

YEAR 2023 MARKS 50 YEARS OF DIPLOMATIC RELATIONS BETWEEN INDIA AND QATAR

- India is strengthening its bilateral relations with Qatar. Diplomatic relations between both countries were established in 1973.
- Key areas of engagement
 - > Economic: India's bilateral trade with Qatar in 2021-22 was US\$ 15.03 billion.
 - Qatar's exports to India include LNG, LPG, chemicals and petrochemicals, fertilisers, plastics etc.
 - India's exports to Qatar include cereals, copper articles, iron and steel articles, fruits, spices etc.
 - India-Qatar Start-up bridge is a joint initiative to link the start-up ecosystems of two countries as well as helping their economies mutually.
 - > Defense: India regularly participates in biennial Doha International Maritime Defence Exhibition and Conference (DIMDEX) in Qatar.
 - Za'ir-Al-Bahr (Roar of Sea) is naval exercise between Indian and Qatar Navy.
 - > Diaspora: Over 8 lakhs Indian nationals residing in Qatar. They comprise largest expatriate community in Qatar and are engaged in professions like medicine, engineering etc.
 - > Humanitarian: Qatar Fund for Development (QFFD) sent Covid medical relief material to India for combating second wave of Covid-19.
 - > Education: 14 Indian schools in Qatar are offering CBSE curricula to over 30,000 students, most of whom are children of Indian nationals working in Qatar.

IONAL COUNCIL OF APPLIED ECONOMIC RESEARCH'S (NCAER) RELEASES REPORT NG INDIA A GLOBAL POWFR HOUSF ON FARM MA

- Farm Mechanisation is process of using agricultural machinery to mechanize the work of agriculture, and increasing farm worker productivity.
- > India's farm equipment market is 7 percent of global market, with more than 80 percent of value contribution coming from tractors.
- Major Highlights of report

Challenges of Farm Mechanisation in India	Details	Recommendations
Demand-side	 Small and fragmented land holdings. Practice of subsistence agriculture. Diverse soil conditions and cropping patterns. Lack of access to power. Process of acquiring farm equipment is tedious and cumbersome. 	 Centre and State government may subsidise farmers on consistent basis for next 15 years for farmer mechanisation to reach desired levels. Subsidy should be given for procurement and for renting heavy farm machinery like harvesters. Process of applying/receiving subsidy should be streamlined, simplified and digitised as done in Odisha. Extension programmes for farmers need to be strengthened.
Supply side	 Unaffordable Cost of equipment. Inadequate quantity and quality of service centres for proper maintenance. Banks are reluctant to lend to farmers. Mismatch between needs of Indian farmers and what farm machinery sector is producing. 	 Agricultural universities/institutes should be identified and assigned responsibility for R&D in different agro-economic zones. Logistics needs to be improved especially for transporting heavy machinery. Level-playing field for Indian manufacturers. Testing, specification standardisation & performance requirements, and regulations should be developed in line with global benchmarks.

- Related Term: Package of Practice (PoP)
 - > PoP refers to process of increasing agricultural output by implementing scientific farming methods in place of conventional farming practices. It includes all aspects of farming, right from selection of seed to harvest.







INDIAN SPACE RESEARCH ORGANISATION (ISRO) FINALISED CHANDRAYAAN-3 LANDING SITES COORDINATES

- All the probable three landing sites are on moon's south polar region on the side facing earth.
 - > Landing sites are decided on basis of local and global slope, illumination from sun, radio communication with earth, and crater and boulder sizes.
 - > Prime landing site lies between Manzius U and Boguslawsky M craters (southern pole region) on moon.
- Chandrayaan-3 is a follow-on mission to Chandrayaan-2.
 - > Its primary objective is putting a lander and rover in highlands near south pole of Moon in 2023.
- It consists of Lander and Rover configuration.
 - > Lander: Chandra's Surface Thermophysical Experiment measure thermal conductivity and temperature; Instrument for Lunar Seismic Activity measures seismicity around landing site; Langmuir Probe estimates plasma density and its variations.
- > Rover: Alpha Particle X-ray Spectrometer (APXS) and Laser Induced **Breakdown Spectroscope (LIBS)** for deriving elemental composition in vicinity of landing site.
- It'll be launched by Geosynchronous Satellite Launch Vehicle (GSLV) Mk III from Sriharikota, Andhra Pradesh.
 - > GSLV is a 3-stage rocket, powered by a cryogenic engine.

