

WEEKLY UPDATES – (14th-20th Jan)

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ART & CULTURE

India's Oldest Living City Found In Vadnagar: Multi Institution Study

Context: A collaborative study by the Indian Institute of Technology (Kharagpur) and the Archaeological Survey of India (ASI) has unearthed evidence of cultural continuity in Vadnagar, Gujarat, following the collapse of the Harappan civilization. The findings challenge the prevalent notion of a "Dark Age" by demonstrating sustained cultural development in Vadnagar.

Key Highlights of the Excavation at Vadnagar

Age of Settlement

- Evidence reveals a human settlement in Vadnagar dating back to approximately 800 BCE, placing it in the late-Vedic/pre-Buddhist Mahajanapadas or oligarchic republics period.

Climate Influence

- Severe changes in climate, such as variations in rainfall or droughts, are proposed as factors influencing the rise and fall of kingdoms over a 3,000-year period.

Multicultural and Multireligious Settlement

- Vadnagar is characterized as a multicultural and multireligious settlement incorporating Buddhist, Hindu, Jain, and Islamic influences.
- Seven cultural stages, spanning Mauryan to Gaekwad-British colonial rule, were uncovered during excavation.

Archaeological Artifacts

- Various artifacts, including pottery, copper, gold, silver, and iron objects, were discovered.
- Notable findings include intricately designed bangles and coin molds from the Indo-Greek rule.

Buddhist Monastery

- A significant discovery includes one of the oldest Buddhist monasteries in Vadnagar, contributing to the historical and cultural richness of the settlement.

Radiocarbon Dates

- Unpublished radiocarbon dates suggest the settlement's age could be as old as 1400 BCE, challenging the concept of a Dark Age.
- The Dark Age refers to the period between the decline of the Indus Valley Civilization and the emergence of the Iron Age and cities like Gandhar, Koshal, and Avanti.

Archaeological Survey of India (ASI)

- ASI, under the Ministry of Culture, is the premier organization responsible for archaeological research and protection of the nation's cultural heritage.
- Its primary concerns include maintaining ancient monuments, archaeological sites, and remains of national importance.
- **ASI's Regulatory Role:** ASI regulates all archaeological activities in the country as per the provisions of the Ancient Monuments and Archaeological Sites and Remains Act, 1958, along with the Antiquities and Art Treasure Act, 1972.

- **Foundation and Director-General:** Established in 1861 by Alexander Cunningham, considered the "Father of Indian Archaeology."

Who conducted the study?

Leadership and Team Composition

- The excavation was led by the ASI and involved scientists from IIT Kharagpur, Physical Research Laboratory (PRL), Jawaharlal Nehru University (JNU), and Deccan College.
- Funding for the study was provided by the Directorate of Archaeology and Museums (Government of Gujarat).

Significance of the Study

- Fills historical knowledge gaps by providing insights into the period between 1,500 BC and 500 BC.
- Challenges the concept of a Dark Age, proposing cultural continuity over 5,500 years.
- Vadnagar is identified as the oldest living city within a single fortification in India.
- The rarity of archaeological records is highlighted, with Vadnagar potentially dating back to 1400 BCE, challenging previous assumptions.

Jallikattu

Context: Recently, in a jallikattu event, two individuals, including a minor boy, met a tragic end after being gored to death.

Jallikattu	
About	The term "Jallikattu" is a combination of 'Calli' (coins) and 'Kattu' (tie), symbolizing a bundle of coins tied to a bull's horns.
Ancient Tradition	<ul style="list-style-type: none"> • Jallikattu, a competitive bull-taming sport in Tamil Nadu, has a history spanning 2,000 years. • Participants attempt to tame a bull for a prize, with failure leading to the bull owner claiming the reward.
Cattle Breeds for Jallikattu	<ul style="list-style-type: none"> • Native cattle breeds like Kangayam, Pulikulam, Umbalachery, Bargur, and Malai Maadu are specifically raised for Jallikattu, showcasing diversity in participants.
Historical References	<ul style="list-style-type: none"> • The origins of Jallikattu trace back to a Mohenjodaro seal from 2,500 BC to 1,800 BC, known as Eru Thazuval, meaning "embracing the bull." • Mentioned in Silappadikaram, a significant Tamil epic from the Sangam age.

Controversy over Jallikattu

- **HC Verdict:** In 2006, a Madras High Court ruling prohibited events like rekla race and jallikattu, citing safety concerns.
- **Tamil Nadu Regulation of Jallikattu Act (2009):** Enacted in 2009, this act aimed to introduce regulations and safety measures for conducting jallikattu.
- **Jallikattu and Mass Agitations in Tamil Nadu**
 - Supreme Court's ban on jallikattu and similar sports involving animals in Tamil Nadu led to mass agitations.
 - The ban was based on the Prevention of Cruelty to Animals (PCA) Act, 1960, highlighted in the Welfare Board of India vs A. Nagaraja (2014) case.

Bangla for Classical Language, GangaSagar Mela for National Status

Context: West Bengal's Chief Minister made headlines by advocating for classical language status for Bangla, the world's 7th most spoken language. The Chief Minister also sought national fair status for GangaSagar Mela, India's second-largest pilgrimage gathering, held annually during Makar Sankranti.

What is Gangasagar Mela?

- Takes place during mid-January at Sagar Island, confluence of the Ganges and Bay of Bengal.
- India's second-largest pilgrimage gathering after Kumbh Mela.
- Commemorates King Bhagirath's descent of the Ganges to Earth.
- Gangasagar Mela faces challenges due to rising sea levels and beach erosion, despite efforts to counter erosion.

Benefits of National Status

- Elevated status would attract increased central funding and infrastructure development.
- Potential boost to tourism and economic activity in West Bengal.

Other Major Melas in India

Kumbh Mela

- Celebrated every 12 years at four sacred rivers' sites (Allahabad, Haridwar, Ujjain, Nashik).
- Ardha Kumbh Mela held at Haridwar and Allahabad every six years.
- Maha Kumbh held every 144 years.

