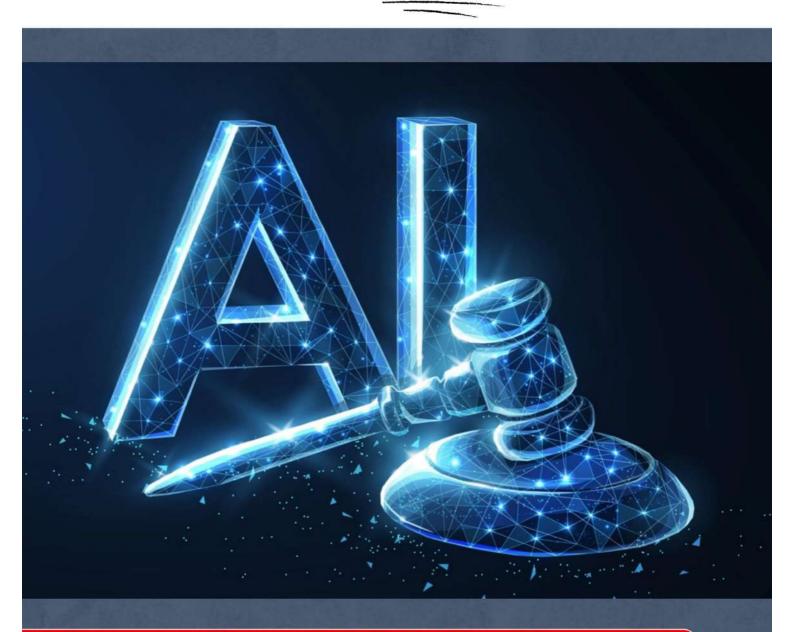
OFFICERS' PULSE



November 2024 (In Depth)

CURRENT AFFAIRS MONTHLY

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

Foreword

Officers Pulse-In Depth provides detailed analyses of significant articles from a variety of sources including The Hindu, Indian Express, Business Standard, Down To Earth, Yojana, Kurukshetra, and others. These insights are extremely valuable for UPSC CSE Mains preparation. To ensure comprehensive preparation for both Prelims & Mains, we recommend studying Officers Pulse-In Depth along with Officers Pulse-Digest.

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1) INDIA-IRAN RELATIONS

(GS-II: Bilateral, Regional and Global Groupings and Agreements involving India and/or affecting India's interests)

Background

- India and Iran share a millennia-long history of interactions starting before the times of Alexander, the great.
- India and Iran signed **a friendship treaty** in 1950.
- The **Tehran Declaration in 2001** and the **New Delhi Declaration in 2003** deepened the India-Iran cooperation. The two documents identified areas of cooperation and **set the strategic vision for the India-Iran partnership.**

Significance of relations with Iran

- Energy Security: Iran possesses vast reserves of oil and gas, which can be useful for India's growing energy needs. Before U.S. sanctions in 2019, Iran supplied nearly 12% of India's crude oil imports.
 - Projects like the potential Iran-Oman-India undersea gas pipeline could diversify India's energy sources and reduce dependency on volatile regions.
- Strategic Connectivity: Chabahar Port is vital for India's access to Central Asia and Afghanistan, bypassing Pakistan. It also enhances regional trade through the International North-South Transport Corridor (INSTC).
 - Chabahar facilitates India's humanitarian and **developmental assistance to Afghanistan,** particularly during crises.
- Gateway to West Asia and Central Asia: Iran serves as a bridge for India's broader engagement in West Asia and Central Asia, providing opportunities for trade, energy, and political influence.
- **Diplomatic Mediation:** India's ability to balance ties with adversarial powers like Iran and Israel positions it as a possible mediator in regional conflicts, such as the ongoing Gaza crisis.
- **Shared Security Concerns:** Both nations face challenges from terrorism, particularly emanating from Pakistan. Collaborative counterterrorism efforts can enhance regional stability.
- **Multilateral Engagement:** Iran's inclusion in forums like the Shanghai Cooperation Organization (SCO) and BRICS, supported by India, enhances India's role in shaping global and regional power dynamics.

Challenges in the relations

- **U.S. Sanctions:** U.S. sanctions on Iran severely limit India's ability to import Iranian oil and invest in energy and infrastructure projects.
 - o India-Iran bilateral trade came down to **USD 2.33 billion during the FY 2022-23** from a high of **USD 17 billion in 2018-19.** This is a fall of 86.29 per cent in the last four years in the wake of US sanctions on Tehran.
 - Also, India has to balance its strategic relations with the U.S. and its desire to engage with Iran, which can constrain bilateral cooperation.
- **Conflict in West Asia:** Iran's involvement in regional conflicts, including the Gaza crisis and its **strained ties with Gulf Cooperation Council (GCC) nations and Israel**, creates problems for India's West Asia strategy. This is due to the fact that India shares close ties with Israel and the GCC countries.
 - Tensions in the Persian Gulf and Strait of Hormuz threaten the security of trade and energy routes critical for India.

- **Religious and Political Sensitivities:** Comments by Iranian religious leaders on issues like the state of Indian Muslims or Kashmir, which are internal issues of India, strain bilateral ties.
- **Economic and Infrastructure Hurdles:** Progress on projects like the Chabahar port and the Chabahar-Zahedan railway has been slow, often hindered by bureaucratic, financial, and logistical issues.

Way Forward

- **Maintain Strategic Autonomy:** India should continue engaging with Iran independently while maintaining strong ties with the U.S., Israel, and Gulf nations.
- India should expand Security and Defense Collaboration with Iran to get and improve new systems like armed drone systems which are being supplied by Iran to countries like Russia
- India can also develop intelligence-sharing mechanisms and conduct joint exercises to address shared security challenges, especially concerning threats from Pakistan.
- Developing smooth and a working partnership with Iran gives more benefits to India in its path to development.

UPSC PYQ:

How have the US sanctions against Iran affected India's bilateral relations with Iran? (2012)

2) CHALLENGES BEFORE INDIAN CITIES

(GS- I: Urbanization, their problems and their remedies)

Background

- The world's urban population has reached an estimated 4.7 billion, or 57.5% of the world's total population, with projections to double by 2050.
- October 31 is observed every year as World Cities Day. The theme for this year's World Cities Day is 'Youth Climate Changemakers: Catalysing Local Action for Urban Sustainability'.
- World Bank estimates suggest around 40% of India's population live in urban areas, in around 9,000 statutory and census towns.
- Cities in India occupy just 3% of the nation's land, but their contribution to gross domestic product (GDP) is a massive 60%.
- Such is the importance of urban areas to the growth of India.

Challenges faced by Indian cities

- **Inadequate Spatial Planning**: Urban planning in India is mostly based on outdated frameworks which does not accommodate the rapid population growth and urbanization trends.
 - This has led to **overcrowding, in peri-urban areas,** where displaced workers and migrants settle in poorly planned neighborhoods.
- **Housing Shortages**: Around 40% of India's urban population lives in slums without essential services such as water, sanitation, and secure housing.
- Climate Change Impacts: Indian cities face extreme climate-related challenges, including
 urban flooding during heavy rains, heat island effects from unregulated urban sprawl,
 and high levels of pollution.
- **Massive Migration**: Economic distress based migration, both from rural to urban areas and between urban centers places put pressure on already stretched infrastructure.

- **Inequality and Social Segregation**: The urban landscape is increasingly marked by stark disparities. While exclusive developments cater to the wealthy, millions of urban poor live in substandard conditions, reflecting a widening gap in access to resources and opportunities.
- **Governance Limitations**: Despite constitutional amendments (74th Constitutional Amendment), most cities are managed by entities other than local bodies. Urban planning and decision-making are often outsourced to **parastatal and private organizations**, leaving elected representatives with limited control and reducing accountability to the local population.
- **Limited Financial Resources**: Urban local bodies receive a mere 0.5% of the GDP through intergovernmental transfers, severely restricting their ability to invest in critical infrastructure and services. This lack of funding hampers development initiatives and makes them dependent on the State government.

Way Forward

- **Updating Urban Planning Frameworks**: Development of dynamic spatial and temporal plans to accommodate population growth and urbanization trends.
 - Priority should be given for inclusive planning that addresses the needs of all socioeconomic groups, including affordable housing and basic amenities.
- Strengthen Governance and Local Autonomy: Implementation of the 74th Constitutional Amendment by transferring urban governance functions to elected representatives.
 - Enhance accountability by involving local communities in decision-making processes and urban development initiatives.
- Urban local bodies should be empowered to raise resources and develop infrastructure for the development of urban areas.

UPSC PYQ:

Discuss the various social problems which originated out of the speedy process of urbanization in India. (2013)

3) GREEN ECONOMY

(GS-III: Indian Economy and issues relating to Planning, Mobilization of Resources, Growth, Development and Employment)

Definition

- A green economy is defined as **low carbon**, **resource efficient and socially inclusive**.
- In a green economy, growth in employment and income are driven by public and private investment into such economic activities, infrastructure and assets that allow reduced carbon emissions and pollution, enhanced energy and resource efficiency, and **prevention** of the loss of biodiversity and ecosystem services.

Fundamental Shifts Required for Green Economy in India

- **Decentralised Energy Systems:** India should encourage the adoption of distributed renewable energy (DRE) systems like rooftop solar and develop community-based models to make clean energy affordable for lower-income groups.
- **Operational Expenditure Models:** India should transition from capital-intensive approaches to operational expenditure models, such as pay-as-you-go services for solar power, district cooling, and sustainable mobility.

- **Climate-Resilient Infrastructure:** India should prioritize investments in climate-proofing infrastructure and businesses, ensuring granular risk assessments and insurance to mitigate economic impacts of climate change.
- **Integrate into Global Supply Chains:** India should leverage its strengths to integrate into global clean energy supply chains, such as solar PV and green hydrogen, while collaborating on international rules-based energy systems.
- **Decarbonisation with Digitalisation:** India should invest in digital technologies like Artificial Intelligence, smart appliances, and smart meters to enhance energy efficiency and integrate renewables into power grids.
- **Circular Economy:** India should establish systems for waste management and recycling in renewable energy, ensuring critical mineral security and promoting sustainability in sectors like water and agriculture.
- Finance End-Use Consumers: India should enable financial solutions to help consumers
 adopt clean energy technologies, such as electric vehicles, rooftop solar panels, and energy
 efficient materials.

Conclusion

- The path forward towards the green economy is not merely about transitioning from one energy source to another but it is a shift and an opportunity to redefine India's relationship with energy, economics, and the environment.
- This transition should put people at the centre of policies.

4) GOVAI IN INDIA

(GS-II: Important Aspects of Governance, Transparency and Accountability, E-governance-applications, models, successes, limitations, and potential; Citizens Charters, Transparency & Accountability and institutional and other measures)

Definition

- GovAI refers to a novel concept of applying artificial intelligence (AI) in governance to enhance the efficiency, transparency, and effectiveness of government operations, decision-making, and service delivery.
- It aims to use AI-driven technologies, such as machine learning models, natural language processing, and predictive analytics, to transform governance into a more responsive, datadriven, and inclusive process.

Significance of GovAI in India

- **Tool of Digital Transformation:** GovAI integrates with India's robust digital public infrastructure (DPI) to enhance service delivery across sectors like healthcare, education, agriculture, and public administration.
 - DPI refers to foundational digital systems that are accessible, secure, and interoperable, supporting essential public services. In India, Aadhar, Unified Payments Interface (UPI) are prominent DPIs.
- **Strengthening IndiaAI Ecosystem:** By creating AI models based on vast datasets generated from India's digitized platforms, GovAI promotes innovation within the startup ecosystem.
 - Startups and entrepreneurs can develop specialized AI products and platforms to address governance challenges, boosting the IndiaAI initiative.
- Efficient Use of Resources: AI-driven analytics and decision-making enable better allocation of government resources, reducing waste and ensuring maximum impact from public spending.

- GovAI aligns with political priorities to optimize governance and achieve "maximum governance, minimum government."
- **Utilising India's Data Repository:** India, with one of the largest data repositories globally, can use this wealth of information to train AI models for predictive analysis, decision-making, and enhanced citizen services.
 - Programs like the **IndiaDatasets Programme** provide special datasets for building high-quality AI models while ensuring data protection and privacy.
- **Improving Public Service Delivery:** GovAI enables targeted delivery of government schemes, improves policy design, and measures performance more accurately, enhancing citizens' trust and satisfaction.
- Addressing National Challenges: All applications in governance can tackle critical areas such as:
 - **Healthcare:** Disease prediction, medicine discovery, and improved public health strategies.
 - **Agriculture:** Enhancing productivity and sustainability through AI-driven insights in farming and allied sectors.
 - **Disaster Management:** Predicting and mitigating natural disasters and climate impacts.
 - **Security:** Strengthening national security, cybersecurity, and law enforcement.

