2024

DAILY CURRENT AFFAIRS

GS 2: POLITY, GOVERNANCE, SOCIAL JUSTICE, INTERNATIONAL RELATIONS/INSTITUTIONS

1. Nuclear deal in mind US removes curbs on BARC and two others

Context: The US Bureau of Industry and Security (BIS) removed three Indian nuclear entities, Bhabha Atomic Research Centre (BARC), Indira Gandhi Centre for Atomic Research (IGCAR) and the Indian Rare Earth Limited (IREL) from its 'Entity List'. The US Entity list is a list of foreign individuals, Businesses and organisations that are subject to export restrictions and licensing requirements for certain goods and technologies. The list is used ostensibly to prevent unauthorised trade in items that could be diverted to terrorism, weapons of mass destruction (WMD) or other activities that are perceived by the US as going against its foreign policy or national security interests.

Key points

- **Overview:** The US is finalizing measures to ease regulations hindering civil nuclear cooperation with India, as part of advancing the Indo-US nuclear deal.
- **Indo-US Civil Nuclear Deal:** The Indo-US Civil Nuclear Deal, signed in 2008, marked a watershed moment in India-US relations. It allowed India to engage in nuclear trade despite not being a signatory to the Non-Proliferation Treaty (NPT). The agreement granted India access to nuclear fuel, reactors, and technology for civilian purposes while committing to the separation of its civilian and military nuclear programs under IAEA safeguards.

  Progress - The deal received initial enthusiasm, leading to amendments in US laws like the Hyde Act to accommodate India's unique status. India signed agreements with several countries for nuclear fuel and reactor technologies. However, the operationalization of the agreement has been slow, with limited progress in the construction of nuclear reactors or the flow of significant US investments.

  Technological Constraints in India's Nuclear Programme - India's civil nuclear programme primarily relies on Pressurised Heavy Water Reactors (PHWRs) using heavy water and natural uranium. PHWRs are becoming outdated compared to the more widely adopted Light Water Reactors (LWRs), where the US, Russia, and France lead in technology.

- **Key Legal Barriers to Indo-US Civil Nuclear Deal:** *US Regulatory Impediments (10CFR810)* - Part 810 of Title 10, Code of Federal Regulations, under the US Atomic Energy Act of 1954, restricts US nuclear vendors from manufacturing equipment or performing nuclear design work in India. This limitation hinders India's aspiration to participate in the manufacturing value chain and co-produce nuclear components for joint projects.

  India's Civil Liability for Nuclear Damage Act, 2010 - The Act holds suppliers liable for damages in case of a nuclear accident, deterring foreign vendors like GE-Hitachi, Westinghouse, and Orano from investing in India's nuclear sector. Concerns about future liability remain a significant hurdle for international players.

- **New initiatives signed between India and the US:** *Civil Nuclear Cooperation* - US announced to remove restrictions e.g., supply of US nuclear reactors on Indian nuclear entities like Bhabha Atomic Research Centre (BARC) to implement India-US civil nuclear cooperation agreement.

  Sonobuoy Co-Manufacturing - It aims to bolster the Indian Navy's underwater threat detection capabilities, particularly in detecting submarines and other hostile underwater objects.

  Missile Export Control - The US NSA briefed India on updates to missile export controls under the MTCR, enhancing space cooperation and creating new collaboration opportunities.

  Advancement of iCET - Both nations reaffirmed cooperation in emerging technologies such as artificial intelligence, quantum computing, telecommunications, and space.

- **Way forward:** *Reducing Dependency on China* - Sullivan criticized China's "predatory industrial strategies" in sectors like chip manufacturing and clean energy. US companies, including Apple, are diversifying supply chains and expanding into India, with over 25% of iPhones expected to be made in India soon. Sullivan stressed the importance of India-US collaboration to safeguard critical supply chains and technologies.

  Ensuring Dual-Use Technologies' Security - Sullivan highlighted the need to prevent advanced technologies from falling into the wrong hands, referencing Russia and its S-400 air defence system. He underscored India-US cooperation for peace and stability in the Indo-Pacific region.

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2. The red flag as China's expansionist strategy rolls on

Context: India has strongly condemned the recent Chinese actions, asserting that they are illegal and a direct challenge to India's sovereignty. In response to China's ambitious hydropower project, India has expressed concern, noting that it is monitoring the situation and will take necessary measures to safeguard its national interests. These developments are particularly disturbing given the recent consensus on troop disengagement along the Line of Actual Control (LAC). These new moves further underscore the unpredictability of China's approach in the region.

Key points

- **Overview:** India has witnessed two significant incidents of Chinese aggression along the China-India border, highlighting vulnerabilities that not only threaten India's territorial integrity but also undermine its sovereignty.

- **China's Ambitions:** *Superpower Status* - Beijing believes maritime dominance is key to achieving global leadership they feel is their right.
  Resource Access - China's economy is hungry for energy and raw materials. Control over sea lanes secures their supply chain.
  Challenging the Status Quo - China resents the existing US-led maritime order. They want to change the rules in their favour.