Pushkar Mela

- Annual five-day camel and livestock fair in Pushkar, Rajasthan.
- One of the world's largest cattle fairs.

Hemis Gompa Fair

- Annual fair in Ladakh commemorating Guru Padmasambhava's birth anniversary.

What are Classical Languages?

About	<ul style="list-style-type: none"> ○ Created in 2004 as a category of languages in India. ○ Criteria for classical language status laid down in 2006; six languages granted status so far.
Criteria	<ul style="list-style-type: none"> ○ High antiquity spanning 1,500–2,000 years. ○ Possession of valuable ancient literature. ○ Presence of an original literary tradition. ○ Distinctness from modern forms.
Benefits	<ul style="list-style-type: none"> ○ Financial assistance for establishing a center of excellence. ○ Opens avenues for awards and UGC to create chairs for scholars.

Conclusion

8th Schedule of Indian Constitution lists 22 official languages of India, including Assamese, Bengali, Gujarati, Hindi, Kannada, Kashmiri, Konkani, Malayalam, Manipuri, Marathi, Nepali, Oriya, Punjabi, Sanskrit, Sindhi, Tamil, Telugu, Urdu, Bodo, Santhali, Maithili, and Dogri.

ENVIRONMENT

Great Indian Bustard

Context: The Supreme Court has directed the Centre to disclose its plans for the conservation of the critically-endangered Great Indian Bustard.

Great Indian Bustard	
About	Considered India's most critically endangered bird and the State bird of Rajasthan.
Flagship Species	Regarded as the flagship grassland species, symbolizing the health of the grassland ecology.
Habitat	Primarily found in Rajasthan and Gujarat, with smaller populations in Maharashtra, Karnataka, and Andhra Pradesh.
Concerns	The proximity of Rajasthan's international border with Pakistan's Sindh and Punjab provinces raises concerns about the vulnerability of the birds to poaching.
Protection Status	<ul style="list-style-type: none"> • IUCN: Critically Endangered. • CITES: Appendix 1. • CMS: Appendix 1 (Convention on Migratory Species). • Wildlife (Protection) Act, 1972: Schedule 1.

Initiatives for GIB Conservation

- **Integrated Development of Wildlife Habitats:** GIB is included in the species recovery program under the Integrated Development of Wildlife Habitats by the Ministry of Environment, Forests, and Climate Change (MoEFCC).
- **Conservation Breeding Facility:** A conservation breeding facility was established in the Desert National Park at Jaisalmer in June 2019 through collaboration between MoEF&CC, Rajasthan government, and the Wildlife Institute of India (WII).
- **Project Great Indian Bustard:** Launched by the Rajasthan government with the goal of constructing breeding enclosures and developing infrastructure to alleviate human pressure on GIB habitats.

POLITY

Understanding the Tenth Schedule

Context: The Maharashtra Assembly Speaker has refused to disqualify 40 MLAs associated with the Eknath Shinde faction, acknowledging it as the authentic Shiv Sena.

10th Schedule of Constitution

About	<ul style="list-style-type: none"> ○ The Tenth Schedule was introduced in response to political instability caused by defections during the 1960s and 70s. ○ Defections led to the downfall of elected governments.
Objective	<ul style="list-style-type: none"> ○ The 52nd constitutional amendment in 1985 introduced the Tenth Schedule. ○ Aims to ensure stability in elected governments through an 'anti-defection' law.
Provisions	<ul style="list-style-type: none"> ○ Members abandoning their party or voting against party instructions face disqualification. ○ Party instructions issued by the 'whip' appointed by the 'political party.'

Distinction Between Political and Legislature Party	<ul style="list-style-type: none"> 'Political party' includes the entire organization, while 'legislature party' comprises party members in a Parliament or State legislature.
Original Tenth Schedule	<ul style="list-style-type: none"> Two exceptions to disqualification: one-third members splitting to form a separate group and party merger approved by two-thirds of its 'legislature party.' Para 3 omitted in 2003.

Instances of Party Mergers and Challenges

Cases like the merger of BSP MLAs with Congress in Rajasthan (2019) and Congress MLAs with BJP in Goa (2022) highlight challenges in implementing the 'anti-defection' law.

Disqualification Process

- The Speaker of the House holds the authority to decide on disqualification.
- Concerns about neutrality have arisen, with a tendency to favor the ruling dispensation observed in past instances.

Constitutional Amendment Recommendations

- In the K. M. Singh versus Speaker of Manipur (2020) case, the Supreme Court recommended constitutional amendments.
- Suggested transferring the powers of disqualification decisions from the Speaker to an independent tribunal headed by judges.

Dispute Over Minority Status of AMU

Context: The Supreme Court (SC) recently noted that an educational institution, specifically Aligarh Muslim University (AMU), doesn't lose its minority status merely due to statutory regulation of its administration.

Centre's Stand on Minority Educational Institutions

- The Centre, in front of the SC, clarified that minority educational institutions are not obligated to implement the reservation policy under the Central Educational Institute (Reservation in Admission) Act, 2006.