Conclusion

- With the synergy of DPI and AI, GovAI transforms governance from being reactive to proactive, delivering sharper, more efficient, and targeted outcomes.
- It aims to establish a structural partnership between the government, private sector, and innovation ecosystem to build sustainable AI models and platforms.
- India's success in using GovAI and restructuring the governance process should ensure that AI does not remain a preserve of a few companies or countries, but is more inclusive and accessible by all countries.

5) BULLDOZER JUSTICE

(GS-II: Structure, Organization and Functioning of the Executive and the Judiciary—Ministries and Departments of the Government; Pressure Groups and Formal/Informal Associations and their Role in the Polity)

Definition

- Bulldozer Justice refers to the **practice of demolishing properties of individuals accused of criminal activities without following due legal** processes.
- These activities have been justified under the pretext of removing unauthorized constructions or encroachments.
- It has increasingly been used as a form of **extra-judicial punishment**, disproportionately targeting marginalized communities and alleged perpetrators, sometimes without proof of their guilt.

Issues with Bulldozer Justice

- **Violation of Due Process:** Properties are demolished without adhering to legal procedures, such as providing prior notice, conducting hearings, or obtaining judicial approval. This undermines the fundamental right to a fair trial and the principle of natural justice.
- **Collective Punishment:** Demolitions often penalize innocent family members, such as spouses, children, and elderly parents, who have no connection to the alleged crime. This violates their right to shelter under Article 21 of the Constitution.

- **Targeted Discrimination:** Bulldozer justice disproportionately affects marginalized communities, particularly religious and ethnic minorities. Selective targeting of properties based on community affiliation fosters bias and communal tensions, further eroding social harmony.
- **Erosion of Rule of Law:** The practice allows the executive to act as judge, jury, and executioner, bypassing the judiciary. This undermines public trust in democratic institutions and promotes a culture of arbitrariness and impunity, leading to lawlessness.

Recent Judgement by the Supreme Court

- The Supreme Court of India recently **condemned this practice**, **emphasizing that such** actions violate fundamental principles of natural justice and the separation of powers.
- It underscored that the executive cannot usurp the judiciary's role by punishing individuals without trial.
- Arbitrary demolitions not only penalize the accused but also harm innocent family members, undermining public trust and transparency in governance.

Guidelines for Demolition by the Court

- **Prior Notice:** A minimum of 15 days' notice must be given to the property owner or occupier before any demolition. The notice must detail:
 - The nature of unauthorized construction.
 - Reasons for demolition.
 - A date for a personal hearing.
- **Personal Hearing:** A hearing must be conducted to allow the owner to present their case. The minutes of the hearing should also be recorded.
 - The final demolition order must include:
 - The owner's arguments.
 - Reasons for rejecting these arguments.
 - Justifications for why demolition is the only viable option.
- **Final Order and Time to Appeal:** After serving the final order, authorities must wait an additional 15 days before proceeding with demolition. This period allows the owner to:
 - Remove the construction voluntarily.
 - Challenge the order in court and seek a stay.
- **Transparency and Accountability:** The demolition process must be:
 - Thoroughly videographed.
 - Documented through a detailed inspection report before the demolition and a demolition report afterward.
 - Reports should list the names of officials involved and be made publicly accessible on a digital portal.
- Accountability of Officials: Officials responsible for illegal demolitions will face:
 - Disciplinary action.
 - Contempt charges.
 - Monetary penalties, with compensation for wrongful demolitions recovered from them personally.
- **Exemptions:** The guidelines do not apply to:
 - Unauthorized structures on public lands (e.g., roads, water bodies).
 - Demolitions ordered by courts.
- **Equal Treatment:** Selective targeting of specific properties or communities raises mala fide intent. If similar structures in the same vicinity remain untouched, it is presumed the demolition is punitive rather than for enforcing municipal laws.

Conclusion

- These Guidelines, thus, represent a sincere and committed effort by the Court to check the menace of "bulldozer justice".
- It now remains to be seen how effective they will be going forward, and much of this will depend on how other Benches will implement these Guidelines, when fresh cases come to the Court.

6) PRIVATE SPACE SECTOR IN INDIA

(GS-III: Awareness in the fields of IT, Space, Computers, Robotics, Nano-technology, Biotechnology and issues relating to Intellectual Property Rights)

Background

- From **Indian Space Research Organisation (ISRO)** founding in 1969, several state-owned firms like Hindustan Aeronautics Limited (HAL) and Antrix Corporation, and private companies like Godrej Aerospace, Ananth Technologies, and Larsen & Toubro have helped it manufacture rockets, satellites, and other space components.
- However, the boost to the Indian private space sector came in 2020 when the Indian National Space Promotion and Authorisation Centre (IN-SPACe) was established to promote, authorise and supervise various space activities of non-governmental entities (NGEs).
- Start-ups began to take root in India in the early 2010s with the first space start-up, **Dhruva Space Private Limited**, being established in 2012.
- Soon after, several other space start-ups cropped up in India: Bellatrix Aerospace (2015), Aadyah Aerospace (2016), AgniKul Cosmos (2017), Manastu Space (2017), Skyroot Aerospace (2018), Satellize (2018), and Pixxel (2019), to name a few.
- As of May 2024, over 200 space start-ups are registered in the country.
- In November 2024, the Union Cabinet approved a Rs. 1000 crore venture capital fund dedicated to the space sector further setting the stage for development of private space sector.

Potential Advantages from Private space sector

- **Economic Growth and Leadership:** India's private space sector has the potential to position the country as a global leader in the space economy, with the market projected to grow to \$44 billion by 2033.
- **Social Benefits:** The development of advanced satellite technologies will provide solutions for pressing social problems.
 - Improved access to education, telemedicine, and economic opportunities via satellite communications.
 - **Sustainable urban planning** and efficient natural resource management supported by Earth observation technologies.
- **Defense and Security:** New satellite technologies will bolster national security through improved intelligence, surveillance, and reconnaissance capabilities, enabling swift and effective responses to emerging threats.
- Revolutionizing Supply Chains and Logistics: Positioning, Navigation, and Timing (PNT) technologies will enhance vehicle tracking, route optimization, and timely deliveries, transforming logistics efficiency across sectors.
- **Bridging the Digital Divide:** By providing satellite-based internet connectivity, the sector will bring digital access to remote and underserved regions, fostering inclusivity and bridging the digital divide.

- **Indigenous Manufacturing:** The initiative will promote local manufacturing capabilities, reducing reliance on foreign technologies and fostering self-reliance in line with the Atma Nirbhar Bharat initiative.
- **Job Creation:** The space sector will create numerous direct jobs in engineering, software development, and manufacturing, as well as thousands of indirect jobs through supporting industries
- Improving Disaster Management: Satellite-enabled early warning systems and real-time
 data will improve disaster response capabilities, saving lives and mitigating the impact of
 natural disasters.

Way Forward

- Globally, governments recognise the strategic importance of space technologies. Countries like the UK, Japan, and Saudi Arabia have established space-focused venture capital funds to accelerate the growth of private sector space ventures.
- India's Rs 1,000 crore VC fund is a bold step in this direction.
- The space economy is ready for significant growth, if technological advancements and financial competitiveness continue to improve.
- However, challenges such as **space debris, regulatory constraints, and competition from terrestrial alternatives** could cap growth to some extent.
- To realise the full potential of the space economy, collaboration between public and private sectors is essential.
- Stakeholders must work together to standardise and harmonise technologies, improve accessibility and usability, and raise awareness and education about the benefits of space technologies.

7) STATE OF INDIA'S PRISONS

(GS-II: Structure, Organization and Functioning of the Executive and the Judiciary—Ministries and Departments of the Government; Pressure Groups and Formal/Informal Associations and their Role in the Polity)

Background

- Indian prisons house around 5.73 lakh people, far exceeding their capacity of 4.36 lakh, with many operating at over 100% or even 200% capacity (National Crime Records Bureau, 2022; Maharashtra Prison Department, 2024).
- Prisons in India have been plagued by violence, abuse, and neglect. In the early 1980s, the
 Mulla Committee report on prison reforms was released, recommending extensive
 measures to improve prison conditions and administration.
- In 1996, a Bengaluru's Central Jail inmate wrote to the Chief Justice of India about deplorable prison conditions.
- Consequently, Rama Murthy vs State of Karnataka was a landmark case where the Supreme Court of India directed the government to address key issues such as overcrowding, trial delays, torture, and neglect in prisons, in line with the Mulla Committee recommendations.
- Again, nearly three decades later, no substantial progress has been made, evident in the current state of prisons.

Issues in India's Prisons

• Lack of Basic Amenities: Many prisoners, especially those from weaker socio-economic backgrounds, could not access basic necessities such as medication for illnesses, pens, paper, books, and television.

- The plight of disabled people is even worse as most of the prisons do not have any disabled friendly features.
- **Overcrowding:** Indian prisons suffer from severe overcrowding, with national average occupancy rates of 131.4%(Prison Statistics India 2022 by National Crime Records Bureau). Some central jails in Delhi have occupancy of more than 300%.
 - 75.8% of all the inmates are undertrials.
 - This leads to a host of problems including limited access to facilities, increased stress on resources, and compromised living conditions.
- **Unhygienic Conditions:** Overcrowding exacerbates issues of hygiene, with prisoners living in unclean environments that can lead to health problems.
- **Custodial torture** is one another problem faced by the prisoners. This had even led to the death of many prisoners.
- **Unequal Access to Legal Rights:** Many prisoners, particularly those who cannot afford good legal representation, struggle to secure permissions from the court for basic necessities. This results in a disparity in access to rights based on socio-economic status.
- **Lack of Rehabilitation Services:** Prisons often fail to provide adequate rehabilitation and reformation services to inmates, which are essential for their successful reintegration into society as law-abiding citizens.
- **Normalising Inhumane Treatment:** There is a societal tendency to normalise inhumane and degrading treatment of prisoners, perpetuating a cycle of suffering rather than viewing prisons as institutions for rehabilitation and reform.

Government of India's Measures to reform Prisons

- Model Prisons Act 2023: Prison is a State subject and so the Union Government has come
 up with this model to act as a framework for prison management. The salient features of
 this act are,
 - Provision for security assessment and segregation of prisoners, individual sentence planning,
 - Grievance redressal, prison development board, attitudinal change towards prisoners.
 - Provision of separate accommodation for women prisoners, transgender, etc.
 - Provision for use of technology in prison administration with a view to bring transparency in prison administration.
 - Provision for video conferencing with courts, scientific and technological interventions in prisons, etc.
 - Provision of punishment for prisoners and jail staff for use of prohibited items like mobile phones etc. in jails.
 - Provision regarding establishment and management of high security jail, open jail (open and semi open), etc.
 - Provision for protecting the society from the criminal activities of hardened criminals and habitual offenders, etc.
 - Provision for legal aid to prisoners, provision of parole, furlough and premature release etc. to incentivise good conduct.
 - Focus on vocational training and skill development of prisoners and their reintegration into the society.
- **Legal aid for Undertrials:** The State Legal Services Authorities have established Legal Service Clinics in jails, which provide free legal assistance to persons in need.
 - These clinics have been established to ensure that no prisoner remains unrepresented and legal aid and advice is provided to them.

- The National Legal Services Authority had prepared a Standard Operating Procedure (SOP) for Under-Trial Review Committees, which has been circulated by MHA to all States/Union Territories for making best use of the same and providing relief to prisoners.
- National Legal Services Authority also holds awareness generation camps in jails to generate awareness about availability of free legal aid, plea bargaining, Lok Adalats and legal rights of inmates, including their right to bail, etc.

Conclusion

- Many in society believe that cruelty to prisoners is deserved, fuelling a troubling hate that undermines the political will for prison reforms.
- Regardless of political will, all prisoners, including those with disabilities, are the responsibility of the government.
- Given that 'prisons' is a State subject, State governments bear the explicit responsibility to ensure that the rights of prisoners with disabilities are upheld.
- It is critical that the state authorities reevaluate and reorient their attitudes toward prisoners with disabilities.

