
- Johannes Kepler's Second Law of planetary motion elucidates the varying orbital speeds of Earth:
- Perihelion: Earth moves fastest in its orbit around the Sun.
- Aphelion: Earth moves slowest in its orbital path.
- **Implications for Earth's Seasons**
- Seasonal Influence: Contrary to popular belief, seasonal changes on Earth are primarily governed by the tilt of its axis. However, the slight variations in solar radiation due to Aphelion and Perihelion contribute to nuanced climate patterns globally.
- **Conclusion and Way Forward**
- Understanding Aphelion and Perihelion is crucial for a comprehensive grasp of Earth's orbital mechanics and its impact on climate and seasons. Aspirants preparing for UPSC examinations should delve into these astronomical principles, as they not only enrich scientific understanding but also highlight the interconnectedness of celestial movements with terrestrial phenomena. Further exploration into these concepts not only aids in academic pursuits but also fosters a deeper appreciation for the dynamic equilibrium of our solar system.



- *Source* → *The Hindu*

## **10 – Balance of Payment:**

### **Prelims Specific Topic**

- **Features of Balance of Payments (BoP)**

- **Comprehensive Coverage:** Encompasses transactions by individuals, corporations, and governments.
- **Ideal Equilibrium:** Theoretically aims for a zero balance, where inflows equal outflows, though practical disparities are common.
- **Surplus and Deficit Identification:** Highlights whether a country has a surplus (positive balance) or deficit (negative balance) in its international transactions.

- **Calculation and Components**

- **Current Account:** Includes trade in goods and services, income, and current transfers.
- **Financial and Capital Accounts:** Record financial investments and capital transfers.
- **Overall Balance:** Ideally zero but rarely achieved in practice, providing insights into economic strengths and weaknesses.

- **Understanding Balance of Payments Deficit**

- **Definition:** Occurs when a country imports more goods, services, and capital than it exports.
- **Consequences:** Can be managed by tapping into foreign exchange reserves or seeking external financial assistance.

- **Understanding Balance of Payments Surplus**

- **Definition:** Occurs when a country exports more goods, services, and capital than it imports.
- **Benefits:** Provides capital for domestic investment and strengthens international financial standing.

- **Purposes and Significance of BoP Calculation**

- **Economic Indicator:** Reveals a country's economic standing and fiscal health.
- **Currency Value Implications:** Affects currency valuation, influencing economic policies.
- **Policy Decisions:** Guides governments in formulating trade and financial policies.

- Analytical Tool: Provides crucial data for analyzing economic relationships and trends.
- **Context and Importance in Current Affairs**
- In the current global economic landscape, the Balance of Payments assumes greater significance as countries navigate complex trade dynamics and financial challenges. Understanding and interpreting the BoP data allows policymakers and economists to make informed decisions that impact national economies and international relations.
- **Conclusion and Way Forward**
- In conclusion, a comprehensive grasp of the Balance of Payments is indispensable for anyone involved in economic analysis and policymaking. As countries continue to engage in intricate global trade networks, the BoP serves as a vital compass, guiding nations towards sustainable economic growth and stability. Moving forward, continuous monitoring and accurate interpretation of BoP data will remain crucial in shaping effective economic strategies and fostering international cooperation.
- *Source → The Hindu*

## **11 - African Swine Fever (ASF) and Classical Swine Fever (CSF):**

### **Prelims Specific Topic**

- **About ASF:**
- Highly contagious and fatal disease affecting domestic and wild pigs.
- Symptoms include high fever, depression, anorexia, hemorrhages, vomiting, and diarrhea.
- Originating in Africa in the 1920s, ASF has spread to multiple countries in Africa, Asia, and Europe since 2007.
- Mortality rate is extremely high, ranging from 95% to 100%.
- Only spreads among animals and does not affect humans.
- Listed in the World Organisation for Animal Health (OIE)'s Terrestrial Animal Health Code.
- **Clinical Signs:**
- Acute form characterized by high fever, loss of appetite, and hemorrhagic symptoms.
- Other signs may include vomiting, diarrhea (sometimes bloody), and respiratory distress.

- **Transmission:**

- Direct contact with infected pigs, their body fluids, or feces.
- Indirect transmission through contaminated equipment or personnel.
- Consumption of infected pig meat or products.
- Biological vectors such as ticks can also contribute to transmission.

- **Classical Swine Fever (CSF)**

- **About CSF:**

- Also known as Hog Cholera, caused by a Pestivirus closely related to viruses causing diseases in cattle and sheep.
- Mortality rate reaches 100%, making it economically damaging globally.

- **Recent Developments:**

- The Indian Council of Agricultural Research developed a Cell Culture CSF Vaccine, inducing protective immunity within 14 days of vaccination for up to 18 months.

- **Conclusion and Way Forward**

- The outbreaks of ASF and CSF underscore the critical need for robust biosecurity measures and effective vaccines in the swine industry. As these diseases continue to threaten global pig populations, advancements in research and vaccine development are pivotal. Governments and stakeholders must collaborate closely to implement stringent disease control strategies and ensure the sustainability of the swine sector. By prioritizing preventive measures and investing in research, the global community can mitigate the impact of these devastating diseases on animal health and agricultural economies.

- **Source** → *The Hindu*