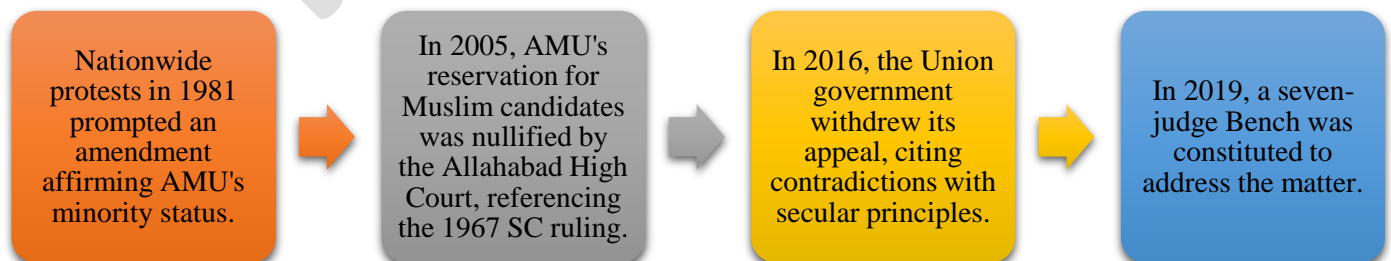
Origin of Dispute

- Legal challenges to the AMU Act of 1920 arose in 1967, particularly related to amendments made in 1951 and 1965.
- Changes included allowing non-Muslims in the University Court and reducing its authority.
- SC's 1967 ruling emphasized that AMU, as a central university, couldn't be considered a minority institution.

History of AMU

- The roots trace back to the Muhammadan Anglo-Oriental (MOA) College, established in 1875 by Sir Syed Ahmad Khan.
- AMU gained university status in 1920 through an Act, inheriting assets and functions from the MOA College.

Dispute Evolution



Supreme Court Observations

Minority Status and Statutory Regulation

- SC emphasized that statutory regulation doesn't diminish an institution's minority status.
- Article 30 of the Constitution doesn't mandate exclusive administration by the minority community.

Secular Administration for Minority Institutions

- Minority institutions can have secular administration, admitting students from diverse communities.
- The presence of majority community office-bearers doesn't necessarily dilute minority character.

Constitutional and Statutory Provisions

- Article 29 protects distinct language, script, or culture rights for citizens.
- Article 30 empowers religious and linguistic minorities to establish and administer educational institutions.
- The scope of Article 29 isn't limited to minorities, as it includes both minorities and the majority.
- Various articles like 25, 26, 27, and 28 ensure freedom of religion and charitable purposes.

National Commission for Minorities (NCM)

- Established in 1992, the NCM advises on the welfare of minority communities.
- Initially, Muslims, Christians, Sikhs, Buddhists, and Parsis were notified as minority communities, later joined by Jains in 2014.

The SC's observations aim to clarify the nuanced relationship between minority institutions, statutory regulations, and constitutional safeguards.

GOVERNANCE

What Are The Complaints About Digi Yatra?

Context: Air travelers are expressing privacy concerns on social media regarding the aggressive promotion of the Digi Yatra initiative at airports by security personnel.

Introduction to Digi Yatra

- Digi Yatra is a government-backed initiative aimed at streamlining air travel by allowing passengers to use facial biometrics for various checkpoints.
- Key pillars include Connected Passengers, Connected Airports, Connected Flying, and Connected Systems.
- Targets both Indian citizens (with or without Digi Yatra ID) and foreign nationals.
- Operated by the DigiYatra Foundation under the Ministry of Civil Aviation, funded by airports (not the government).

Enrollment and Usage

- Passengers are required to scan boarding passes and faces at the first entry point, creating a biometric face token for subsequent checkpoints.
- As of August 10, 2023, 34,60,454 passengers enrolled, with 1.29 million using the Digi Yatra mobile app.

Problems Associated

Unauthorized Data Collection	Enrollment Drive Explanation	Data Collection Process	Privacy Concerns
<ul style="list-style-type: none"> • Reports of security personnel collecting facial biometrics without passengers' consent. • Complaints about coercive and deceptive enrollment practices by private staff and Central Industrial Security Force (CISF) personnel. 	<ul style="list-style-type: none"> • CEO of Digi Yatra Foundation clarified the surge in enrollment was part of a "day of travel" drive to let passengers experience and understand the benefits. 	<ul style="list-style-type: none"> • Passengers register on the app, providing personal details and a selfie for facial recognition. • Facial scans and boarding pass scans create a unique travel ID for subsequent checkpoints. 	<ul style="list-style-type: none"> • Concerns about data protection despite the government's claim of no central storage. • Mention of adherence to data protection laws in the Digi Yatra policy, but uncertainties due to the absence of finalized rules. • User complaints about lack of trust in securely maintaining privacy data, citing instances of data breaches and exemptions for airports to share data.

Significance

Aims to improve operational efficiency and enhance security by allowing faster processing of passengers and preventing boarding pass exchanges.

About Digi Yatra Foundation

- Not-for-profit organization founded to implement the Digital Yatra Central Ecosystem.
- Shareholders include Airport Authority of India (AAI), Cochin International Airport (CIAL), Bangalore International Airport (BIAL), Delhi International Airport Ltd. (DIAL), Hyderabad International Airport Ltd (HIAL), and Mumbai International Airport Ltd (MIAL).
- Objective is the rollout of the "Digi Yatra" system with a digital ID backed by verifiable government-issued identities like Aadhaar, passport, and others.

The Delusion Of Eliminating 'the Last Terrorist'

Context: The Director General of Police in Jammu and Kashmir reported a significant decrease in civilian killings and attacks on forces in 2023.

Terror Situation in Jammu and Kashmir

- Active terrorists reduced to 31, with 4 in Jammu region, an all-time low.
- In 2023, 76 terrorists (55 foreigners) killed; 4 policemen also lost their lives.
- Targeted attacks on civilians dropped from 31 (2022) to 14 (2023).
- Recruitment declined to 20 (2023) from 130 (2022), an 80% decrease.
- DGP warns of a potential rise in terrorist numbers in 2024.

Challenges in Counter-Insurgency	
Ineffectiveness of Killing Approach	<ul style="list-style-type: none"> • Critics argue focusing solely on killing terrorists is futile. • Instances like Rajouri-Poonch show insurgency declining without addressing the root problem.
Influence of Tangibles	<ul style="list-style-type: none"> • Decline in terrorist incidents may lead to a disregard for means in pursuit of tangible results.