8) A CASE FOR ENVIRONMENT HEALTH REGULATORY AGENCY

(GS-III: Conservation, Environmental Pollution and Degradation, Environmental Impact Assessment)

Definition

- An **Environment Health Regulatory Agency (EHRA)** is envisaged to be a centralized, independent regulatory body designed to integrate environmental and health governance.
- It aims to address the linkage pollution, public health, and economic growth by collecting and analyzing data, formulating evidence-based policies, and enforcing regulations.
- The EHRA would serve as **a unified platform** for tracking, mitigating, and preventing the health impacts of environmental pollutants while aligning national objectives with global sustainability and climate commitments.

Need for an EHRA in India

- Integrated Environmental and Health Governance: Current governance is fragmented across the Central Pollution Control Board (CPCB), the Ministry of Environment, Forest and Climate Change (MoEFCC), and the Ministry of Health and Family Welfare (MoHFW).
 - Lack of coordination leads to gaps in monitoring and mitigating the health impacts of environmental pollution.
- **Rising Health Burdens from Pollution:** Exposure to pollutants (e.g., PM2.5, water contamination, soil degradation) is linked to respiratory, cardiovascular, metabolic diseases, and developmental disorders.
 - Vulnerable populations, such as children and the elderly, are disproportionately affected.
- Reliable Data and Evidence-Based Policy Framework: Environmental health policies in India lack a centralized body to consolidate research and translate it into actionable regulations.
 - An EHRA could commission studies specific to India's unique challenges, such as vector-borne diseases, chemical exposures, and the health impacts of climate change.

- **Economic and Environmental Alignment:** Environmental regulation does not hinder economic growth but promotes innovation and resilience through sustainable practices, as demonstrated by global examples like the U.S. EPA.
 - Policies encouraging cleaner technologies and energy transitions can create green jobs and long-term financial stability.
- Addressing Regional Disparities: Environmental health challenges vary significantly across India's regions.
 - An EHRA can develop **tailored interventions and collaborate with state** and municipal governments to address localized issues.
- **Empowering Public and Community Participation:** Public awareness and advocacy for cleaner living conditions are crucial for accountability.
 - An EHRA can support citizen initiatives and amplify the role of NGOs and local bodies in driving environmental health improvements.
- **Global Commitments and Standards:** India's obligations under the Paris Agreement and Sustainable Development Goals require a robust framework for environmental and public health governance.
 - An EHRA would align India's policies with international best practices and facilitate cross-border collaborations.
- Building a Comprehensive Monitoring and Accountability Mechanism: Elaborate platforms for tracking health outcomes can provide timely responses to emerging environmental health crises.
 - Such a mechanism would ensure cumulative accountability among stakeholders, including industries, local governments, and international bodies.

Way Forward

- As a nation, India continues to experience rapid economic growth, so the interdependencies between climate, environment, health, and the economy are undeniable but capacities to address these issues holistically are limited.
- It is time for India to establish an environmental health regulatory agency (EHRA), which could lead to more comprehensive and cohesive environmental governance that focuses simultaneously on pollution control and health risk mitigation.

9) AIR POLLUTION IN DELHI

(GS-III: Conservation, Environmental Pollution and Degradation, Environmental Impact Assessment)

Background

- The Air Quality Index (AQI) trends from 2017 to 2023 show that Delhi experiences **only two "healthy air" days per year on average.**
- Over **half the year, the air remains unfit for breathing.** Even during the 2020 lockdown, when activities were curtailed, the improvement in air quality was only marginal.
- Current AQI levels in parts of Delhi exceed 500 micrograms per cubic meter, which is over 30 times the World Health Organization's permissible limit of 15 micrograms per cubic meter for 24 hours.
- In 2019, air pollution was responsible for 1.67 million deaths in India, with ambient particulate matter (PM) pollution being a major contributor in Delhi.
 - Air quality index (AQI), according to the Central Pollution Control Board (CPCB), is a measure of the concentration of eight pollutants particulate matter (PM)10, PM2.5, nitrogen dioxide (NO2), sulphur dioxide (SO2), carbon monoxide (CO), ozone (O3), ammonia (NH3), and lead (Pb) in the air at a monitoring location.

Factors Causing Pollution in Delhi during Winters

- **Local Emissions:** Vehicles are the largest contributors, accounting for 58% of PM2.5 levels. This includes 34% from exhaust emissions and 24% from wear and tear of tyres and brakes.
 - Industrial activities and emissions from thermal power plants also play a significant role in deteriorating air quality.
 - Open construction sites and dust further add up to the pollution levels.
- **Meteorological Factors: Cold winter air traps pollutants** close to the ground, leading to higher concentrations of pollutants.
 - Low wind speeds and a lack of rainfall during winters prevent the dispersal of pollutants.
- **Stubble Burning:** During peak winter months, stubble burning in the adjacent states of Punjab and Haryana, contributes 15–35% of PM2.5 levels.
 - However, even in a hypothetical scenario with zero stubble burning, Delhi's AQI would not drop below "very poor."

Impacts of High Air Pollution

- **Health Effects:** Air pollution has led to a rise in **respirat**ory diseases, such as asthma and bronchitis. It is also associated with **non-respiratory ailments**, including strokes, cardiovascular issues, certain cancers, and impaired fetal development.
- **Class Disparity in Exposure:** Poor children in Delhi are disproportionately affected compared to their rich sections of the society. For example, consistent exposure to high levels of PM2.5 could shorten the life expectancy of poor children by up to five years.
- **Economic and Generational Costs:** Increased healthcare costs and reduced productivity are significant economic burdens. Prolonged exposure to toxic air has generational health implications that could reduce the quality of life over time.

Way Forward

- **Transform Urban Mobility:** There needs to be a significant shift from private vehicles to **public transportation** powered by cleaner energy sources.
 - Authorities should improve **last-mile connectivity** and promote non-motorized transport options, such as cycling and walking.
- **Regulate Industrial and Vehicular Emissions:** Industrial emissions and pollutants from thermal power plants must be strictly regulated.
 - A **vehicle scrappage policy** should be implemented to phase out older, more polluting vehicles.
- **Expand Green Infrastructure:** Urban planning should prioritize the creation and expansion of green spaces to act as natural air filters.
 - Environmentally friendly construction practices should be mandated to reduce dust and emissions.
- **Adoption of Best practices:** The government should invest heavily in air pollution control measures, following examples like Beijing, which significantly reduced its pollution levels through multi-pronged strategies and increased financial investments.
- **Inter-state collaboration** is essential to address the issue of stubble burning by providing incentives for sustainable alternatives.
- **Public awareness campaigns** should be launched to educate citizens about pollution and encourage their participation in mitigation efforts.

UPSC PYQ:

"The most significant achievement of modern law in India is the constitutionalization of environmental problems by the Supreme Court." Discuss this statement with the help of relevant case laws. (2022)

10) ANTIMICROBIAL RESISTANCE

(GS-II: Issues Relating to Development and Management of Social Sector/Services relating to Health, Education, Human Resources)

Definition

• Antimicrobial Resistance (AMR) occurs when microbes, including bacteria, viruses, fungi, and parasites, evolve to become resistant to the drugs designed to kill them, rendering these medications ineffective.

Causes for AMR

- Irrational Use of Drugs: Overuse or misuse of antibiotics in humans, animals, and agriculture. Over-the-counter availability of antibiotics without prescriptions helps this overuse of antibiotics.
- **Incomplete Treatment:** Patients not completing prescribed antibiotic courses and stopping antibiotics after the subsidence of symptoms.
- **Environmental Contamination:** Effluents from healthcare facilities and pharmaceutical manufacturing units contaminating water sources can lead to AMR.
- Lack of Infection Control: Poor sanitation, hygiene, and infection control measures such as disease surveillance in healthcare facilities and communities.

Dangers in AMR

- **Increased Mortality and Morbidity:** Infections caused by drug-resistant pathogens are harder and sometimes impossible to treat leading to death and long term disabilities.
- **Economic Burden:** Extended illness durations, higher healthcare costs, and loss of productivity leads to high economic burden and this may affect the weaker sections to a greater extent.
- Threat to Global Health: AMR is a global issue, not confined by borders, making it a significant public health threat.

Measures to address AMR

- A global public awareness campaign: It is crucial to educate our societies about the danger behind the overuse and misuse of antimicrobials, as patients still commonly demand them from doctors or buy them over-the-counter.
 - An efficient and well-delivered public campaign in the long-term could reduce the number of prescribed antimicrobials by 36%.
- Improve sanitation and prevent the spread of infection: Prevention is better than cure
 by improving healthcare systems and living standards we can markedly reduce the demand for antibiotics and therefore give less chance for new resistance strains to develop.
 - $\circ~$ It is estimated that improving sanitation in low-income countries would decrease the use of antibiotics to treat diarrhea by 60%.
- **Reduction in Agriculture:** Reduce unnecessary use of antimicrobials in agriculture and their dissemination into the environment
 - The vast majority of global antimicrobial consumption comes from agriculture and aquaculture.
 - The use of antibiotics solely for infection prevention and more importantly, growth promotion, should be considered dangerous and unnecessary.

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- Moreover, recent data suggest that 75-90% of antibiotics are excreted from animals unmetabolized and leak into the environment.
- **Improve global surveillance:** Three areas require better structure and information: antibiotic consumption among humans and animals, resistance rates for the available drugs and research knowledge on the molecular foundations of AMR.
- **Promote development and use of vaccines and alternatives:** With increasing vaccination, the number of infected people needing antibiotic treatment would reduce.
 - Although there are currently no licensed vaccines against the most urgent pathogens, there are promising clinical candidates coming up against Clostridium difficile and Pseudomonas aeruginosa.
 - However, greater investment in early stage research for development of new vaccines is recommended.
- **Quality Workforce:** Addressing AMR requires a qualified workforce to implement them. There is a shortage of key professional figures such as microbiologists, infectious disease specialists, infection control specialists, pharmacists, nurses, veterinarians and epidemiologists, for example. Therefore, countries need to invest in training and rewarding these specialists.
- A global innovation fund: Higher private and public investment in early-stage research in drug discovery is crucial for development of new treatments. However, it is less attractive for commercial funders because of substantial risks. Therefore, a global innovation fund for support of less commercially attractive research is needed.
- **Global coalition:** Putting AMR on the international political agenda and tackling it using **One Health principles** is important for impacting change. For example, actively engaging with the G20 or the United Nations could help to put AMR on the political agenda.

Conclusion

- So far, India has shown tremendous commitment to containing AMR. India was among the first few countries to launch a National Action Plan (NAP) on AMR in 2017.
- Now the need is to create a new NAP which addresses the current challenges and opportunities in addressing the problem of AMR.

11) BIODIVERSITY BEYOND NATIONAL JURISDICTION (BBNJ) AGREEMENT

(GS-III: Conservation, Environmental Pollution and Degradation, Environmental Impact Assessment)

Background

- The **BBNJ Agreement, or the 'High Seas Treaty',** is an international treaty under the **United Nations Convention on the Law of the Sea (UNCLOS)**.
 - 'High Seas' are sea areas beyond national jurisdiction and are global common oceans open to all for internationally lawful purposes such as navigation, overflight, laying submarine cables and pipelines, etc.
- It aims to address the growing concerns over the **long-term protection of marine biodiversity in the high seas**.
- It sets precise mechanisms for the sustainable use of marine biological diversity through international cooperation and coordination.
- Parties **cannot claim or exercise sovereign rights over marine resources derived from the high seas** and ensure fair and equitable sharing of benefits.
- It follows an inclusive, integrated, ecosystem-centric approach based on the precautionary
 principle and promotes using traditional knowledge and the best available scientific
 knowledge.

- It helps minimise impacts on the marine environment through area-based management tools and establishes rules for conducting environmental impact assessments.
- It would also contribute to achieving several SDGs, particularly **SDG14** (Life Below Water).
- The BBNJ Agreement was agreed upon in March 2023 and is open for signature for two years starting September 2023.
- It will be an international legally binding treaty after it enters force 120 days after the 60th ratification, acceptance, approval or accession.
- As of October 2024, 105 countries have signed this agreement and 15 countries have ratified it.
- India has signed the treaty in September 2024.