MINISTRY OF HOME AFFAIRS (MHA) PARLIAMENTARY **CONSULTATIVE** MEETING ON LEFT WING EXTREMISM (LWE)

- MHA highlighted that its policy to deal with LWE has three main pillars which are,
 - > Strategy to curb extremists' Ruthless violence with Approach.
 - > Better coordination between Centre and States.
 - > Eliminating support for LWE through Public participation in development.
- This strategy had catalysed in curbing LWE in past eight years such
- SMART POLICING AND LEADERSHIP **AGGRESSIVE STRATEGY** MOTIVATION AND TRAINING **ACTIONABLE INTELLIGENCE** DASHBOARD FOR DEVELOPMENT AND KEY PERFORMANCE INDICATORS HARNESSING TECHNOLOGY FOR **DEVELOPMENT AND SECURITY ACTION PLAN FOR EACH THEATRE** NO ACCESS TO FINANCING
- > Number of civilian and security personnel killed in LWE incidents declined to 98 in 2022.
- > 76% reduction in violent incidents related to LWE is observed in 2022 in comparison to 2010.
- Number of districts most affected by LWE has reduced to 30 in 2018 and further reduced to 25 since 2021.
- LWE, popularly known as Maoists worldwide and as Naxalism in India, started as an agrarian rebellion in Naxalbari (West Bengal), 1967 against local landlords.
 - > Maoist ideology believes in use of violence and armed insurrection as a means to capture State power.
- Initiatives for LWE affected areas
 - > SAMADHAN strategy to frame short and long-term policies to tackle LWE. (refer image)
 - **Eklavya Model Residential Schools** to promote literacy among tribals.
 - > Security Related Expenditure Scheme and Special Infrastructure Scheme for State Police.

EARLIER CHANDRAYAAN MISSIONS

- Chandrayaan-1 (2008): Successfully inserted into lunar orbit.
- Chandrayaan-2 (2019): Successfully launched and inserted into lunar orbit in 2019, but it's lander crash-landed on the moon's surface due to a software glitch.

NITI AAYOG PROPOSES SETTING **UP SEPARATE CENTRAL BOARD** FOR VOCATIONAL EDUCATION

- NITI Aayog's report titled "Transforming Industrial Training Institutes (ITIs)" had recommended to set up separate board for VE on lines of an education board such as Central Board of Secondary Education.
 - > It will ensure better credibility and recognition of institutes providing VE.
 - > Credit framework implemented through Board will facilitate equivalence and mobility between general and VE and enable lifelong learning.
- VE refers to training in skills and teaching of knowledge related to a specific trade, occupation or vocation.
- Need/Significance of VE
 - > Makes students "work ready" upon graduation by providing practical education in professional environment.
 - ➤ Helps people move forward in their careers.
 - > Programs are often shorter and more **flexible** than college or university programs.
- Issues with VE: Shortage of trainers, absence of qualified trainers, poor infrastructure at training institutes, inflexible and partly obsolete curricula etc.
- Other recommendations highlighted by report
 - > Centralized, web-enabled admission process for filling vacancies of ITIs at pan India level.
 - > Online grievance redressal mechanism to ensure transparency and accountability for resolution of issues in timely manner.
 - > Facilitate Tie-ups with MSMEs.





- Idea has been mooted to set up India's Intranational COP (IndiaCOP), forum similar to GST council, to generate national consensus on India's climate goals and means to achieve them.
 - > It can promote spirit of cooperative and competitive federalism with each state/UT committing bolder actions towards net zero.
- Net zero refers to a state in which greenhouse gases going into atmosphere are balanced by removal out of atmosphere. India aims to achieve net zero emissions by 2070.
- Importance of states/UTs in achieving net zero
 - Though a project is conceived, financed, and implemented by central agencies, site-specific mobilisation of resources requires active cooperation of states/UTs.

SOME EXAMPLES OF ACTIONS TAKEN BY STATES

- Himachal Pradesh: Started "Community Led Assessment, Awareness, Advocacy & Action (CLAP)" **Programme** mission for environment protection and carbon neutrality at panchayat level.
- Sikkim (carbon neutral state): Developed Sikkim Carbon Inventory and Monitoring **System (SCIMS)** to monitor and assess state's carbon emissions.
- > Constitutional provisions, legislations of Parliament, etc. enable states/UTs to have a influence on matters like land, electricity, pollution control etc.
- > Directly support local bodies in innovating customised approaches for adoption of climate goals in line with socioeconomic and cultural sensitivities of region.
- Challenges faced by state/UTs
 - > Lack of climate finance along with limited scientific knowledge, technical and institutional capacity constraints. Absence of concrete strategies.
- Road ahead
 - > Fast-track implementation of climate related actions as part of development planning at sub-national level.
 - > Develop reliable downscaled climate models to predict district and block-specific climate impacts across country.