	<ul style="list-style-type: none"> • Factors like limited tenures, short-term gains, competition, and a false sense of glory impact counter-insurgency approaches.
Reluctance to Adapt	<ul style="list-style-type: none"> • Despite varying fatalities, security forces' modus operandi remains unchanged, affecting peacebuilding efforts.
Need for People-Centric Approach	<ul style="list-style-type: none"> • Tactical operations should be people-centric, but a focus on performance often sacrifices people's aspirations. • Lack of alignment between formulated people-centric policies and execution.

Government's Future Approach

Defending People and Dignity

The primary goal of security forces is to defend people and their dignity.

Political leadership should bridge the gap between people's interests and soldiers' sacrifices.

Conflict Management

Security forces should manage the conflict, paving the way for political processes with increased people participation.

Political Initiatives

Strong political initiatives are necessary to strengthen people's voices.

Whole-of-Government Approach

A comprehensive approach is needed to address terrorism, focusing on sustainable peace rather than eliminating terrorists.

Operation Sadhbhavana

- **Overview:** Indian Army's goodwill initiative focusing on Topa Pir village in Poonch, Jammu and Kashmir.
- **Objectives:** Achieve national integration, women empowerment, employment generation, and national building.
- **Collaborative Approach:** Projects aligned with local aspirations, coordinated with civil administration.
 - Aims to transform Topa Pir into a model village with community development.

Conclusion

The decline in terrorist activities prompts a reevaluation of counter-insurgency strategies. Advocates for a people-centric approach addressing root causes and ensuring long-term stability through political initiatives. Emphasizes the need for a comprehensive, whole-of-government approach for sustainable peace in Jammu and Kashmir.

Concerns Related to Anganwadi Workers

Context: Andhra Pradesh's anganwadi workers are on strike in protest of their pay and benefits. The protesting Anganwadi staff and assistants have been subject to legal action by the State government under the Essential Services and Maintenance Act (ESMA), 1971. Citing the effects of their ongoing indefinite strike on the Integrated Child Development Services (ICDS) at Anganwadi Centers, the ruling forbids them from going on strike for six months in the State.

What Are the Services Offered by Anganwadi and What Do Anganwadi Workers Do?

- In India, the ICDS program was introduced on October 2, 1975. The services are now provided as part of Saksham Anganwadi and Poshan 2.0 after being renamed Anganwadi Services.
- It is a State-/Unit-sponsored program that offers early childhood development and care to eligible beneficiaries, including children aged 0 to 6, pregnant women, and nursing mothers, via a vast network of Anganwadi workers (AWW) and Helpers (AWH).

Services That Anganwadi Offers

- It has been made available to all eligible recipients, including children between the ages of 0 and 6, expectant moms, and nursing mothers, via the nationwide network of Anganwadi Centers.
- The National Rural Health Mission & Public Health Infrastructure offers three services that are related to health: health check-ups, referral services, and immunizations.
- ICT infrastructure Poshan Tracker was created to record data in real-time on the nation's Anganwadi Service deployment and monitoring.
- It offers a full beneficiary management perspective, as well as a 360-degree view of the Anganwadi Center's (AWC) operations and the services provided by AWWs.

Principal Duties and Functions of AWWs



- **Enrolling Recipients:** Determining and registering children under six years old, expectant moms, and nursing mothers who qualify for ICDS services.
- Raising community knowledge of ICDS programs, encouraging healthy lifestyle choices, and supporting community involvement in Anganwadi activities are all examples of mobilizing communities.
- **Early Childhood Education and Daycare:** Running Anganwadi Centers making sure the facility is hygienic and clean, keeping records, and putting together instructional materials.
- **Preschool Education:** Educating young children through storytelling, age-appropriate play, and fundamental learning activities to get them ready for official schooling.
- **Monitoring Growth and Development:** this involves taking regular measurements of children's weight and height, spotting any developmental delays, and, if necessary, referring them for additional interventions.
- **Counselling Parents:** Offering direction on healthy habits, kid nutrition, and daycare procedures.
- **Health and Nutrition:** Supplementary Nutrition Distribution: Providing hot meals, take-home rations, and nutritional supplements to combat malnutrition, particularly in children under six years old and pregnant and nursing mothers.
- **Performing Basic Health Checkups:** Checking children's health for common ailments, and making referrals to medical facilities when necessary.
- Additionally, to provide direction for Accredited Social Health Activists (ASHA) working with the National Rural Health Mission as they provide medical services.
- **Immunization:** Helping medical professionals plan and carry out childhood vaccination drives to guarantee vaccines in a timely manner.
- **Increasing Awareness:** Teaching moms and local communities about sanitation, health, and well-being of their children.

What Are the Main Obstacles Faced by AWWs?

- **Poor Pay:** Anganwadi workers receive a monthly honorarium that is frequently between Rs. 5,000 and Rs. 10,000, which is far less than the minimum wage in many states. They are also not recognized as government employees.
- They find it challenging to provide for their fundamental requirements as a result, and they become discouraged from giving their employment their all.
- They frequently experience delays in obtaining their honorarium, which exacerbates their financial difficulties and instability.
- **Overworked and overburdened:** Anganwadi personnel are given a lot of responsibilities. Additionally, state governments frequently give them extra work without paying them extra for it, including tasks linked to COVID-19, the Census, or implementing government programs like Ayushman Bharat.
- Their ability to provide high-quality services is hampered by their heavy workload, which frequently causes burnout.
- **Lack of Resources and Training:** Although Anganwadi workers receive some initial training, it frequently falls short of providing them with the necessary tools to manage the challenging duties they encounter daily.
- Moreover, Anganwadi centres sometimes lack basic supplies including appropriate buildings, instructional materials, and medications, which makes it harder for them to run efficiently.
- **Lack of Social Respect and Recognition:** Despite their important contributions to the community, Anganwadi workers frequently experience social stigma and a lack of appreciation. It may have a detrimental effect on their motivation and morale.