Issues in the Treaty

- **Limited Ratification**: Only 15 of 105 signatories have ratified the treaty, far from the required 60.
- **Geopolitical Rivalries**: Disputes in regions like the South China Sea complicate consensus on Marine Protected Areas (MPAs).
- **Marine Genetic Resources**: Few nations can under report information about marine genetic resources to keep the gains with them and not share with other countries. This could undermine equitable sharing goals.
- **Weak Enforcement Mechanisms**: The agreement does not have robust accountability and enforceability provisions. Low and middle-income nations may struggle without enforceable mechanisms for equitable partnerships.
- **Focus on High Seas**: The treaty leaves out damages in the Exclusive Economic Zones (EEZs) of the countries but these localized damages can impact international waters.
 - The 2021 X-Press Pearl disaster off Sri Lanka, which spilled hazardous chemicals into the Indian Ocean, is a stark reminder of how localised incidents can have global repercussions.
- Exclusion of Certain Activities: The agreement does not cover oil and gas exploration activities and does not mandate Environmental Impact Assessment for this activity. Oil and gas exploitation constitutes an important economic interest of countries and this is an important reason for keeping it out of this treaty.

Way Forward

- Integration of Coastal and High-Seas Governance: An unified framework can be created that links governance of Exclusive Economic Zones (EEZs) with high-seas regulations to address interconnected environmental impacts.
- Enhance Ratification and Consensus: Promote dialogue among nations to resolve geopolitical disputes and encourage widespread ratification by providing incentives, especially for nations in the Global South.
- **Strengthen Capacity Building and Support**: Wealthier nations should commit to providing financial aid, technology transfers, and technical expertise to help low and middle-income countries implement treaty provisions effectively.
- **Establish Robust Enforcement Mechanisms**: Develop clear accountability systems, including international oversight for environmental impact assessments and transparent sharing of marine genetic resource benefits, to ensure compliance and equity.
- The treaty's success ultimately depends on building a collective commitment among nations to safeguard the oceans as a shared global resource.

12) SUPREME COURT VERDICT ON RIGHT TO PROPERTY

(GS-II: Indian Constitution—Historical Underpinnings, Evolution, Features, Amendments, Significant Provisions and Basic Structure)

Background

- The recent nine-judge Constitution Bench judgment by the Supreme Court marks an important shift in the interpretation of **Article 39(b) of the Constitution**, concerning the ownership and control of material resources for the common good.
- The majority judgment clarified the extent to which private property can be considered a "material resource of the community" and overturned earlier wider interpretations of the term.

Constitutional Provisions

- **Directive Principles of State Policy (DPSP):** Part IV of the Constitution contains DPSPs aimed at achieving social and economic justice.
- **Article 39 (b):** The State shall, in particular, direct its policy towards securing– that the ownership and control of the material resources of the community are so distributed as best to sub serve the common good.
- **Article 39 (c):** The State shall, in particular, direct its policy towards securing– that the operation of the economic system does not result in the concentration of wealth and means of production to the common detriment.
- **Right to Property:** Initially, Articles 19(1)(f) and 31 guaranteed the right to property as a Fundamental Right.
- **Article 31C** was added through the **25th amendment in 1971**. It provided an exception that laws made to fulfil the principles under Articles 39(b) and (c) shall not be void on the ground that it violated Fundamental Rights including right to property.
- In the *Kesavananda Bharati case (1973)*, a 13-judge Bench of the Supreme Court upheld the validity of Article 31C but made it subject to judicial review.
 - It also said that property rights could not be arbitrarily overridden.
- Right to property was omitted from the Fundamental rights and then made a **constitutional right under Article 300A**, requiring any government acquisition to be for public purposes and accompanied by adequate compensation.

Earlier Judgments

- **State of Karnataka v. Ranganatha Reddy (1977):** Justice V.R. Krishna Iyer's interpretation of Article 39(b) extended the term "material resources" to include all national wealth, private or public, if it served material needs.
- This judgement formed the basis of judgements in cases like *Sanjeev Coke Manufacturing Co. v. Bharat Coking Coal Ltd. (1982); Mafatlal Industries Ltd. v. Union of India (1996).*

Current Judgement

- In *Property owners' association versus State of Maharashtra*, majority opinion (for seven judges including the CJI) held the interpretation of V.R. Krishna Iyer, that every privately-owned property could be used by the state as a 'material resource' to 'subserve the common good', as a rigid economic ideology that advocates greater governmental control over private resources.
- Therefore, it was rejected by the majority opinion which said that India has moved on from a socialistic model to a **market-based liberalised economic model**.
- It held that to qualify as a 'material resource of the community,' a resource must be 'material' and 'of the community.'

- Certain resources like **forests, ponds, spectrum, mines and minerals,** which have the potential to impact the welfare of the community, may fall within the scope of Article 39(b) even if they are privately held.
- However, not every private resource automatically qualifies just because it meets material needs.
- The term 'distribute' in Article 39(b) also carries a wide meaning that can include both government acquisition and redistribution to private players, as long as it serves the common good.

Way Forward

- The judgment is an acknowledgement that India had evolved **from socialism to a market-based economy** with a focus to reduce inequalities.
- The process to balance these two interests requires strengthening legislative frameworks to define material resources and regulate acquisitions. This is to be done with relevant judicial oversight to prevent misuse of acquisition powers.
- This would also require implementation of policies that value environmental sustainability and social equity, in providing a better quality of life not only to the present generations but also to the future generations.

13) SOCIAL SECURITY VITAL FOR DEVELOPMENT AND PROSPERITY

(GS-II: Welfare Schemes for Vulnerable Sections of the population by the Centre and States and the Performance of these Schemes; Mechanisms, Laws, Institutions and Bodies constituted for the Protection and Betterment of these Vulnerable Sections)

Context

- Article 22 of the Universal Declaration of Human Rights states that 'Everyone, as a
 member of society, has the right to social security and is entitled to realization of the
 economic, social and cultural rights indispensable for his dignity and the free
 development of his personality'
- According to the International Labour Organization (ILO), social protection is defined
 as a "set of policies and programmes designed to reduce and prevent poverty,
 vulnerability and social exclusion throughout the life cycle".
- Social protection as a whole comprises **nine main areas** which include child and family benefits, maternity protection, unemployment support, employment injury benefits, sickness benefits, health protection, old-age benefits, invalidity / disability benefits, and survivors' benefits.

Need for Universal Social Protection

- 71% of the world's population is not adequately protected, with over 750 million people living in abject poverty and utter insecurity.
- Only about 29% of the world's working population have effective access to comprehensive social protection.
- **World Social Protection Report 2024-26** of **ILO** points out that globally, most children (76.1 per cent) still have no effective social protection coverage, and a substantial gender gap persists.

Significance of Social Security

- **High return on investment:** The World Bank notes that for every dollar transferred to poor families, there is an estimated multiplier effect of \$2.49 in the local economy.
- **Poverty Reduction:** Social protection systems have resulted in sustained social and economic development of individuals.

- **Economic growth:** Social security helps in raising incomes which in turn increases consumption, savings and investment at the household level, and raises domestic demand at the macro level.
- Promotes human development: Cash transfers in social security schemes facilitate
 access to nutrition and education, thus resulting in better health outcomes, higher
 school enrolment rates, reduced school drop-out rates, and a decline in child labour.
- **Increases employability:** Help provided under various schemes increases productivity and employability by **enhancing human capital** and **productive assets**.
- social protection
- **Social cohesion and participation:** Social security ensures greater social cohesion and participation. It **promotes social inclusion** and dignity of vulnerable populations.
- **Provides stability:** Social security schemes **protect individuals and families** against the **losses** due to shocks, whether they be pandemics, natural disasters, or economic downturns.

Social Security in India

Social security is both a concept and a system, aimed at providing protection for individuals in need especially during circumstances that are often beyond an individual's control.

• Education:

- The Indian Constitution recognizes the **right to education** as a **fundamental right** under article 21A. The **Right to Education (RTE) Act** of 2009 provides free and compulsory education to children between the ages of 6 and 14.
- The Sarva Shiksha Abhiyan and the Samagra Shiksha scheme have been aligned with the recommendations of NEP 2020 to ensure that all children have access to quality education with an equitable and inclusive classroom environment.
- Under the **PM Poshan Scheme** free lunch is provided to every child in government and government-aided schools to **boost enrolment**, **reduce dropouts** while also **improving nutrition and health outcomes**.

Social Security with Right to Food:

- Human rights such as the right to food and social security are interrelated. Social
 protection schemes can play a key role in gradual realization of the right to adequate
 food for all.
- The National Food Security Act passed in 2013 made nutritional security a right. It entitles up to 75% of the rural population and 50% of the urban population to receive subsidized food grains through the Targeted Public Distribution System.
- **Pradhan Mantri Garib Kalyan Anna Yojana:** It was launched by the Indian Government as a response to COVID 19 pandemic to provide financial assistance to economically weaker sections of the society affected by the pandemic.
- **Antyodaya Anna Yojana (AAY):** It is aimed at ensuring food security for the most vulnerable 8.92 crore people of the society.
- Fortified rice: It has been started to provide essential vitamins and minerals to improve the nutritional security of the people.

• Health Insurance Cover:

- Ayushman Bharat Pradhan Mantri Jan Arogya Yojana: It has become the largest health assurance scheme in the world and offers comprehensive secondary and tertiary care hospitalisation benefits of up to Rs 5 lakh per family annually.
- The Central Government has approved a major expansion of the AB PM-JAY in 2024 and now all senior citizens aged 70 and above will receive health coverage, regardless of their income.
- Social Security with Right to Work:

- Right to work and employment and labour welfare are also important components of social security.
- Mahatma Gandhi National Rural Employment Guarantee Act: It is an important labour law and social security measure that aims to guarantee the 'right to work'. It aims to enhance livelihood security in rural areas by providing at least 100 days of wage employment in a financial year to every household whose adult members volunteer to do unskilled manual work.

• Senior Citizens Vital Component of Social Security:

- According to the Report of the Technical Group on Population Projections (July 2020), India's elderly population is expected to reach 193.4 million by 2031.
- Pensions: Senior citizens who have served in the Central and State Governments and Public Sector Undertakings are well protected with their entitled pensionary benefits after retirement.
- **Pradhan Mantri Shram Yogi Maandhan:** It is a voluntary contributory scheme with matching contribution by Government of India for old age pension.
- Atal Vayo Abhyuday Yojana: It is being run by the Department of Social Justice and Empowerment, includes components to provide financial security, healthcare, nutrition, shelter, welfare etc. for senior citizens.
- **Rashtriya Vayoshri Yojana:** Under this scheme assisted living devices are distributed free of cost, in camp mode, to senior citizens belonging to the families living below the poverty line.
- o **Indira Gandhi National Old Age Pension Scheme:** Under this scheme monthly pension at the rate of Rs.200/- per month per beneficiary is paid to elderly persons in the age group of 60-79 years belonging to Below Poverty Line households.
- Senior Citizens' Saving Scheme: It is a retirement benefit program which earns the individual higher interest rates on the earnings.

• Social Protection of Workers in Unorganized Sector:

- The Economic Survey 2023-24 estimates India's workforce at nearly 565 million, with over 45 percent engaged in agriculture, 11.4 percent in manufacturing, 28.9 percent in services, and 13.0 percent in construction.
- As of July 31, 2024, the number of unorganized workers registered on the eShram portal was over 29.85 crore.
- O Unorganised Workers Social Security Act (UWSS), 2008: It is being implemented to provide social security to unorganized workers by formulating suitable welfare schemes on the matters relating to: (i) life and disability cover; (ii) health and maternity benefits; (iii) old age protection.
- Life and disability cover is available under Pradhan Mantri Jeevan Jyoti Bima Yojana (PMIJBY) and Pradhan Mantri Suraksha Bima Yojana (PMSBY) based on contributions made by subscribers.
- **Pradhan Mantri Shram Yogi Maan-Dhan:** It provides a monthly pension of Rs 3000/- after attaining the age of 60 years.

Way Forward

- Work on effective mechanisms of social protection is a **continuous process** for any country. These initiatives must be **gradual**, **cumulative and must evolve** with changing demographic and other influencing factors.
- Economies fare better when there are efficient social protection schemes, because they help **improve worker productivity** and **promote balanced and sustainable growth**.

Conclusion

• Social security and welfare are integral to India's journey toward a more equitable society. By addressing the existing challenges and adopting a holistic approach, India can create a resilient safety net that supports its most vulnerable populations, fostering social stability and inclusive growth.