- **Belt and Road Initiative (BRI):** *Debt-Trap Diplomacy* - Many BRI projects saddle smaller nations with unsustainable debt, making them vulnerable to Chinese influence. Example: Hambantota Port in Sri Lanka.
  Naval Access - These ports, ostensibly commercial, can easily become dual- use, allowing Chinese warships to refuel, resupply, and extend their presence far from home.

- **String of Pearls:** This strategy isn't formally declared by China, but the pattern is clear-
  - ➢ *Strategic Encirclement* - They build relationships with countries along key sea lanes, establishing a network of potential bases. This constricts India's maritime space.
  - ➢ *Trade Control* - Dominance over these routes lets China pressure trade flows of energy and other resources to its advantage.

- **India-China Border Dispute:** The 3,488-km border is not clearly demarcated throughout and there is no mutually agreed Line of Actual Control (LAC) along certain stretches. LAC that came into existence after the 1962 India-China war is the demarcation that separates Indian-controlled territory from Chinese-controlled territory.

- **India's Strategic Autonomy and rising global footprint:** *India as economic and military power* - China is wary of India's economic and military rise and recent status as the world's most populous country.
  India as a regional democratic power - India presents a sustainable alternative to China's debt-trap policy for neighbouring countries, challenging China's influence.

- **Conclusion:** Going forward, in the words of India's Minister of External Affairs, 'the relationship between India and China is "quite a challenge" since India and China are the two most populous countries of the world, both rising in a broadly parallel timeframe, physically next to each other'. The relationship was profoundly affected by 2020 military standoff as it has always been an assumption by India that peace and tranquillity in the border areas is a prerequisite for the development of bilateral ties. Both countries will also have to look at it slowly and progressively.

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3. Easy access to clean toilets essential for human dignity

Context: The Supreme Court on Wednesday declared that easy access to clean public toilets for all — including men, women, persons with disabilities, and transgender people — is not just a matter of convenience but a basic right and an essential part of human dignity. State governments and Union Territory administrations have an important duty to not only provide easy access to clean washrooms and drinking water to all regardless of their sex or gender but also ensure that these restrooms were maintained throughout the year.

Key points

- **Overview:** For 10 years, the government has embarked on several campaigns of environmental health and development. These included the Swacch Bharat Mission (SBM), the Atal Mission for Rejuvenation and Urban Transformation, the Pradhan Mantri Awas Yojana, and the National Clean Air Programme.

- **Persistent Traditional Beliefs Regarding Sanitation Work:** Sanitation and waste management in India are associated with the wide prevalence of caste. Historically, the subjugated castes have been forced to carry out sanitation work. The SBM tried to create a narrative that sanitation is everyone's job. Instead, it has ended up continuing the same old caste practices.

- **No Universal Access to Toilets:** The Union government claims that India is open defecation-free, but the reality is different. A Comptroller and Auditor General report in 2020 raised many questions about the government's claims over the success of the SBM on this front. It indicated the poor quality of construction of toilets under this scheme.

- **Lack of Sanitation Inspectors:** In March 2024, in the Himachal Pradesh High Court, the Urban Development Department said that there are just five sanitation inspectors in the Shimla Municipal Corporation, which comprises 34 wards. Instead of recruiting more such inspectors, this cadre is being declared dead after they retire.

- **Ways to Improve:** *Focussing on Vulnerable Sections* - While, India has made substantial progress in sanitation coverage, some individuals, households, and community belonging to disadvantage sections of the society such as female-headed household, landless people, migrant labourers, and disable people-still do not have toilets in their home or find the existing toilets not accessible.
  Integration With Public Health Infrastructure - Educational institutions, child-care centres, hospitals, and other government facilities need further development in sanitation practices. Sanitation coverage disaggregated data in public facilities and the government departments requires innovation to make it a long lasting and feasible option, which will be vital in public health infrastructure.
  Robust Waste Management Systems - With pollution levels in cities growing and the overflowing of landfills, there is an urgent requirement to reinvent garbage management in cities so that waste is fully processed and not landfilled.

- **Conclusion:** No doubt, India has made rapid progress to achieve the SDG 6 by increasing nationwide toilet access under SBM. At the same time, India must scrutinize its success within the framework of environment safety and fecal-oral transmission of disease that help, especially to children to spend their childhood free from malnourishment or premature death.

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4. Safeguarding NE's food bowl

Context: Northeast India, a region celebrated for its rich biodiversity and distinct cultural heritage, is increasingly grappling with the adverse impacts of climate change. This ecological upheaval is particularly threatening the region's indigenous food systems, which are deeply intertwined with its natural environment. The region's agriculture, heavily reliant on monsoon rains, is becoming increasingly vulnerable. Erratic rainfall patterns, coupled with frequent and intense floods and droughts, disrupt the traditional agricultural calendar, leading to significant crop failures. Extreme weather events like floods and droughts have become more frequent and intense, further damaging crops and infrastructure. Additionally, climate change is contributing to the proliferation of pests and diseases, further jeopardising food security.