The Way Ahead

Increased Salary and Benefits

Advancement and
Acknowledgment in the
Profession

Better Resources and Working
Conditions

- **Increased Salary and Benefits:** It includes timely, equitable salary adjustments that reflect the cost of living. Strong social security benefits, such as maternity leave, provident fund, and health insurance should be introduced.
- **Advancement and Acknowledgment in the Profession:** Specific career advancement routes with chances for promotion. Frequent, comprehensive training courses including early childhood education, health, nutrition, and child development.
- **Better Resources and Working Conditions:** Optimize personnel numbers combined with extra Anganwadi assistants to lessen the workload. Update Anganwadi centres with better furnishings, technology, and educational resources. Tech-enabled methods for effective communication, monitoring, and record-keeping should be introduced.

INTERNATIONAL RELATIONS

U.S.-India Social Security Totalisation Agreement

Context: The agreement is a proposed arrangement between the U.S. and India to address social security contributions made by expatriates. The goal is to exempt expatriates from contributing to the social security scheme of the host country.

Katherine Tai's Involvement

- Katherine Tai, the United States Trade Representative (USTR), acknowledged receiving essential information from India about the proposed agreement.
- She highlighted the need for further work despite having the necessary data to advance negotiations.
- Katherine Tai made her statement during the 14th meeting of the Trade Policy Forum (TPF) between the U.S. and India.

- The meeting was co-chaired by Katherine Tai and India's Minister of Commerce and Industry, Piyush Goyal.

Status of the Agreement

- The agreement is currently in the initial stages of negotiation.
- India has provided relevant data on its social security schemes, and the U.S. is reviewing this information for further discussions.

Impact on Services Trade

- The agreement is expected to significantly enhance services trade between the U.S. and India.
- By resolving the social security contribution issue, it could encourage more Indian professionals to work in the U.S., benefiting both economies.

Primary Beneficiaries

- Temporary and short-term workers, especially from India, working in the U.S. are the primary beneficiaries of the agreement.
- Exemption from dual social security contributions provides significant financial relief.
- Increased economic efficiency by eliminating the obligation to contribute to two different social security systems.
- Encourages mobility for professionals and is likely to benefit the IT sector.

Key Highlights

Key Asks in Trade Policy Forum

- The social security totalisation agreement is one of the key requests from India in the Trade Policy Forum meeting.

Data Submission by India

- India has submitted all relevant data on its social security schemes, initiating negotiations on the agreement.

Objective of India-US TPF

- The Trade Policy Forum aims to activate working groups in various sectors and address mutual concerns for the benefit of both countries.

Impact on India-U.S. Relations

- The agreement is a significant step in strengthening economic and trade relations between India and the U.S.
- It addresses a long-standing issue affecting skilled professionals' mobility, fostering a more conducive environment for bilateral cooperation.

Why has South Africa dragged Israel to the ICJ?

Context: South Africa invoked the Genocide Convention, 1948, against Israel at the International Court of Justice (ICJ), accusing it of committing genocide during the Gaza military campaign.

What is ICJ?

- World's court and principal judicial organ of the United Nations, not located in New York.
- Composed of 15 judges elected to 9-year terms by the UN General Assembly (UNGA) and the Security Council.
- Elections conducted triennially, with five judges elected every three years for a nine-year term.

Two types of jurisdiction

Contentious (resolving legal disputes between consenting states)

Advisory (opinions on legal questions for UN bodies)

ICJ's Role and Significance

- Hears cases related to war crimes, illegal state interference, ethnic cleansing, etc.
- Settles legal disputes between states, gives advisory opinions to the UN and specialized agencies.
- Rules only on cases involving nations, not individuals or private entities.
- The court's judgments are final and binding, but enforcement depends on states' compliance.

Concerns About ICJ

- Non-compliance issues as enforcement lies with the UN Security Council (UNSC).
- Non-participation of powerful states like Russia and the US in certain cases.
- Lengthy procedures, as seen in past cases like Bosnia-Serbia.

Why South Africa Approached ICJ?

- South Africa seeks provisional measures under the Genocide Convention to stop alleged genocide by Israel in Gaza.
- Accuses Israel of causing hunger, dehydration, and starvation in Gaza, hindering humanitarian assistance, and failing to provide shelter to Palestinians.

Israel's Response

- Israel denies genocidal intent, claims self-defense against Hamas, and argues its actions are lawful.
- Disputes South Africa's reliance on Hamas-provided statistics about casualties.

Genocide Convention, 1948

- Codified the crime of genocide in 1948.
- As of 2022, 152 state parties.
- Defines genocide as acts with intent to destroy a national, ethnic, racial, or religious group.

What Lies Ahead?

- ICJ may issue provisional measures, but enforcement depends on the UNSC.
- The potential for a U.S. veto if the ICJ rules against Israel.
- Calls for a decentralized judiciary to foster judicial independence.

Denmark's Green Fuels Alliance To Boost Sustainable Energy Solutions Sector

Context: India and Denmark announced the Green Fuels Alliance India (GFAI) to enhance collaboration in sustainable energy solutions and work towards carbon neutrality. The Green Strategic Partnership (GSP) signed in 2020 lays the foundation for the GFAI.

Green Fuels Alliance India (GFAI)	
Definition	Strategic collaboration between India and Denmark in the sustainable energy sector, led by the Consulate General of Denmark and the Embassy of Denmark.
Aim	Foster innovation, collaboration, and partnerships between Danish and Indian industries, specifically focusing on the green fuels sector, including green hydrogen.
Objectives	Promote sustainable energy growth in India through an ecosystem fostering collaboration among businesses, government entities, research institutions, and financial stakeholders.