14) SOCIAL SECURITY AND WELFARE OF FARMERS FOR BUILDING VIKSIT BHARAT

(GS-II: Welfare Schemes for Vulnerable Sections of the population by the Centre and States and the Performance of these Schemes; Mechanisms, Laws, Institutions and Bodies constituted for the Protection and Betterment of these Vulnerable Sections)

Context

- The transformation in agriculture and allied sectors will be pivotal to make India a developed country by 2047.
- In a nation where the heartbeat of the economy resonates with the toil and efforts of farmers, ensuring their social security and welfare is crucial for building a truly Viksit Bharat a developed and inclusive India.
- It encourages a **positive outlook** towards structural and technological changes, helping the farmers realize the potential benefits of **greater efficiency and increased productivity**.
- The focus has transitioned from a welfare-based, entitlement-driven approach to a more participatory model of empowerment.

Need of Farmers' Social Security

- The vision of India to become a developed nation by 2047, needs an accelerated growth rate of its economy with \sim 8% per year.
 - But issues such as climate change, degradation of natural resources and land use change, socio-economic and institutional stressors will impact the production and productivity patterns of agriculture that is presently contributing around 18% to the GDP.
- Around 55% of the Indian population relies directly on agriculture for their livelihoods (Census 2011).
 - Farmers face a plethora of challenges that impact their livelihoods small landholdings, limited access to modern technology, erratic monsoons, market fluctuations, rising input costs etc.
- Many Indian farmers remain trapped in a vicious cycle of debt and poverty. This scenario
 underscores the urgent need for strong social security frameworks to provide them with
 economic stability and dignity.
- The vitality and strength of a nation's farmers also called "Annadatas" is strongly correlated with the country's overall empowerment and prosperity.
- By providing a safety net, **social security schemes** play a vital role in **enhancing social welfare and alleviating poverty**, fostering a more **equitable society**.

Measures taken by the Government

The GOI has launched several key initiatives which have the potential to significantly reshape social security and welfare of the farming community in India.

- Income Support Schemes
 - Pradhan Mantri Kisan Samman Nidhi: It is aimed at supporting land-holding farmers by providing annual financial assistance of Rs 6,000, distributed in three equal instalments every four months directly into their bank accounts via Direct

- **Benefit Transfer (DBT)**. It guarantees that all eligible farmers receive benefits **without intermediaries**, ensuring transparency.
- PM Kisan Mobile App: To enhance accessibility, the PM Kisan Mobile App allows farmers to complete their e-KYC using face authentication.
- The recently launched PM KISAN Al Chatbot, Kisan e-Mitra, serves as a one-stop solution for addressing beneficiary queries in all 22 official languages.
- **Crop Insurance and Risk Mitigation:** Agriculture is inherently unpredictable, especially in India, where farmers are heavily dependent on monsoons.
 - Pradhan Mantri Fasal Bima Yojana: It is aimed at providing financial support in terms of a cost-effective crop insurance plan to farmers, who experience crop loss or damage due to unforeseen events. In terms of farmer enrolment, PMFBY has grown to be the largest crop insurance program globally.
 - o **Interest Subvention Scheme (ISS):** It supports farmers engaged in crop husbandry and other allied activities like animal husbandry, dairying, and fisheries with concessional short-term agri loans. ISS is offered to farmers who take out **short-term crop loans of up to Rs 3.00 lakh at a 7% annual interest rate**. Farmers receive an additional **3% subvention** for **timely loan repayment**.
 - **Pradhan Mantri Annadata Aay Sanrakshan Abhiyan (PM-AASHA):** This scheme is to guarantee farmers receive remunerative prices for their produce.

• Financial Security for Farmers

- Pradhan Mantri Kisan Maan- Dhan Yojana (PM-KMY): It is a contributing program for small and marginal farmers where applicants aged 18-40 years will make monthly contributions ranging from Rs 55 to Rs 200 till they reach 60 years. PM-KMY looks after farmers in their old age, providing a monthly pension of Rs 3,000 to enrolled farmers who reach the age of 60 years.
- **Atal Pension Yojana (APY)**: It is a government-backed pension scheme in India aimed primarily for the workers in the unorganized sector. All subscribing workers are eligible to receive a pension of up to Rs 5,000 per month upon reaching the age of 60.
- **Pradhan Mantri Jeevan Jyoti Bima Yojana:** It is a government-backed life insurance scheme designed to enhance insurance coverage among the population. It features an affordable annual premium of Rs 436. In the unfortunate event of the policyholder's death for any reason, the nominee will receive a payment of Rs 2 lakhs.

• Sustainable Farming and Environmental Security

- Paramparagat Krishi Vikas Yojana (PKVY): The scheme provides financial assistance of Rs 50,000 per ha to states, of which 62% (Rs 31,000) is given directly to farmers as incentives for organic conversion, inputs, production infrastructure, and other expenses through Direct Benefit Transfer This Scheme aims to promote integrated, climate-resilient farming systems.
- Per Drop More Crop scheme (PDMC): It primarily aims to enhance water use
 efficiency at the farm level through precision and micro irrigation techniques. An
 area of 78 lakh ha has been covered
- Pradhan Mantri Krishi Sinchai Yojana (PMKSY): It aims to enhance farm productivity and ensure better resource utilization. The major objectives include the convergence of investments in irrigation at the field level, expanding the cultivable area under irrigation (Har Khet Ko Paani) and promoting the adoption of water-saving technologies for more effective crop production.

- Rashtriya Krishi Vikas Yojana Remunerative Approaches for Agriculture and Allied Sector Rejuvenation (RKVY-RAFTAAR): It is to enhance pre- and post-harvest infrastructure while promoting agri-entrepreneurship, innovation, and value addition.
- Digital Platform for Farm Mechanization and Technology
 - Digital Platform for Farm Mechanization and Technology: It is a centralized effort aligned with government policies focused on enhancing the "Ease of Doing Business." This portal integrates several essential features to support farmers and promote agricultural efficiency.
 - Centralized Farm Machinery Performance Testing Portal: It allows for the online submission of testing applications and facilitates the monitoring of testing activities and related processes.
 - **FARMS (Farm Machinery Solutions) Mobile App:** It provides a convenient platform for farmers to rent and hire agricultural machines and equipment, ensuring they have **easy access to the necessary tools** for their farming needs.
- Marketing of Farm Produce
 - Integrated Scheme for Agriculture Marketing (ISAM): It helps state governments manage agricultural produce marketing by improving market structures, creating capacity, and providing access to information.
 - National Agriculture Market (e-NAM): It is a pan-India electronic trading system that connects current APMC mandis to form a single national market for agricultural commodities.

Conclusion

• By enhancing income stability, promoting climate resilience, improving social safety needs and ensuring financial security, the livelihoods of the farming community can be uplifted. Strengthening social security as well as welfare measures is not only an economic necessity but also a moral commitment, fostering a brighter future for both farmers and the nation as a whole.

15) GOVERNMENT SCHEMES MAKING THE PATH EASIER FOR DIVYANGIAN

(GS-II: Welfare Schemes for Vulnerable Sections of the population by the Centre and States and the Performance of these Schemes; Mechanisms, Laws, Institutions and Bodies constituted for the Protection and Betterment of these Vulnerable Sections)

Context

- Differently abled Physicist Stephen Hawking said about Helen Keller, "**She has taught us** that even disability cannot become an obstacle in living life to the fullest."
- Many differently abled people including world famous physicist Stephen William Hawking, the first divyangjan to climb the Everest summit Arunima Sinha and IAS topper Ira Singhal have earned fame all over the world on the basis of their passion and with the help of society, family and government.
- On seeing them, thousands and millions of divyangian are inspired to achieve something.
- According to the 2011 census, the total population of **India** was 1.23 billion, out of whom more than **2.1 percent people were affected with some kind of disability.**

Categories of disabled people

• Among the 21 categories of disabled people, the major ones are **mobility impairment**, **visual impairment**, **mental illness**, **speech and hearing impairment**, learning impairment and multiple disabilities.

- Among these, the percentage of people with visual impairment is the highest. People
 with mobility impairment come in second place. They are the ones who have to face the
 most discrimination in society.
- Such disabled people in the country are victimized due to the inhumane behaviour of the society and keep struggling to survive.

Initiatives by the Government

- Skill Development Council and National Divyangjan Finance and Development Corporation (NDFDC): The aim of establishing this institution is to ensure that every single Divyangjan in the country should have work.
- Persons with Disabilities (Equal Opportunities, Protection of Rights and Full Participation) Act, 1995: It envisages three percent reservation for disabled people in the identified posts in government establishments.
- **Divyangjan Swavalamban Yojana:** Under this scheme they are given loans up to Rs 50 lakh. This loan can be for any kind of enterprise and the interest rate is between five to nine percent. If they want a loan for studies, they can get an education loan at an interest rate of four percent. Loans are also given for building houses. T
- VNY: This is a kind of Micro Finance Scheme, under which a loan of up to Rs 60,000 is given.
- **Divya Kala Mela:** Under this scheme the products prepared by the Divyangjans are promoted by making them available in the market.
- Do Boond Zindagi Ki campaign: The World Health Organization declared India a poliofree country a decade ago but to avoid any suspected case, many awareness programs are run on World Polio Day. Through this campaign many Governments saved a large number of children from the infection of infectious polio.
- **Disability Certificate:** With the help of this certificate, people of this category are able to get concessions in school and college fees and scholarships.
- **Unique Disability ID:** The UDID has now become a very important **'ID card'** for Divyangjans. On the basis of this card, there is a provision to give them an education loan at lower rates for higher education.
- Unemployment allowance is also provided to Divyangjans, the amount of which depends on the government provisions.
- **Concessions for Travel:** Divyangjans are also given concessions in government buses, for rail and air travel based on degree of disability.
- **ADIP Scheme:** The main objective is to provide **assistance** to needy disabled persons in **purchasing** durable, sophisticated, scientifically manufactured **assistive devices and equipment.** It is to increase their physical, social and psychological rehabilitation.
- Awards: The Department of Empowerment of Persons with Disabilities of the Government of India gives national awards to such Divyangjan and institutions, who have done special work in their respective field. These awards are given on 3rd December every year on the occasion of World Disability Day.

National Trust

- Established as a **premier Institute of the Ministry of Social Justice and Empowerment,** the National Trust works for the **welfare of persons** with **autism, cerebral palsy, intellectual disability and multiple disabilities.**
- Under this, many schemes are run for the disabled.
 - O **Disha**: This is an early intervention and school readiness scheme for disabled children up to the age of 10 years and aims to provide treatment, training and support to family members for persons with four disabilities covered under the National Trust Act.

- O Day Care Centre: This is a day care scheme whose main objective is to increase the range of opportunities available to persons with disabilities to enhance interpersonal and vocational skills. The centre provides day care facilities for at least 6 hours a day between 8 am and 6 pm.
- **SAMARTH (Respite homes):** The objective of this scheme is to establish Samarth Kendras to provide group home facilities, where basic medical and quality care service is provided with the help of doctors.
- **Gharaunda (Group Home for Adults):** The objective of this scheme is to provide an assured home and minimum quality care services throughout life to a person with autism, cerebral palsy, mental retardation and multiple disabilities. It also includes providing assistance for vocational activities.
- Niramaya (Health Insurance Scheme): The objective is to provide affordable health insurance to persons with disabilities covered under the National Trust Act. Under this, there is a provision for all enrolled beneficiaries to get health insurance cover of up to Rs 5 lakh.
- Sahyogi (Caregiver Training Scheme): The scheme aims to set up skilled caregiver cells to provide adequate and nurturing care to persons with disabilities and their families. Under this, parents are provided training to take care of the disabled person at home.
- **Prerna (Marketing Support):** It aims to create viable and comprehensive channels for sale of products and services made by persons with disabilities.
- **Sambhav (Aids and Assistive Devices):** This is a scheme to establish additional resource centres that aim to provide information and easy access to equipment, aids, software etc. for the betterment and empowerment of persons with disabilities.
- Badhte Kadam (Awareness and Community Connectivity): The scheme aims at community awareness, sensitisation, social integration and mainstreaming of persons with disabilities.