ALSO IN NEWS



Director General of Police (DGP) appointment

- Nagaland has shown concern over appointment process of DGP, highest police authority of State/UT's.
- DGP appointment is made on basis of Guideline issued by Supreme Court in Prakash Singh vs Union Judgement (2006).
 - > DGP is to be selected by state government from among three-senior most officers whose name has been suggested by UPSC (Issued its guidelines in 2009).
 - > UPSC suggest names on basis of their length of service, very good record and experience (30 years).
 - > DGP should have a **fixed tenure of two years** in the post, irrespective of retirement date.



Joint Parliamentary Committee (JPC)

- Parliament continues to be halt over Opposition's demand for a JPC.
- JPC is an ad-hoc body (dissolved after its term) usually set up for a specific object and duration.
 - > Members are from both Houses and from both ruling parties and opposition.
- > JPC has power to scrutinise documents and summon people for questioning; submits a report and makes recommendations to government.
- > Their recommendations are **not binding on government.**



SEBI proposed institutional mechanism for stock brokers

- In the backdrop of recent volatility in capital market, SEBI proposed institutional mechanism for Stock Brokers to ensure prevention and detection of fraud or market abuse.
 - > Brokers are regulated under SEBI (Stock Brokers) Regulations, 1992.
- Proposed framework
 - > Setting up of Robust Surveillance Systems to detect potential fraud.
 - > Provide protection to whistle blowers.
 - > Escalation and reporting mechanism to detect suspicious trading activities.









International Energy Forum (IEF)

- India hosted 9th Asian Ministerial Energy Roundtable in association with IEF in Bengaluru.
 - > Theme for this roundtable was "Mapping new pathways for energy security, inclusive growth and energy transitions".
- IEF is world's largest international organization of energy ministers from 72 countries (including India) and includes both producing and consuming nations.
 - > Member countries are signatories to IEF Charter, which outlines framework of global energy dialogue through this inter-governmental organization.
 - > HQ: Riyadh, Saudi Arabia.



Spy balloon

- U.S. Air Force fighter jet shot down spy balloon off South Carolina coast.
- Spy balloon is a high-altitude surveillance tool that usually operates at 80,000-120,000 feet.
 - > It gathers intelligence and carry out other military missions.
 - > It is equipped with cameras and imaging devices suspended beneath the gas-filled white object to capture things of interest.
 - > Advantages: Cost-effective in comparison to satellites. Also, scan an area from close quarters and capture clearer, high-resolution images of target.
 - > Disadvantage: Deflected due to wind current.



Bio-Fertilizers

- Biofertilizers are microorganism-containing substances that, when added to soil, increase fertility and promote plant growth.
 - > Biofertilizers are live microbial products which does not contain any nutrients.
- There are 11 bio-fertilizers notified under Fertilizer (Control) Order, 1985 viz.
 - ➤ Rhizobium, Azotobactor, Azospirillum, Phosphate Solubilising Bacteria, Bio-fertilisers, Potassium Mobilizing Bio-fertilizers (KMB), Zinc Solubilizing Biofertilizers (ZSB), Acetobactor, Carrier Based Consortia, Liquid Consortia, and Phosphate Solubilising Fungus.



Integrative Medicine (IM)

- Ministry of Health and Family Welfare and Ministry of Ayush has inaugurated Integrative Medicine (IM) Centre at Safdarjung hospital.
- IM is defined as healing-oriented medicine that takes account of the whole person (body, mind, and spirit), including all aspects of lifestyle.
 - > It emphasizes therapeutic relationship between practitioner and patient, is informed by evidence, and makes use of all appropriate therapies.
 - > IM neither rejects conventional medicine nor accepts alternative therapies uncritically.



Jupiter Moons

- Jupiter, with 92 moons, beats Saturn to become planet with most moons.
- Jupiter is home to first moons discovered in our solar system, functions like a mini solar system.
- Jupiter's four largest moons are called Galilean satellites: Lo, Europa, Ganymede, and Callisto.
 - > Lo is most volcanically active body in solar system.
 - > Europa's surface is mostly water ice.
 - > Ganymede is largest moon in solar system and is only moon known to have its own internally generated magnetic field.
 - > Callisto's surface is extremely heavily cratered and ancient.



Places in news

Argentina (Capital: Buenos Aires)

 Argentina seeks India's support to deploy technologies for facilitating entrepreneurs in Argentina.

Political & Boundaries

- Located in southern part of South America.
- > It is bounded by Chile (south and west), Bolivia and Paraguay (north), and Brazil, Uruguay, and Atlantic Ocean (east).
- > Shares maritime borders with Falkland Islands.
- Geographical features
 - > Divided into four regions: **Andes, North, Pampas, and Patagonia.**
 - > Highest point: Mount Aconcagua.







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ARGENTINA