Members	<ul style="list-style-type: none"> ○ Founding members include Maersk, Topsoe, Umwelt Energy, Mash Makes, European Sustainable Solutions, Novozymes, Danfoss, Brdr. Christensen, and Hydrogen Denmark. ○ Advisory Board members include India Hydrogen Alliance, Energy Consortium at the Indian Institute of Technology-Madras, Danish Energy Agency, and State of Green.
Key Features	<ul style="list-style-type: none"> ○ Steering Committee, led by Danish businesses and coordinated by the Secretariat at the Danish Consulate, Bangalore. ○ Advisory Board comprising industry experts to ensure initiatives align with industry requirements and trends. ○ Collaborative initiatives inspired by existing programs like the India-Denmark Energy Partnership and joint R&D efforts on Green Fuels.

Green Strategic Partnership

Definition	Focus	Ambitious Goals	Mechanisms
<ul style="list-style-type: none"> • Mutually beneficial agreement between India and Denmark to enhance political cooperation, expand economic relations, promote green growth, create jobs, and address global challenges. • Launched during the Virtual Summit in September 2020 between the Prime Ministers of India and Denmark. 	<ul style="list-style-type: none"> • Promotion of green and sustainable development. • Implementation of the Paris Agreement and UN Sustainable Development Goals (SDGs). 	<ul style="list-style-type: none"> • India aims for net zero emissions by 2070. • Denmark targets a 70% reduction in CO2 emissions by 2030 and international leadership on SDG 7 (affordable and clean energy). 	<ul style="list-style-type: none"> • Exchange of ideas, best practices, knowledge, and capacity building. • Collaboration through the Joint Commission for Cooperation and existing joint working groups.

Significance

- International collaboration aids in implementing the global green transition.
- Danish expertise contributes to India's green development.
- India's favorable conditions for renewable energy production align with Denmark's renewable energy leadership.
- Denmark's goal of 100% renewable energy by 2030 makes it a valuable partner for India's green transition.

Conclusion

The Green Fuels Alliance India represents a pioneering collaboration between India and Denmark in advancing sustainable energy. With ambitious goals and shared expertise, the initiative aims to drive innovation and propel India towards carbon neutrality, benefiting from Denmark's support.

SCIENCE & TECHNOLOGY

Quantum Gates: Devices That Translate Quantum Effects To Computing Awesomeness

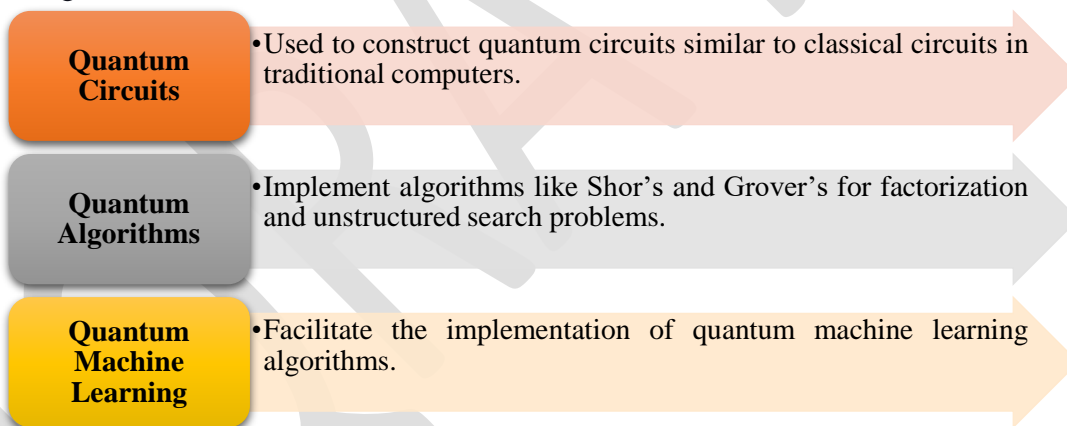
Context: Quantum gates and its technological applications are gaining momentum in the country.

About Quantum Gates

Quantum gates are physical processes or circuits altering the state of qubits or groups of qubits. Electromagnetic pulses often serve as gates when particles or superconducting qubits are the physical qubits.

- **Operations and Quantum Circuits**
 - They perform operations on qubits, enabling the creation of quantum circuits for intricate calculations.
 - Quantum algorithms, like those using Hadamard gates and CNOT gates, can be implemented through these operations.
 - Unlike classical bits, qubits can exist in superpositions of 0 and 1 simultaneously.
- **CNOT Gate**
 - Acts on two qubits: a control qubit and a target qubit.
 - Control qubit remains unaffected, while the target qubit flips if the control qubit is in the state of 1.
- **Comparison with Classical Bits**
 - In classical computing, bits can only be in a state of 0 or 1, whereas qubits exhibit superposition.
- **Challenges with Transistors**
 - Traditional computers use semiconductor transistors, but they become unreliable for computational tasks as they get smaller.
 - Quantum effects become more pronounced in smaller transistors.
- **Privacy Concerns and Superposition**
 - Superposition accelerates quantum computers but is fragile, degrading when qubits interact with the environment.
 - Privacy concerns arise due to uncertainties in data protection.

Applications of Quantum Gates



Challenges in Quantum Computing Sector

Engineering Challenges

Error Correction Challenges

India-Specific Challenges

- **Engineering Challenges**
 - Reliable quantum computers need at least 1,000 qubits; current processors are smaller.
 - Qubits require specific conditions such as very low temperatures and protection against physical shock.
- **Error Correction Challenges**
 - No-cloning theorem poses challenges in perfectly cloning qubit states.
 - Quantum computers amplify errors when more qubits are added.
- **India-Specific Challenges**
 - Shortage of candidates with expertise in quantum physics, engineering, and statistics.

- Lack of domestic manufacturing capabilities for quantum computing hardware.
- Absence of clarity on short or long-term quantum applications.