16) ENSURING DIGNITY IN OLD AGE: A PATHWAY TO SOCIAL SECURITY FOR SENIOR CITIZENS

(GS-II: Welfare Schemes for Vulnerable Sections of the population by the Centre and States and the Performance of these Schemes; Mechanisms, Laws, Institutions and Bodies constituted for the Protection and Betterment of these Vulnerable Sections)

Background

- India has been undergoing a **demographic shift**, with **rapid increase in its elderly population**.
 - The percentage share of the elderly in the total population in the country has been increasing steadily, rising from 5.5 per cent in 1951 to 8.6 per cent in 2011. It is estimated to be at 14.9 percent by 2036.
- The rise in the elderly population is due to improved life expectancy, driven by advancements in healthcare services and living conditions.
- The rise of the nuclear family system, urban migration and globalization has eroded the traditional caregiver system, underscoring the urgent need for formal economic and social security mechanisms for senior citizens.
- With the rapidly expanding elderly population and limited resources, it is crucial to examine the existing system of social security for senior citizens in India.

• This includes focusing on pension schemes, healthcare, housing, legal protection and addressing the challenges that still need attention to ensure a dignified and secure life for the elderly.

Social Security Programmes For Senior Citizens In India

- National Policy on Older Persons (1999): It aimed to create a comprehensive support
 system, focusing on financial and food security, healthcare, shelter, legal protection and
 other essential needs of older persons, with the goal of enhancing their overall quality of
 life
- National Action Plan for the Welfare of Senior Citizens (2021): It is a centrally sponsored umbrella scheme aimed to promote healthy, dignified and self-reliant living for senior citizens, while strengthening social and inter-generational bonds.
- Pension and Insurance Schemes:
 - National Social Assistance Programme: Launched under the Ministry of Rural Development it aims at providing financial assistance to the elderly, widows and disabled persons living below the poverty line (BPL) both in rural as well as urban areas.
 - Pradhan Mantri Vaya Vandana Yojana (PMVVY): It was launched exclusively for the senior citizens aged 60 years and above and is an insurance policy-cum-pension scheme.
 - **Pradhan Mantri Suraksha Bima Yojana (PMSBY):** It is an affordable accidental insurance scheme for individuals aged 18 to 70 with a bank account. It provides coverage of Rs 2 lakh for accidental death with an annual premium of just Rs 20.

• Healthcare Initiatives for Senior Citizens:

- Rashtriya Swasthya Bima Yojana: It provides health insurance coverage for unorganized sector workers belonging to BPL category.
- Senior Citizen Health Insurance Scheme (SCHIS): It comes under RSBY and provides an additional coverage of Rs 30,000 for critical illnesses. The scheme aims to bridge the gap in healthcare access for elderly individuals particularly those suffering from chronic or life-threatening diseases.
- National Programme for Health Care of the Elderly (NPHCE): It was launched by the Ministry of Health and Family Welfare and focuses on making healthcare more accessible and affordable while also developing infrastructure dedicated to elderly care. This includes establishing geriatric units in district hospitals and building a network of healthcare providers trained in geriatric care.
- Rashtriya Vayoshri Yojana (RVY): It is a Central Sector Scheme funded by the Senior Citizens' Welfare Fund. It aims to provide free aids and assistive devices to senior citizens belonging to the BPL category or those earning less than Rs 15,000 per month who suffer from age-related disabilities such as low vision, hearing impairment, loss of teeth, or mobility issues.
- Senior Citizens' Welfare Fund: It aims to enhance the welfare of senior citizens by providing financial assistance for programmes that improve their quality of life. It supports various initiatives such as healthcare services and awareness campaigns to protect the rights and interests of older persons.

• Livelihood and Skilling Initiatives

Senior Able Citizens for Re-employment in Dignity (SACRED): This programme is aimed at providing re-employment opportunities for seniors. The SACRED portal connects senior citizens with private enterprises, matching them with job opportunities based on their skills and experience.

- Action Groups Aimed at Social Reconstruction: These groups were introduced as part of the Livelihood and Skilling Initiatives for Senior Citizens. These groups encourage seniors to form Self-Help Groups (SHGs), allowing them to spend their time constructively and engage in activities that may lead to marketable products.
- Promoting Silver Economy: This initiative identifies and supports innovative startups focused on developing products, processes and services for the welfare of the elderly.

• Housing and Welfare Schemes

- Day care centres: Here senior citizens participate in recreational activities, receive basic healthcare and access counseling services. These centres aim to reduce isolation and improve the mental and emotional well-being of the elderly.
- Reverse Mortgage Scheme: It allows senior citizens to mortgage their houses to banks and receive periodic payments in return. This scheme offers financial security to elderly individuals who own a home but do not have a steady income source.

• Legal Protection And Rights For Senior Citizens:

- Maintenance and Welfare of Parents and Senior Citizens Act, 2007: It mandates that children are legally obligated to provide maintenance to their elderly parents. It allows senior citizens to claim maintenance if they are neglected or abandoned by their children.
- National Policy for Senior Citizens-2011: It outlines the government's commitment to creating an inclusive society where the elderly are respected, protected and cared for.
- To protect senior citizens from abuse, the government and various NGOs have set up help-lines specifically for the elderly. These helplines provide immediate assistance in cases of abuse, financial exploitation, or neglect.

Challenges in Implementing Social Security for Senior Citizens

- **Inadequate infrastructure** particularly in rural areas, where essential services and resources are often scarce, is a primary obstacle.
- Many elderly individuals **lack awareness** of the available government schemes, which can leave them without the necessary support to navigate these programmes.
- The **amounts of pension** provided are often **insufficient** to cover basic living expenses, leading to financial insecurity.
- Healthcare access poses another significant barrier as elderly people often encounter high
 medical costs that prevent them from availing necessary treatments, exacerbating their
 health challenges.
- The digital divide further complicates matters, as many elderly individuals lack the skills or resources to engage with online platforms necessary for applying for social security programmes.

Way Forward

- To effectively improve social security for senior citizens in India, a comprehensive and coordinated approach is imperative.
- Targeted efforts to **close the gender gap** in social security access are equally important.
- Special initiatives should focus on supporting elderly women, particularly widows, by providing tailored resources and programmes that address their unique challenges.
- Encouraging **community engagement** and creating networks for **social interaction** can also help combat isolation and improve mental health outcomes among seniors.

Conclusion

- The rapidly growing elderly population in India presents both significant challenges and opportunities for policymakers committed to safeguarding the dignity and well-being of senior citizens.
- While substantial progress has been made in implementing various social security programmes, notable gaps still persist that hinder effective access and utilization of resources.
- To truly enhance the quality of life for the elderly, a **multi-faceted approach** is essential, one that prioritizes expanding universal pension coverage, improving healthcare access and simplifying application processes for social security benefits.
- By prioritizing these actions, India can develop a robust social security framework that not only meets the immediate needs of its elderly population but also fosters a society where senior citizens are respected, valued and enabled to live with dignity and security in their later years.

17) SOCIAL SECURITY OF SCHEDULED TRIBES & SCHEDULED CASTES IN NORTH-EASTERN REGION

(GS-III: Welfare Schemes for Vulnerable Sections of the population by the Centre and States and the Performance of these Schemes; Mechanisms, Laws, Institutions and Bodies constituted for the Protection and Betterment of these Vulnerable Sections)

Background

- The Northeastern Region occupies a **special position** as far as the status of Scheduled Tribes and Scheduled Caste communities of the country is concerned.
- The region is by and large **inhabited by various tribal communities**, and four (Arunachal Pradesh, Meghalaya, Mizoram and Nagaland) of the eight states are tribal-majority states.
- The indigenous economic system, particularly in tribal areas, is heavily dependent on certain ecological parameters like land, forest and water. Thus, there is an essential **interrelationship between the ecology and the communities.**
- Unfortunately, land, forest and water have come under **tremendous pressure in the Northeast** since the colonial period.
 - Pursuing its divide-and-rule policy, the British had kept the tribal communities secluded from the other communities of the country on the pretext of protecting them.
- **Land alienation** among tribal communities is a major problem, which in turn has led to large-scale insecurity, often also triggering socio- political and ethnic conflicts.
- Displacement induced by development projects has also remained an issue, and small
 gaps continue to remain here and there despite rehabilitation schemes undertaken by the
 government.

Government Initiatives

- In the post-Independence era, though the **Sixth Schedule to the Constitution** came into force with the basic objectives of (i) providing for the administration of tribal areas in Assam, Meghalaya, Tripura and Mizoram and (ii) safeguarding the rights of the tribal population in these states.
- On the political front, representation in elected bodies including Lok Sabha and State Legislative Assemblies however has ensured due reservation of seats for both ST and SC communities.
- Pradhan Mantri Janjatiya Unnat Gram Abhiyan: It is for improving the socio-economic condition of tribal communities, by adopting saturation coverage for tribal families in tribal-majority villages and aspirational districts. The major schemes are - (i) Providing

- pucca house for eligible Households with other entitlements, (ii) Improving Village infrastructure, (iii) Skill Development Entrepreneurship promotion and enhanced livelihood and self-employment, (iv) Increasing Gross Enrolment Ratio, and (v) Ensuring enhanced access to quality health facilities.
- **Dharti Aaba Janjatiya Gram Utkarsh Abhiyan:** This ambitious program aims to address critical gaps in social infrastructure, health, education, and livelihood development across approximately 63,000 tribal villages across the country.

Performance of North Eastern states across various indicators

- **Sex Ratio:** In most states across the Northeast, the sex ratio is much above the national average of 943. States which have sex ratio above the all-India average are Assam, Manipur, Meghalaya, Mizoram and Tripura.
- **Infant Mortality Ratio (IMR):** While the All-India IMR stood at 28 during 2020, IMR in six northeastern states except Assam and Meghalaya were below it.
- **Gross Enrolment Ratio(GER):** GER of all Northeastern states were above the national average at the Primary and Elementary levels during 2021-22.

18) IMPORTANCE OF ENHANCING SOCIAL SECURITY FOR UNORGANIZED SECTOR WORKERS

(GS-III: Welfare Schemes for Vulnerable Sections of the population by the Centre and States and the Performance of these Schemes; Mechanisms, Laws, Institutions and Bodies constituted for the Protection and Betterment of these Vulnerable Sections)

Context

- According to the assessment of the Economic Survey 2021-22, about 93 percent of the total labour force in India, i.e. an estimated 43.99 crore workers, are employed in the unorganized sector.
- According to the International Labour Organization (ILO), the security which is provided by the society through appropriate organizations to protect its members from certain incidents and risks is called social security. These risks include disease, maternity, disability, old age and death.
- In India, several acts were made from time to time since 1948 to provide social security facilities, such as the **Employees Provident Fund Act, 1952, Maternity Benefit Act, 1961,** etc.
- Though the common people working in the organized sector are getting the benefit of these schemes to some extent **93% people who earn their livelihood in the unorganized sector** could not get out of the vicious cycle of poverty and are never able to provide basic facilities to their families.

Social Security Initiatives by the Government

- **Social Security Code 2020:** Its objective is to provide **social security benefits** to workers and labourers working in various organizations in the **unorganized sector** of the country in situations like illness, maternity, disability. Major provisions include:
 - The district administration should register all the labourers, workers, temporary workers and platform workers of the unorganized sector and issue them identity cards.
 - **Kamgar (Workers) Facilitation Centers** should be established which can help them in getting social security facilities from different ministries and departments.
 - To constitute a **National Social Security Board** to monitor the social security schemes provided for these sections. No doubt, the Central Government has made.

- **Pradhan Mantri Jan Dhan Yojana:** It was launched in 2014 to bring the people, who were deprived of banking facilities till now, into the **formal banking sector.** Under this Yojana accounts can be opened without the requirement of a minimum balance and aims to ensure that **every household has at least one bank account.**
- **Pradhan Mantri Jeevan Jyoti Bima Yojana:** It is a **term insurance plan** in which after investment, if the policy holder dies due to any reason or becomes disabled, then his family gets Rs 2 lakh. Its annual premium is only Rs 436.
- **Pradhan Mantri Suraksha Bima Yojana:** Under this scheme by paying just Rs 20/- annual premium an insurance cover of **Rs 2 lakh on death and Rs 1 lakh on disability** is given.
- **Pradhan Mantri Shram Yogi Maan Dhan:** This scheme provides benefits to **domestic maids, drivers, plumbers, cobblers, tailors etc. who do household work** and do not have any source of income after the age of 60. There is a provision of minimum monthly pension of Rs 3,000. This pension will be given to the beneficiary after the age of 60 years.
- **Pradhan Mantri Laghu Vyapari Maandhan Yojana:** To join this scheme, the age of the businessmen must be between 18 to 40 years. Small shopkeepers will get the benefit of this scheme only after the age of 60 years.
- MNREGA has also proved to be a milestone for the workers of the unorganized sector.
- **Establishment of Common Service Centres**: These centres were established in rural areas where workers in the unorganized sector are helped to avail the benefits of all the public welfare schemes of the government.