Key points

- **Overview:** According to the World Food Programme, 195 million people in India are undernourished. 43% of children in India are chronically undernourished. India ranks 68 out of 113 major countries in terms of the Global food security index 2022.
- **Need for food security:** *Population Pressure* - With over 1.3 billion people, India has a large and growing population. The increasing demand for food places significant pressure on agricultural production and food resources.
  Agricultural Productivity - India's agricultural sector is characterized by low productivity due to several factors such as fragmented land holdings, inadequate irrigation facilities, lack of modern farming techniques, and limited access to credit and technology.
  Climate Change and Natural Disasters - Erratic weather patterns, including droughts, floods, and extreme temperatures, affect crop yields and livestock productivity.
- **Challenges related to food security:** *Sustainable Agriculture Practices* - Promote sustainable farming practices such as organic farming, agroforestry, and integrated pest management. These practices enhance soil fertility, reduce chemical inputs, and conserve water, leading to increased productivity and resilience.
  Research and Technology - Developing high-yielding crop varieties, drought and pest-resistant seeds, and innovative farming techniques. Encourage the adoption of modern technologies like precision agriculture, remote sensing, and digital farming tools to optimize resource use and improve productivity.
- **National Food Security Act (NFSA), 2013:** The National Food Security Bill, which was passed in India in 2013 and subsequently enacted as the National Food Security Act (NFSA), is a landmark legislation aimed at ensuring food security for the population.
- **Way Forward:** It refers to the state in which all individuals within a country have access to an adequate supply of nutritious food, can afford to purchase high-quality food, and face no obstacles in obtaining it. While those living in poverty often struggle to meet their food needs, even wealthier individuals can experience food insecurity during emergencies or crises. In India, numerous people encounter issues with food and nutrition security, with groups being more severely impacted.

Q. What are the salient features of the National Food Security Act, of 2013? How has the Food Security Bill helped in eliminating hunger and malnutrition in India? (চনৰ ৰাষ্ট্রীয় খাদ্য সুৰক্ষা আইনৰ মুখ্য বৈশিষ্ট্যসমূহ কি কি? খাদ্য সুৰক্ষা বিধেয়কখনে ভাৰতত ক্ষুধা আৰু অপুষ্টি দূৰ কৰাত কেনেদৰে সহায় কৰিছে?)

GS 3: ECONOMY, ECOLOGY, SCIENCE & TECHNOLOGY, DEFENCE, SECURITY AND DISASTER MANAGEMENT
5. 3 warships join Navy, PM says India's key to global security

Context: As Three frontline vessels were commissioned together into the Indian Navy, a historic first for the country. Three frontline combatants – INS Nilgiri, lead ship of the Project 17A stealth frigate class, Ins Surat, fourth and final ship of the Project 15B stealth destroyer class, and INS Vagsheer, sixth and final submarine of the Scorpene-class project were commissioned in the Indian Navy at the Naval Dockyard in Mumbai on Wednesday.

Key points

- **Overview:** This first tri-commissioning of indigenously developed destroyer, frigate and submarine marks a significant step towards realizing India's vision of becoming global leader in naval indigenisation and maritime security.

- **About three frontline naval combatants:** *INS Surat* - 4th and final ship of the P15B Guided Missile Destroyer Project.
  INS Nilgiri - 1st ship of the P17A Stealth Frigate Project designed by the Indian Navy's Warship Design Bureau.
  INS Vaghsheer - 6th and final submarine of the P75 Scorpene Project built by Mumbai-based Mazagon Dock Limited.

- **India's Naval Indigenization efforts:** *Navy's expansion of Make in India Initiative* - Of the 40 naval vessels included in the Navy in the past decade, 39 have been built in Indian shipyards.
  R&D Initiatives - Underwater Domain Awareness (Samudrayaan project), Scientific partnerships with Indian Ocean Rim countries and development of autonomous systems for high-risk environments like, mine detection.

- **Policies:** *Indian Navy's Maritime Capability Perspective Plan (MCPP)* - Targets a force of 200 ships by 2027 with a vision of transforming it from a buyer's navy to a builder's navy.
  Indian Naval Indigenisation Plan (INIP) 2015-2030 - Encourages domestic industries including MSMEs to participate in ship construction.

QUICK FACTS FOR PRELIMS: U.S., JAPAN MOON LANDERS LAUNCH ON SINGLE ROCKET

The US and Japan has launched their "rideshare" to the moon on Wednesday, showcasing the private sector's growing role in space exploration on board the SpaceX Falcon 9 rocket that took off from the Kennedy Space Centre in Florida were Firefly Aerospace's Blue Ghost and ispace's Resilience from Japan, which will also deploy a micro rover. Both uncrewed missions aim to build on the success of Texas-based Intuitive Machines, which last year became the first company to successfully touch down on the Earth's moon.