National Quantum Mission (NQM)

Objective	<ul style="list-style-type: none"> • Strengthen India's quantum research and development. • Indigenously develop quantum-based computers.
Deliverables	<ul style="list-style-type: none"> • Develop intermediate-scale quantum computers in various platforms. • Establish satellite-based secure quantum communications and quantum networks. • Develop magnetometers, atomic clocks, and quantum materials.
Thematic Hubs	<ul style="list-style-type: none"> • Four thematic hubs focusing on Quantum Computing, Quantum Communication, Quantum Sensing & Metrology, and Quantum Materials & Devices.
Benefits	<ul style="list-style-type: none"> • Accelerate quantum technology-led economic growth. • Address communication, health, financial, and energy sectors. • Contribute to national priorities like digital India and Make in India.

Challenges in Quantum Computing Development

- **Real-World Problem Solving:** Prototype quantum computers have not proven helpful in solving real-world issues.
- **Extreme Conditions Requirement:** Current quantum systems require extremely cold conditions for operation.
- **Engineering Limitations:** Practical quantum computers need at least 1,000 qubits; current processors fall short.
- **Disturbance and Error Correction:** Qubits in superposition are sensitive to disturbances, making error correction challenging. No-cloning theorem makes perfect copies impossible, amplifying errors in quantum computers.

Quantum gates represent a significant advancement in quantum computing. Challenges, from engineering limitations to skill shortages, highlight the need for strategic planning in India's quantum technology development.

REPORT & INDEX

Global Surgery: Why Access To Essential Surgery Is Important?

Context: Lancet Commission on Global Surgery (LCoGS) reports that over 70% of the global population lacks timely access to safe and affordable surgical care.

What is Global Surgery?

- Focuses on equitable access to emergency and essential surgery, primarily targeting low and middle-income countries (LMICs).
- Addresses access disparities in high-income countries and includes surgeries, obstetrics, trauma, and anesthesia (SOTA).

Historical Background

- Recognized globally in 2015 as a critical component of healthcare.
- Traces its roots to earlier decades with knowledge sharing and training under surgical missions in humanitarian settings.

Developments in 2015

- World Bank-sponsored Disease Control Priorities Network (DCPN) identifies emergency and essential surgical care as cost-effective.
- Lancet Commission on Global Surgery formed to assess global surgical care, develop indicators, and propose implementable strategies like the national surgical, obstetrics, and anesthesia plan (NSOAP).
- WHO Resolution 68.15 - Declaration on Safe Surgery passed, recognizing the importance of emergency and essential surgical systems for universal health coverage.

Challenges Faced

Global Disparity

Disease Burden

Economic Burden

- **Global Disparity:** Over 70% (5 billion) lack timely access, with 99% and 96% facing access gaps in low and lower-middle-income countries.
 - South Asia, with 1.6 billion affected, highlights a significant lack of access to safe and affordable SOTA care.
- **Disease Burden:** In 2010, surgically treatable conditions caused 17 million deaths, surpassing combined mortality from HIV/AIDS, tuberculosis, and malaria.
 - Peri-operative mortality identified as the third most common cause of death, linked to factors like lack of timely care and limited surgical system capacity.
 - South Asia carries a high disease burden in various categories.
- **Economic Burden:** Projected cumulative GDP loss of \$20.7 trillion by 2030 due to the absence of surgical care scale-up in 128 countries.
 - Annual loss in societal welfare of about \$14.5 trillion, with South Asia contributing 7% to the global lost welfare.

Neglect of the Sector

- **In Policy Formulation:** Globally, surgery contributes to less than 1% of indicators in World Bank, WHO, UNICEF, and other reports.
 - National Health Strategic Plans in 43 African countries show neglect, with 19% not mentioning surgery, and 63% mentioning it five times or less.
 - In India, National Health Policy (2017) and new NCD guidelines exhibit a lack of focus on surgery.
- **In Funding:** Developmental Assistance for Health (DAH) contributions reveal inadequate funding for surgery compared to other health areas.
 - Philanthropic funds mainly support infrastructure and training for local surgical providers.
- **In Research:** Only 1.5% of global health titles in the Pubmed database are related to global surgery.
 - Limited funding, with just \$22 million of \$750 million NIH projects related to surgery.

Surgical Care in India: Status

- In 2019-2020, India recorded over 14 million minor surgeries, insufficient according to LCoGS requirements.
- Low rate of surgeries per 1 lakh people, ranging from 166 to 3,646, compared to HICs like New Zealand with 5,000 surgeries per 1 lakh people.

Challenges

Lack of Access

Neglect in Policymaking

Resource Crunch

- **Lack of Access**
 - Over 90% of rural Indians lack access to surgery when needed.
 - Factors such as location and income impact access to surgical care.
- **Neglect in Policymaking**
 - National Health Policy shows limited attention to surgical care.
 - Absence of NSOAP despite its importance according to LCoGS.
- **Resource Crunch**
 - Insufficient facilities, including transport and road infrastructure, and inadequate resources like manpower and equipment.
 - Lack of investment affecting monitoring and evaluation of surgical care indicators.
 - Increased financial burden on patients due to the absence of universal health coverage.

Way Forward

- **Scaling Up at District Level**
 - DCPN suggests scaling up surgical services at district hospitals to alleviate the disease burden in LMICs.
- **Implementation of NSOAPs**
 - Countries should adopt NSOAPs, similar to African nations, to provide surgical care.
 - Examples include India's Pradhan Mantri Jan Arogya Yojana, providing surgeries at minimal or zero cost.
- **Data Collection**
 - Subnational data collection on surgical care indicators is crucial for policy development and action.
 - India, among at least 30 LMICs, accumulates such data.
- **Support to Research and Innovation**
 - Boost research, innovation, financing, and policy focus to address global surgery challenges.

Global neglect of surgical care, despite its crucial role, poses challenges, especially for LMICs. Urgent attention to policy, funding, and research is needed to handle the significant disease and economic burdens. Implementation of national plans, data collection, and fostering innovation are essential for equitable access to surgical care.