Major Challenges in implementing the schemes

- Lack of awareness, low enrollment, limited coverage and inadequate funding are the major challenges in the implementation of these social security schemes.
- Accounts were opened under PMJDY but the ground reality is that even today the deposits in most of these accounts are very low or negligible.
- On the other hand, during the demonetization of 2016, these accounts were also misused on a large scale to deposit black money.
- The scope of PMSBY is quite large but it does not include situations of natural death, preexisting diseases, war, riots etc.

Way Forward

• Today there is a need for universal social security schemes that are **all-inclusive**, **practical**, easy to implement and for this, the government along with all other stakeholders need to work together with **innovative thinking**. Only then the overall development of the country will be sustainable.

19) A SAFETY NET FOR ALL

(GS-II: Issues Relating to Development and Management of Social Sector/Services relating to Health, Education, Human Resources)

Background

- According to the World Social Protection Report 2020-22, each year, **100 million people fall into poverty** as a **result of health care spending,** and 800 million spend at least 10% of the household budget on health care, a situation that disproportionately affects the poorest.
- According to the National Health Authority, **in India** each year, unforeseen expenditure and loss of income, as a result of illness, push **60 million Indians to the brink of poverty.**
- With over 1.4 billion people, India faces a dual burden of communicable diseases such as alongside rising non- communicable diseases (NCDs) like diabetes, heart disease, and cancer.

- Realising the magnitude of the challenge, the **Centre has increased its healthcare spending** over the years thereby decreasing out-of-pocket expenses of citizens.
- The push has been towards making healthcare accessible to every citizen, particularly from marginalised groups.

Why is Health Equity Important?

- For India's **economic growth to be truly sustainable**, it must be inclusive, addressing the divide between prosperity and marginalisation.
- Systemic barriers, limited access to resources, and historical inequalities can keep individuals and communities trapped in cycles of poverty and exclusion.
 - Well-designed policies and programmes play a crucial role in breaking these barriers, providing a level playing field, and empowering people.
- Strengthening social protection systems is key to increasing resilience against shocks that can push vulnerable populations back into poverty.
 - Achieving true health equity requires addressing systemic barriers related to poverty, discrimination, and unequal access to fundamental resources such as education, clean water, and nutrition.

Initiatives taken by the Government

- National Health Mission (NHM): The NHM with its two Sub-Missions, National Rural Health Mission (NRHM) and National Urban Health Mission (NUHM), supports States/UTs to strengthen their health care systems so as to provide universal access to equitable, affordable and quality health care services.
- Ayushman Bharat programme: It provides for holistic and integrated health care and is the principal vehicle for achieving Universal Health Coverage (UHC). It adopts a continuum of healthcare approach, comprising two interrelated components: Ayushman Arogya Mandirs and Pradhan Mantri Jan Arogya Yojana (PM-JAY).
- **Janaushadhi Kendra's:** They have been setup across the country to reduce the financial burden of medication on people. These **pharmacies** offer essential medicines at 50-90% cheaper rates compared to market prices, providing significant relief to low-income families by reducing their Out of pocket expenditure.
- **National Tuberculosis Elimination Programme:** It has resulted in a 16% decline in TB incidence and an 18% reduction in mortality between 2015 and 2022.
- The **Free Dialysis scheme**, launched in 2015-16, has benefited 25 lakh people.
- Ayushman Bhav campaign: It unites government sectors, civil society organisations and communities under a common mission to ensure that every individual receives essential health services without any disparity or exclusion.
- Some of the other initiatives include National Ambulance Services, Mobile Medical Units, ASHAs, Mera Aspataal, Kayakalp Award Scheme, National Quality Assurance Standards implementation and related activities, Mission Parivar Vikas, Adolescent Friendly Health Clinics, Weekly Iron Folic Acid Supplementation, Menstrual Hygiene Scheme, Anaemia Mukt Bharat strategy, Nutrition Rehabilitation Centre programme and Universal Immunization Programme.

Significance of Government Initiatives

- Focus on Women, Elderly and Transgenders
 - Women, especially those from marginalised communities, face unique healthcare challenges due to social norms, economic dependency, and restricted access to reproductive health services.
 - Government initiatives, including free antenatal care and safe delivery services, have helped reduce maternal mortality.

- The PM-JAY scheme now offers free health coverage of Rs 5 lakh annually to citizens aged 70 and above.
- Transgender Community: The Government launched the SMILE scheme, which includes healthcare, skill development, and shelter homes for transgender persons. A specialised Ayushman Bharat TG Plus card was introduced to provide healthcare services, including sex reassignment surgeries (SRS) and cosmetic treatments, for transgender individuals.

Addresses Out-of-Pocket Expenditure (OOPEs)

- Several of the Government of India's health schemes aim at supporting citizens in the areas of outpatient care, including diagnostics and medicines.
- According to National Health Accounts (NHA) Estimates for India 2020-21 and 2021-22, there is a decline in OOPEs out of Total Health Expenditure (THE) from 64.2% in 2013-14 to 39.4% in 2021-22.
- The estimates show that Government expenditure for healthcare continues to increase in the country, highlighting the efforts of the Government to increase public investments in the health sector.

• Rise in Social Security Expenditure (SSE) on healthcare.

This growth directly contributes to lowering OOPEs for individuals. A strong social security system ensures that people can access essential healthcare services without facing financial hardship or the risk of falling into poverty.

Use of Technology

- In healthcare technology is breaking down traditional barriers to access, positioning itself as a powerful tool for democratising health services.
- Today, there are initiatives leveraging mobile health apps, decentralised diagnostics, digital health records, and a broader digital health ecosystem.
- Key initiatives such as the Ayushman Bharat Digital Mission (ABDM), CoWIN App, Aarogya Setu, e-Sanjeevani, and e-Hospital have created robust digital highways connecting healthcare providers and patients across the country.

Conclusion

- It is important to understand that health is a state of complete physical, mental, and social well-being, not just the absence of disease.
- Health equity ensures that everyone, regardless of their background or circumstances, has
 the opportunity to actively engage in healthcare decisions and access the services they
 need.
- Committed to the concept of "One Earth, One Health," and being the Voice of the Global South, India acknowledges its responsibility to promote a future where **healthcare** is **viewed as a service, not a commodity.**

20) 75 YEARS OF THE INDIAN CONSTITUTION

(GS-II: Indian Constitution— Historical Underpinnings, Evolution, Features, Amendments, Significant Provisions and Basic Structure)

Context

- The Indian Constitution which is world's longest written Constitution came into force in 1950, despite facing innumerable twists, turns, and hindrances within the chaotic sociopolitical context.
- The Indian Constitution was **adopted on 26 November 1949** and stands as a testament to the aspirations of a diverse and vibrant society.

- Led by visionary leaders such as Dr BR Ambedkar, the Drafting Committee sought to create a document that reflected the diverse cultural, linguistic, and religious tapestry of India.
- The **Preamble** to the Constitution encapsulates its spirit. It emphasises the commitment to **justice**, **liberty**, **equality**, **and fraternity**, serving as a guiding light for the nation.

Evolution of the Constitutional Values

- It is very important for the **values and institutions** that emanate from the Constitution to **keep pace with the times.**
- Over the decades, the Indian Constitution being an organic document has undergone numerous amendments, reflecting **India's evolving aspirations and challenges**.
- Each amendment has reaffirmed the Constitution's relevance in addressing contemporary issues such as gender equality, economic disparities, and environmental concerns.
- The Amendments had bearing on the fundamental rights, the Directive Principles of state policy, Fundamental Duties, lists in the Seventh Schedule, emergency provisions, reorganisation, other important areas such as language, elections and the Preamble.

Judiciary - Interpreter of Constitution

- The judiciary has played a pivotal role in interpreting the Constitution and expanding its scope in the last 75 years.
- Some of the landmark judgements are:
 - The landmark judgement of **Kesavananda Bharati v. The State of Kerala (1973)** established the **'Basic Structure' doctrine**, asserting that while Parliament can amend the constitution, it cannot alter its fundamental framework.
 - Minerva Mills Ltd. v. Union of India (1980) reaffirmed the 'Basic Structure' doctrine, emphasising the balance between Fundamental Rights and Directive Principles.
 - o In **Vishaka v. State of Rajasthan** (1997), the Supreme Court laid down guidelines to **prevent sexual harassment at the workplace**, recognising that such harassment violates fundamental rights under Articles 14, 19, and 21.
 - Shayara Bano v. Union of India (2017), wherein the Supreme Court declared the practice of instant triple talaq (talaq-e-biddah) unconstitutional, affirming that it violates the fundamental rights of Muslim women and is against the principles of gender justice.
 - In **Justice K.S. Puttaswamy v. Union of India** (2017), the Supreme Court recognised the **right to privacy as a fundamental right** under Article 21.

Conclusion

- The 75-year journey of the Indian Constitution is a testament to the enduring spirit of democracy and the relentless pursuit of justice.
- Today, it continues to guide India on its path toward a more inclusive and equitable society, celebrating the ideals it was founded upon while adapting to the needs of future generations.
- Education and awareness about constitutional rights are essential to empower individuals and communities to claim their entitlements and participate meaningfully in democratic processes.

21) EVOLUTION OF THE INDIAN CONSTITUTION

(GS-II: Indian Constitution— Historical Underpinnings, Evolution, Features, Amendments, Significant Provisions and Basic Structure)

Context

- The Indian Constitution is not merely a legal document setting out the fundamental laws for governance of India, but also a **living and dynamic document.**
- This document was designed to address the diverse aspirations of the Indian people.
- Amendment means changing one or more parts of the Constitution, and it can be done by adding a new provision, deleting an existing provision, or revising or modifying a provision.
- So far, as many as **106 amendments** have been carried out in our Constitution.

Evolution of our Constitution during British Rule:

- The present Constitution has evolved from a century-long British Rule during which the British Parliament enacted a number of acts that provided a framework of government and administration to India.
- Our present Constitution has evolved from these acts. Of these acts, the Councils Act of 1909, the Government of India Act of 1919, and the Government of India Act of 1935 are three major milestones in India's constitutional development during the British rule.
- The Government of India Act, 1935, served as the constitution of British India till our present constitution was adopted. Sixty- five percent of our constitution has been taken from this act alone.

Landmark Events Along the Journey of Making the Indian Constitution

- Government of India Act 1935: The journey began with the Government of India Act 1935, which introduced a federal structure and laid the groundwork for constitutional governance in India, providing a blueprint that would influence subsequent discussions on the Constitution.
- Cabinet Mission Plan in 1946: Following World War II and the growing demand for independence, the British government initiated the Cabinet Mission Plan in 1946, leading to the formation of the Constituent Assembly. This assembly was tasked with drafting the Constitution and the first meeting took place on 9 December 1946.
- **Objective Resolution:** This Resolution articulated the fundamental goals of the Constitution, emphasising justice, liberty, equality, and fraternity, which would serve as guiding principles throughout the drafting process.
- **Drafting Committee:** Chaired by Dr BR Ambedkar, it was f**ormed in 1947** to translate the ideals of Objective Resolution into a **comprehensive legal framework.**
- The Constituent Assembly meticulously crafted the Constitution, balancing the aspirations
 of a diverse population while addressing the historical injustices stemming from colonial
 rule.
- On **26 November 1949**, the **Constitution** was **adopted**, marking a momentous occasion in India's history. This date is celebrated annually as **Constitution Day**.
- The Constitution officially came into effect on 26 January 1950, a date now commemorated as Republic Day, symbolising the transition from colonial rule to selfgovernance.

Need for Constitutional Amendments

• With changing times and circumstances, the aspirations of the people also change, and these changes must be reflected in the constitution by amending it, or else it will cease to be a relevant document and become outdated.

• The framers of our Constitution were aware of the need to change its provisions in the future and therefore provided for an amendment procedure (Art. 368) in the constitution itself

Procedure for amending the Constitution:

There are three ways in which our Constitution can be amended:

- By an **ordinary law** passed by Parliament by a simple majority.
- By following a **special procedure given in Art. 368** which requires an amendment bill to be passed by a two-thirds majority in both Houses of Parliament.
- By passing an **Amendment Bill by Parliament** by a two-thirds majority as well as its ratification by at least half of the states if the bill seeks to make changes in provisions that affect the federal provisions.

