DAILY CURRENT AFFAIRS ANALYSIS

18 JULY 2024

1 - PM-JANMAN Scheme:

GS II

Government Policies and Interventions

- **The PM-JANMAN Scheme: What is it?**

- **About:**

- A government initiative called PM JANMAN seeks to integrate indigenous people into society.
- The Ministry of Tribal Affairs will carry out the programme (which consists of Central Sector and Centrally Sponsored Schemes) in coordination with the State governments and the PVTG communities.
- The plan will focus on 11 crucial interventions that will be managed by nine line Ministries, guaranteeing that the programmes that are currently in place are implemented in the areas where PVTGs reside.
- It includes a number of areas, such as chances for sustainable livelihoods, access to clean drinking water, better healthcare, education, and nutrition, as well as safe housing under the PM-AWAS Scheme and enhanced road and telecommunications connectivity.
- The plan also calls for the construction of solar street lights, off-grid solar power systems for one lakh families, and Van Dhan Vikas Kendras for the trading of forest produce.
- By addressing the various and intersecting kinds of prejudice and exclusion that the PVTGs experience, as well as by acknowledging and appreciating their special and significant contribution to both national and international development, the programme is anticipated to improve the quality of life and overall well-being of the group.

- **Difficulties with Implementation:**

- One of the biggest challenges facing PVTGs is the lack of up-to-date statistics. The last census that was conducted in 2001 counted around 27.6 lakh people living in these communities.
- Although baseline surveys have been initiated by the Ministry of Tribal Affairs, a precise and up-to-date dataset of PVTG populations has not yet been assembled.
- The population of PVTGs in Maharashtra, Manipur, and Rajasthan was not included in the population data that was provided to the Parliamentary Standing Committee on Social Justice and Empowerment in 2022. Instead, it was based on the 2011 Census.
- The accuracy of assessing the needs and progress of PVTG communities is hampered by the absence of current data.

- The National Advisory Council of 2013 advised that a separate Census be conducted for PVTG communities, but this recommendation has not been followed, which makes it much more difficult to collect comprehensive data on housing, health, and education.
- the need for specialised and adaptable methods and treatments due to the complexity and diversity of the PVTGs' demands and capacities across various states and regions.
- The state and mainstream society stigmatise and discriminate against PVTGs, and there is a need for public education and stakeholder sensitization on these issues.
- The scheme's convergence and coordination with the federal and state governments' current plans and programmes, as well as the requirement for the effective and efficient delivery and use of resources and services.

- **Specifically Vulnerable Tribal Groups (PVTGs): Who Are They?**

- Primitive Tribal Groups (PTGs) are a special category that the Dhebar Commission created in 1973. PTGs are tribal communities that use pre-agrarian technology, have low literacy rates, a declining or stagnating population, and are economically backward.
- Of the indigenous communities, these are the ones considered to be less developed.
- The Indian government rebranded the PTGs as PVTGs in 2006. They struggle because of inadequate infrastructure and administrative support, living in isolated and inaccessible places.
- Throughout India's 18 States and Union Territories, there are 75 PVTG communities.
- The state of Odisha has the most PVTGs (15), followed by the states of Andhra Pradesh (12), Bihar and Jharkhand (9), Tamil Nadu (6), Madhya Pradesh and Chhattisgarh (7), Kerala and Gujarat (5 each).
- The remaining communities are dispersed throughout West Bengal, Uttarakhand, Rajasthan, Tripura, Manipur, Maharashtra, and Karnataka.
- As PVTGs, all four Andaman tribal groups and one Nicobar Island tribe are acknowledged.

- *Source → The Hindu*

2 – European Union Laws related to AI:

GS II

International issues

- **Which Constitutes the Main Elements of the EU's AI Regulation Framework?**

- **Legislative Protections:**

- Consumer Empowerment: Permission for people to file complaints about alleged AI infractions.

- Limitations on Law Enforcement Adoption: Clearly define the limits on how law enforcement organisations can use AI.
- Strict AI Limitations: AI behaviour manipulation and facial recognition technology are subject to severe limitations.
- Provision for Strict fines: Companies found to be in violation of the regulations may face harsh fines.
- Limited Biometric Surveillance: Only in extreme circumstances, such as terrorist acts, are governments allowed to employ real-time biometric surveillance in public spaces.

- **AI Applications Classification:**

- Four Risk Classes: AI applications are divided into four risk groups according to how risky and intrusive they are.
- Applications Banned: With the exception of law enforcement, most large-scale facial recognition and behavioural control AI applications are prohibited.
- High-Risk Applications: Including AI tools for self-driving cars, they are permitted with certification and provisions for backend technique transparency.
- Applications with a medium level of risk can be deployed freely, such as chatbots that use generative AI, as long as users are informed about AI interaction, there are transparency requirements, and there is thorough technical documentation.

- **Other Regulatory Accomplishments of the EU:**

- The General Data Protection Regulation (GDPR) has been in effect since May 2018. Its main objectives are data processing consent and privacy.