Annual Status of Education Report 2023

Context: The NGO Pratham recently released the 18th Annual Status of Education Report (ASER) 2023, titled 'Beyond Basics,' discussing students' activities, basic and applied reading and math abilities, and digital awareness and skills.

Annual Status of Education Report (ASER)

ASER is an annual citizen-led household survey focusing on understanding the enrollment and learning status of children in rural India. Conducted annually since 2005, it is the largest citizen-led survey in India, providing representative estimates at the national, state, and district levels. Surveys cover children aged 3-16, assessing enrollment and basic reading and arithmetic levels of those aged 5-16.

Key Highlights of ASER 2023

- **Enrollment Rates:** Overall, 86.8% of 14-18-year-olds are enrolled, with differences noted by age and gender. Notable variations include 3.9% of 14-year-olds and 32.6% of 18-year-olds not enrolled.
- **Vocational Training:** Only 5.6% are undergoing vocational training, more prevalent among college-level students (16.2%).
- **Basic Abilities:** Approximately 25% of youth struggle with reading Class II level text fluently in their regional language. Over half face challenges with division problems (3-digit by 1-digit).
- **Language and Arithmetic Skills:** Females outperform males in reading; males excel in arithmetic and English reading. 57.3% can read sentences in English, and almost three-quarters understand their meanings.
- **Digital Awareness and Skills:** Close to 90% have smartphones; males (43.7%) more likely to own one compared to females (19.8%). Males outperform females in digital tasks; boys more familiar with online safety settings.
- **Foundational Numeracy Skills:** Over 50% face difficulties with elementary division; 45% struggle with calculating hours slept based on bedtime and wake-up time.

Recommendations

- Government efforts needed to bridge foundational literacy and numeracy gaps for the 14-18 age group.
- NEP 2020 recognizes the need for 'catch-up' programs.
- Emphasis on initiatives improving foundational literacy and numeracy for practical use.

Digital Education

- Almost 90% have smartphone access, indicating widespread digital connectivity.

- Gender gap in digital literacy; boys more likely to own smartphones and outperform girls in digital tasks.
- Boys more familiar with online safety; a need for targeted efforts to educate and empower girls.

Issues Faced by Elementary Education in India

School Infrastructure

- Despite improvements, concerns about amenities; over 10% lack electricity.
- More than 60% of schools lack computers; 90% without internet facilities.

Shift Towards Private Schools

- Momentum shift towards private schools; government school share decreased from 87% in 2006 to 62% in March 2020.

Teacher Shortage and Quality

- Shortage of teachers; high student-teacher ratio.
- Quality varies; social divides impact education quality.

How Can India Enhance Basic Education?

- Increase funding to 6% of GDP, focusing on infrastructure, teacher training, and amenities.
- Recruit and train qualified teachers, addressing dropout causes, and promoting infrastructure development.
- Emphasize quality education, child-centered teaching, and technology integration.

Multidimensional Poverty Index: NITI Ayog

Context: NITI Aayog has recently released a Discussion Paper titled 'Multidimensional Poverty in India since 2005-06,' revealing that 24.82 crore people escaped Multidimensional Poverty in the last nine years.

National Multidimensional Poverty Index

The National Multidimensional Poverty Index measures deprivations in Health, Education, and Standard of Living using 12 Sustainable Development Goals-aligned indicators.

- Indicators include

Nutrition	Child and Adolescent mortality	Maternal Health	Years of schooling	School Attendance	Cooking fuel
Sanitation	Drinking water	Electricity	Housing	Assets	Bank Accounts

- Based on the Alkire and Foster method, it offers a perspective beyond monetary poverty measures, covering two more indicators than the global MPI.

Key Highlights of the Multidimensional Poverty Index in India Since 2005-2006

- **Overall Decline in Multidimensional Poverty**
 - India experienced a substantial reduction in multidimensional poverty from 29.17% in 2013-14 to 11.28% in 2022-23, marking a 17.89% decrease.
 - Approximately 24.82 crore people escaped multidimensional poverty in the last nine years.
- **State-wise Decline**
 - Uttar Pradesh, Bihar, Madhya Pradesh, and Rajasthan recorded the sharpest decline in the number of people classified as poor based on the MPI.
 - Uttar Pradesh witnessed the largest decline, with 5.94 crore people escaping multidimensional poverty.
- **Improvement in All Indicators**
 - All 12 MPI indicators showed significant improvement, reflecting progress in Health, Education, and Standard of Living dimensions.
- **Severity of Deprivation**

- The Severity of Deprivation (SoD) declined at a slightly lower rate between 2015-16 and 2019-21 compared to 2005-06 and 2013-14.
- Reduction of deprivation was faster after 2015-16, indicating progress.
- **SDG Target Achievement**
 - India is likely to achieve SDG Target 1.2 well before 2030, as indicators related to the standard of living dimension showed significant improvements.
- **Drivers Helped in Declining MPI**
 - Initiatives like Poshan Abhiyan and Anemia Mukht Bharat enhanced healthcare access.
 - Food Security programs, like the Targeted Public Distribution System, covered 81.35 crore beneficiaries.
 - Decisions, such as extending free food grain distribution under Pradhan Mantri Garib Kalyan Anna Yojana, demonstrate the government's commitment.
 - Programs addressing maternal health, Ujjwala Yojana for clean cooking fuel, Saubhagya for improved electricity coverage, and campaigns like Swachh Bharat Mission and Jal Jeevan Mission collectively improved living conditions.
 - Flagship programs like Pradhan Mantri Jan Dhan Yojana and PM Awas Yojana played pivotal roles in financial inclusion and safe housing.

What is NITI Aayog?

- NITI Aayog, replacing the Planning Commission, was established on January 1, 2015, with a 'Bottom-Up' approach and a focus on 'Cooperative Federalism.'
- It comprises two hubs: Team India Hub acts as an interface between States and the Centre, and the Knowledge and Innovation Hub builds the think-tank acumen of NITI Aayog.