Does Parliament have unbridled powers to amend any part of the Constitution?

- The stand taken by the Supreme Court:
 - the Shankari Prasad case, 1951, and the Sajjan Singh case, 1964, acknowledging Parliament's unfettered powers to amend any part of the Constitution that included even fundamental rights.
 - However, in the **Golaknath case**, **1967**, the court ruled that Parliament has no constituent powers to amend fundamental rights because they occupy a sacrosanct position under the constitution.
 - Though the term basic structure does not find any mention in our Constitution, it was invented by the Supreme Courtin the famous **Kesavananda Bharati case**, 1973.
 - The **42nd Amendment**, **1976**, allowed Parliament to amend any part of the Constitution and protected it from being challenged in any court on any ground.
 - But in the Minerva Mills Judgement, 1980 the Supreme Court nullified this, holding that it destroys the basic feature of the Constitution.

Landmark Constitutional Amendments since 1950

- **The First Amendment Act, 1951:** The main objects of this amendment were to place 'reasonable restrictions' on laws made on various grounds given in Art. 19 and inserted the 9th schedule to the Constitution which provides immunity from judicial review of certain laws.
- **The Seventh Amendment Act, 1956:** Its main object was to implement the reorganisation of states on a linguistic basis, as recommended by the Afzal Ali Committee.
- The Forty Second Amendment Act, 1976: This is also known as the mini Constitution of India, as it carried out wide ranging and drastic changes in the Constitution during the emergency. It amended the Preamble and Directive Principles. Art. 74 was amended to make the President 'bound by the advice of the council of ministers'.
- **The Forty Fourth Amendment Act, 1978:** It made changes in Art. 352 relating to proclamation of emergency. The written advice of the Cabinet to the President to proclaim an emergency was made mandatory. Right to Property that was a fundamental right was made a legal right.
- The Fifty Second Amendment Act, 1985: By this amendment, the Tenth Schedule was added to the constitution, which provides the grounds on which a member of a legislature shall be disqualified for an act of defection. This act has been further strengthened by the 91st Amendment, which has added more teeth to the 1985 anti-defection law.
- The Sixty First Amendment Act, 1988: The purpose of this amendment was to lower the voting age from 21 years to 18 years to include India's youth in the electoral exercise.
- The Seventy Third and Seventy Fourth Amendment Acts, 1992: These two amendments have constitutionalised the Panchayati Raj Institutions (PRIs) at both

- village and urban levels by adding **Part IX** (the Panchayats) and **Part IXA** (the Municipalities).
- The Ninety Ninth Amendment Act, 2014: This act sought to replace the collegium system of appointment of Supreme Court and High Court judges by establishing a National Judicial Appointment Commission (NJAC).
- The Hundred First Amendment Act, 2016: This act brought the GST regime in existence under the 'One Nation One Tax' slogan.
- The Hundred Sixth Amendment Act, 2023: This has finally paved the way for 33 per cent reservation for women in both Lok Sabha and state assemblies.

22) THE FUTURE OF AI IN INDIA: NAVIGATING PROFILING CONCERNS AND CRIMINAL INVESTIGATIONS

(GS-III: Science and Technology- Developments and their Applications and Effects in Everyday Life)

Context

- In the fast-paced world of technology, artificial intelligence (Al) is not just a tool for convenience; it's becoming a cornerstone of how businesses, governments, and societies operate.
- **Al's ability to analyse vast amounts of data and predict outcomes** has transformed everything from how we shop to how law enforcement approaches crime.
- The use of AI in **profiling and criminal investigations**, present both great **opportunities** and significant challenges.
- The legal frameworks governing Al usage are essential in ensuring the balance between privacy, security, and innovation.

Al and Profiling

- Profiling is the process of collecting data to predict behaviour. All relies on user profiles
 that are constantly being updated based on behaviour. This data-driven approach not only
 enhances user experience but also brings forth concerns about privacy and the misuse
 of personal data.
 - The **Digital Personal Data Protection Act (DPDP Act) 2023** directly addresses these concerns. By recognising behavioural data as personal data, the law ensures that users' rights are protected. This includes the right to correct or erase their data, forcing Al systems to rethink how they operate.
 - AI systems have had to adapt to stringent requirements for obtaining explicit consent before collecting personal data.

Al's Role in Predictive Policing and Criminal Investigations

- The Bharatiya Nyay Sanhita (BNS) 2023 paves the way for the **use of electronic evidence in criminal cases,** acknowledging the power of Al in analysing digital data to aid investigations.
 - Al plays a central role in **predictive policing** which is a method that **uses algorithms to forecast potential criminal activity** based on data analysis.
 - Al is used in crime prediction and digital forensics. Al systems can analyse vast datasets, including social media activity, location history, and communication records, to identify patterns that might suggest criminal intent.

Issues with AI in Criminal Investigation

• Al systems are not infallible: Bias in algorithms can lead to discriminatory outcomes. For example, Al models trained on biased data could wrongfully flag individuals based on their race, gender, or socio-economic status.

- Ensuring algorithmic transparency and judicial oversight is critical to preventing such scenarios from unfolding.
- **False Prediction:** In policing, a false prediction could have serious consequences for individuals and their freedom.
 - The need to build systems that are fair, transparent, and accountable to avoid abuses of power is necessary.

Way Forward

- Training law enforcement to use Al effectively and ethically is critical.
 - Predictive tools, for example, must be regularly audited to ensure they do not perpetuate biases.
- **Legal Framework:** As Al continues to be used in everyday life, the laws governing its use must keep pace.
 - The DPDP Act 2023 and the BNS 2023 represent bold steps toward creating a legal framework that balances the incredible potential of Al with the rights and privacy of individuals.

23) CRIMINAL JUSTICE SYSTEM REFORMS: NEW ADDITIONS IN THE BHARATIYA NYAYA SANHITA

(GS-II: Government Policies and Interventions for Development in various sectors and Issues arising out of their Design and Implementation)

Context

- The introduction of three new criminal laws marks a significant step by the government towards the decolonisation of criminal laws.
 - These three new criminal laws, Bharatiya Nyaya Sanhita, 2023 (earlier IPC, 1860),
 Bharatiya Nagarik Suraksha Sanhita, 2024 (BNSS) (earlier Cr.P.C. 1973), and
 Bharatiya Sakshya Adhiniyam, 2023 (earlier Indian Evidence Act, 1872).
- Effective 1 July 2024, these laws aim to address contemporary challenges, tackle modern
 offences, and decolonise India's criminal justice system, marking a significant step
 towards legal reform.

New Key Additions:

- New offences against women and children
 - The BNS criminalizes sexual intercourse by employing deceitful means and cites the promise to marry a woman without any intention of fulfilling the same as grounds for imprisonment up to 10 years and the possibility of a fine.
 - Hiring, employing, engaging or using a child for sexual exploitation or pornography shall be punished with imprisonment which shall not be less than three years and may extend to ten years with fine.
- New Offences against Human Body
 - The Bharatiya Nyaya Sanhita specifically addresses mob lynching.
 - **Definition of Organised Crimes:** The BNS provided a definition for organised crimes. Organized crime involves unlawful activities like kidnapping, robbery, and extortion, often by groups using violence or intimidation, with the primary goal of obtaining financial or other material benefits.
 - **Petty Organised Crime:** The BNS also has provisions related to petty organised crimes. Previously, there was no specific law to address petty offences, but with the introduction of this section, such cases will now be handled directly, and offenders will receive appropriate punishment based on the severity of the offence.

- Voluntarily Causing Grievous Hurt: This new provision addresses the longstanding gap by imposing stricter penalties for offences that cause permanent disability or leave the victim in a permanent vegetative state ensuring justice for such grave crimes.
- BNS also specifically addresses hate crimes, which were not previously recognised as an offence.

• Offences against Nation

- Terrorist Act: Until now, the term 'terrorism' had not been clearly defined in legal terms. This marks the first comprehensive and inclusive attempt to define terrorism, which will undoubtedly aid in protecting the nation against anti-national activities.
- It also has provisions for providing a life sentence or a seven-year sentence, along with a fine for endangering sovereignty, unity, and integrity of India.
- **Protection of Public Servants:** BNS offers additional protection to public servants while they are carrying out their duties.
- The **dissemination of misleading information** and the propagation of fake propaganda have become prevalent across various media platforms. Making this a **punishable offence** will provide a robust defence for state authorities in dealing with such rumour mongers.
- Abetment outside India for offences in India: This provision imposes liability on even an abettor located outside India who incites someone to commit an offence within the country.

• Offences against Property

Snatching: BNS states that theft is snatching if the offender suddenly or, quickly, or forcibly seizes, or secures, grabs, or takes away from any person or from his possession any movable property.

• New Additions in Definition

- Child- means any person below the age of eighteen years.
- Gender- 'he' includes males, females, and transgenders. The BNS provides transgender people with the same protections previously available to males and females.

• New Punishment

• Community Service: Community services punishment is added in the BNS. This provision is specifically aimed at first-time offenders who commit petty offences.

Articles Mentioned:

• Article 124: Establishment and Constitution of the Supreme Court

- (1) There shall be a Supreme Court of India consisting of a Chief Justice of India and, until Parliament by law prescribes a larger number, of not more than 7 other Judges
- (2) Every Judge of the Supreme Court shall be appointed by the President by warrant under his hand and seal and shall hold office until he attains the age of sixty-five years

• Article 155: Appointment of Governor

• The Governor of a State shall be appointed by the President by warrant under his hand and seal

MODEL QUESTIONS

- 1. Assess the significance of India's developing relationship with Iran.
- 2. Urban areas of our country are undergoing various challenges. Explain the statement in detail.
- 3. India needs a radical shift to adopt a Green economy. How India can take up this shift. Explain.
- 4. Define the idea of 'GovAI'. How is it significant to India?
- 5. The Supreme Court has recently come out strongly against 'Bulldozer Justice'. Explain.
- 6. Analyse the potential advantages for India in allowing greater role for the private sector in the Space sector.
- 7. Prisons in India are not suitable for reform of the prisoner. Critically analyse.
- 8. Assess the need to create an Environment Health Regulatory Agency (EHRA) in India.
- 9. Delhi is facing an extremely high level of air pollution in winter months. Provide sustainable solutions which can address this issue.
- 10. Antimicrobial Resistance (AMR) problem needs to be addressed in a multipronged strategy. Explain in detail.
- 11. Analyse the status of Secularism and Socialism in Indian Constitution with respect to recent judgements of the Supreme Court.
- 12. India has recently signed the Biodiversity Beyond National Jurisdiction (BBNJ) Agreement. In this context, elucidate the aspects of this treaty and analyse any challenges, if present, in the effective implementation of the treaty.
- 13. India's shift to a market based economy has been acknowledged by the recent judgment of the Supreme Court in the field of acquisition of private property by the Government. Elaborate.
- 14. Critically examine the role of social security schemes in India in achieving inclusive growth and reducing poverty.
- 15. Analyze the role of various government schemes in enhancing the social security and welfare of farmers in India. Discuss the challenges in implementation and suggest measures to strengthen the existing framework to ensure a sustainable and prosperous agricultural sector.

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- 16. Despite significant strides in policy and legislation, persons with disabilities in India continue to face numerous challenges. Critically examine the effectiveness of government initiatives in addressing the needs of this vulnerable section of society.
- 17. Discuss the effectiveness of existing government initiatives in addressing the needs of Divyangjan. Suggest a comprehensive framework for ensuring the well-being and dignity of the elderly in the years to come.
- 18. Write about the performance of North Eastern states across various socio-economic indicators. Examine the factors hindering their progress and analyze the effectiveness of government initiatives in addressing these challenges.
- 19. A large section of the workforce in India, particularly those in the unorganized sector, remains inadequately covered by social security. Mention some of the initiatives taken by the government to provide social security to the workers in the unorganised sector.
- 20. What is Health equity and how does healthcare complement social security initiatives? How does the healthcare initiatives by the government help in the upliftment of the marginalised section of the society?
- 21. Discuss the role of the judiciary in upholding constitutional values and safeguarding the rights of citizens.
- 22. Mention some of the landmark events along the journey of making the Indian Constitution. Analyze the impact of significant constitutional amendments on the Indian polity. Discuss how these amendments have shaped the political, social, and economic landscape of the country.