- **Additional Laws: DSA and DMA:**

- The Digital Services Act (DSA) aims to control things like hate speech and counterfeit goods.
- The Digital Markets Act (DMA) addresses non-competitive behaviour and the misuse of dominance by identifying "dominant gatekeeper" platforms.
- What Kinds of International Approaches Exist for Regulating AI?
- EU: Strict attitude; classifies AI according to risk and invasiveness.
- United Kingdom: 'Light-touch' strategy encouraging AI innovation.
- The United States: Stuck between heavy regulation and encouragement of innovation.
- China: Presented its own regulations pertaining to AI that are in line with its goals and policies.

- **What is India's Regulation of AI Strategy?**

- India still lacks a thorough legal framework to govern AI. India, meanwhile, has changed its attitude from not considering regulation of AI to actively developing legislation based on a risk-based, user-harm methodology.

- **Promoting Responsible and Inclusive AI:**

- In 2018, India unveiled #AIFORALL, its first national AI policy that focused on inclusivity.
- The National Strategy for AI (2018) by NITI Aayog has a section on responsible AI.
- The NITI Aayog published a paper titled "Principle of Responsible AI" in 2021. The report listed seven general principles: privacy, accountability, transparency, inclusivity and nondiscrimination, safety and dependability, equality, and reinforcement of positive human values.
- IndiaAI, the national programme on AI, was launched by the Ministry of Electronics and Information Technology in March 2023 with the goal of acting as a holistic initiative to include all AI-related research and breakthroughs.
- In a report published in July 2023, the Telecom Regulatory Authority of India suggested creating an advisory board made up of representatives from various government agencies, academic institutions, and industry experts, as well as creating a domestic statutory authority to regulate AI using a "risk-based framework."

- **Principal AI Frameworks in India by Sector:**

- **Healthcare Industry:**

- In June 2023, the Indian Council of Medical Research released ethical guidelines for the use of AI in biomedical research and healthcare.

- **The Capital Market:**

- In order to establish guidelines and compile an inventory for AI systems in the capital market, SEBI released a circular in January 2019.

- **Sector of Education:**

- The National Education Policy 2020 suggests incorporating AI knowledge into academic curricula.

- *Source → The Hindu*

3 - Diel Sequestration and Diel Vertical Migration:

GS I

Urbanization related issues

- **Diel Vertical Migration (DVM): What is it?**

- DVM, or synchronised vertical migration of marine organisms, is frequently observed in deep-sea species such as zooplankton. During the day, these organisms drop to deeper levels and during the night, they ascend towards the surface.
- These organisms use this pattern to help them find food while evading predators, demonstrating a cunning survival strategy.
- As night falls, creatures from the mesopelagic layer, also known as the Deeper Layer or Twilight Zone, migrate to the protection of the Upper Layer's epipelagic zone. Here, they take advantage of the darkness to graze on microscopic phytoplankton and avoid being eaten by day.
- This coordinated movement, perfectly timed to the cycles of natural light, is the biggest biomass migration on Earth, taking place every day over all oceans.

- **What role do DVMs have in sequestering carbon?**

- By feeding on top plankton, organisms living in the mesopelagic layer actively remove significant amounts of carbon from the upper ocean layers and transfer it to deeper regions.
- Migratory animals contribute to the food chain in the twilight zone by giving their predators access to carbon they have consumed. As a result, the trash that is high in carbon sinks to the ocean floor, acting as a vital carbon sink that traps carbon dioxide and helps control the amount of carbon in the atmosphere.

- **Carbon Sequestration: What Is It?**

- **About:**

- The long-term storage of carbon in soils, oceans, plants, and geological formations is known as carbon sequestration.
- Carbon sequestration is the term used to describe the storing of carbon, which can happen naturally or as a result of human activity.

- **Categories:**

- The process by which carbon dioxide (CO_2) from the atmosphere is taken up by plants and trees through photosynthesis and stored as carbon in soils and biomass (tree trunks, branches, foliage, and roots) is known as terrestrial carbon sequestration.
- Geologic Carbon Sequestration: Shale formations with a high organic content, saline formations, mineable coal seams, gas reservoirs, and oil reservoirs can all hold carbon dioxide.
- Ocean Carbon Sequestration: Significant volumes of CO_2 from the atmosphere are absorbed, released, and stored by the oceans. This can be accomplished in two ways: by adding CO_2 to the deep ocean, and by fertilising ocean biological systems with iron.
- Iron deposition increases the growth of phytoplankton, which in turn allows these microbes to perform better photosynthesis and aid in the absorption of CO_2.

- *Source → The Hindu*

4 – New developments related to the China's Belt and Road Initiative:

GS II

International issues

- **What Motivated Italy to Leave the Belt and Road Initiative?**

- **Unbalanced Economy:**

- Italy, which had weathered three recessions in ten years, was in dire need of infrastructure development and investment when it joined the BRI in 2019.
- Nevertheless, the accord hasn't done anything for Italy four years later, thus the expected economic benefits haven't materialised.
- Chinese FDI (Foreign Direct Investment) in Italy decreased from USD 650 million in 2019 to just USD 33 million in 2021, according to data from the Council on Foreign Relations.
- Italy's commerce with China has climbed from 14.5 billion euros to just 18.5 billion euros since joining the BRI, while China's trade with Italy has increased from 33.5 billion euros to 50.9 billion euros.

- **Geopolitical Reorganisation:**

- Italy's reevaluation fits into a larger pattern of European countries reevaluating their ties to China.

- Italy has reevaluated its position on the Belt and Road Initiative (BRI) due to worries about China's growing influence, geopolitical alignments, and strategic ramifications, especially in light of recent international events like the conflict between Russia and Ukraine.
- The Comprehensive Agreement on Investment (CAI) between the EU and China fell apart in April. Estonia and Latvia withdrew from the 17+1, China's diplomatic initiative in the countries of Central and Eastern Europe, last year. In 2021, Lithuania had left.

- **Standing with the Allies of the West:**

- Italy's decision regarding the BRI may be influenced by its desire to become more closely aligned with its Western friends, particularly in the G7.
- Italy may view its departure from the BRI as a show of support for its Western allies given that it will soon be hosting the G7 chair.

- **Unfavourable Press and Debt Issues:**

- The BRI has drawn criticism from all around the world for possible debt traps and opaque financial transactions.
- It's possible that reports of other nations' significant debt loads as a result of their BRI involvement are influencing Italy's decision to withdraw.

- **How Have ties between Italy and India Been?**

- **Cultural and Historical Connections:**

- India and Italy have been connected historically through commercial routes and cultural interactions, spanning thousands of years.
- Notable individuals who have interacted with Italy in the past, like as Mahatma Gandhi and Rabindranath Tagore, have added to the historical fabric of bilateral relations.

- **Difficulties in Two-Way Relations:**

- Italian Marines Case: Tense ties arose in 2012 when two Italian marines were charged with killing Indian fisherman off the coast of Kerala. The problem become more serious on a political and legal level, which affected the countries' diplomatic relations. After Italy paid India compensation, the matter was ultimately settled, with the closure occurring in 2021.
- AgustaWestland Allegations: Tensions were exacerbated by accusations of corruption surrounding the AgustaWestland agreement. Legal disputes arose in Italy and India as a result of investigations into unethical behaviour and corruption in a significant weapons contract.
- Insufficient evidence led the Italian courts to dismiss all allegations even after the contract was cancelled and legal processes were initiated.

- **Attempts at Rectify:**

- Diplomatic Engagement: Attempts to restore relations started in 2018. Rebuilding relations was the goal of high-level engagements, cultural exchanges, and formal visits between officials from the two nations.
- Strategic Alliances: The Indian Prime Minister's 2021 G20 summit visit to Italy and the meetings with Italian leaders that followed were historic turning points. Strategic alliances and bilateral agreements were formed, concentrating on different industries such as trade, technology, and defence.
- Economic Cooperation: India's bilateral trade has increased significantly, and Italy has become one of India's main EU economic partners. The focus on economic cooperation has improved relations, as has cooperation in the fields of technology and defence.
- Rethinking Relations with China: With regard to projects like the Belt and Road Initiative (BRI), both Italy and India have reevaluated their relations with China. India's resistance to the BRI because of territorial concerns is consistent with Italy's reevaluation of the initiative, which is motivated by economic disparities and unfulfilled expectations.

- **Collaboration with Other Sectors:**

- Science, Technology, and Research Collaboration: In 2021, both nations formed the first collaborative ASI-ISRO working group in heliophysics and instituted Thematic Working Groups as a means of cooperating between the Indian Space Research Organisation (ISRO) and the Italian Space Agency (ASI).
- The study of how the Sun affects the Solar System is known as heliophysics.
- Collaboration for Counterterrorism and Security: Both parties committed to stepping up their bilateral and international collaboration in the battle against terrorism and transnational crime.
- In order to promote collaboration, knowledge sharing, and capacity building, both countries also decided to host the "India-Italy Joint Working Group on Counter-Terrorism" at its subsequent meeting.
- Regional Cooperation and Connectivity: Italy and India have recognised the potential of recently established international institutions like the International Solar Alliance (ISA) and the Coalition on Disaster Resilient Infrastructures (CDRI).
- India was pleased to see Italy join ISA following ISA's universalization.

- **Way Forward:**

- There is a chance that India and Italy will work together more economically now that Italy is leaving the BRI. Opportunities for trade, investment, and cooperative ventures in industries such as manufacturing, technology, renewable energy, medicines, and infrastructure development might be investigated by both nations.
- India and Italy have the potential to strengthen their strategic alliance in a number of areas, such as cybersecurity, defence, counterterrorism, and marine security. Security ties can be

strengthened by cooperative efforts in information sharing, joint military exercises, and defence manufacture.

- *Source → The Hindu*