

DAILY CURRENT AFFAIRS (DCA)

Time: 45 Min

Date: 23-01-2024

Table of Content

Ram Temple: A new-age Architectural Marvel
Cancellation of FCRA Registration for NGOs
India-Myanmar Border Free Movement Regime
Processed food exports up 150% in 9 years
World Economic Forum Annual Meet in Davos
Pradhanmantri Suryodaya Yojana

NEWS IN SHORTS

Bordowa Satra (Batadrava Than)
Ingenuity: Mars Helicopter
Mpemba Effect
Aid Cube under Project BHISHM
EXERCISE KHANJAR
Chinese Ships Heading to Maldives

RAM TEMPLE: A NEW-AGE ARCHITECTURAL MARVEL

Context:

- The Pran Pratishtha (consecration) ceremony of the Ram Lalla idol took place at Ram Temple in Ayodhya, Uttar Pradesh on January 22, 2024.
 - ♦ The temple is a new-age architectural marvel of elegant sandstones with no use of iron or steel.

Key Facts about the Temple

- It is spread over nearly 3 hectares and is made with pink sandstone and adorned with intricate carvings.
- The temple blends traditional design with cutting-edge technology and is **crafted without the use of iron, steel, or cement.**
- The idol of Lord Ram **inside the sanctum sanctorum** (also known as **Grabhgriha**) of the temple; The statue was carved in **black stone** by **sculptor Arun Yogiraj.**

Construction Materials:

- **Traditional construction materials** have been used in their construction to reflect an alignment with traditional building practices along with an emphasis on sustainability.
- These include:
 - ♦ **Bansi Paharpur Pink Sandstone** from Bharatpur of Rajasthan (for the main temple structure);
 - ♦ **Granite Stones** have been used in the **plinths**
 - ♦ **White Makrana and Colored Marbles** have been used for the inlay work
 - ♦ **Teakwood** has been used for the construction of the doors of the temple.
 - ♦ **Special Bricks with 'Shri Ram' inscribed:** It intertwines modern craftsmanship with **ancient symbolism.**
 - ♦ **Other Materials Used:** Shaligram Rock, Copper Plates, Gold, and Ashtdhatu

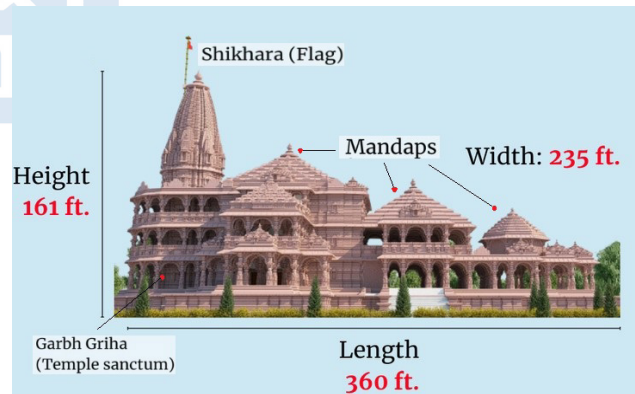
Facts & Figures

- Estimated cost of temple: **₹1800 crore**
- Total land: **70 acres**
- Main temple land: **2.77 acres**
- Floors: **3**
- Gates: **12**
- Doors: **44**
- Total built-up area: **57,400 Sq. ft.**
- Height of each floor: **20 ft.**
- No. of columns in ground floor: **160**
- No. of columns in first floor: **132**
- No. of columns in second floor: **74**
- No. of pedks and pavilions: **5**

Architectural Highlights:

- **Foundation:** A 14-meter thick layer of roller-compacted concrete, looking like an artificial rock, has been used to construct the foundation of the temple.
 - ♦ A 21-foot-high plinth of Granite has been constructed for protection against ground moisture.

The Main Temple: The main temple is built in **Nagara Style**. It consists of a total of **five Mandaps (Hall)** – Nriitya Mandap, Rang Mandap, Sabha Mandap, Prarthna, and Kirtan Mandaps.



- ♦ It has **three stories** (ground plus two floors, with each story designed to give the devotees an experience of the various stages of Lord Rama's divine journey, each floor of the temple will be 20 feet high), and 392 pillars.
- ♦ The ground floor of the temple has been designed to depict the story of the birth and childhood of Lord Rama, and the first floor is designed like Lord Rama's Darbaar.
- ♦ The **main entrance** to the temple is called the **Singh Dwar**, which features a series of ornate statues of elephants, lions, Lord Hanuman, and Garuda were installed.

The Temple Complex

- Kuber Tila is located in the southwestern part of the complex.
- The ancient temple of Lord Shiva located in this part has been restored.
- A bronze idol of the Ramayana character 'Jatayu' is installed.
- The Bell is made of Ashtadhatu (Gold, Silver, Copper, Zinc, Lead, Tin, Iron, and Mercury)
- Some other temples proposed to be constructed within the temple complex are those dedicated to Maharishi Vashishtha, Maharishi Valmiki, Maharishi Vishwamitra, Maharishi Agastya, Nishad Raj, Devi Ahilya, and Mata Shabri.

Unique Feature:

- Around the grand temple is a **rectangular periphery** called **Percota**, a feature found in temples in south India, but not generally in north India.
- About 70% of the complex will be a **green area**.
- The temple complex has **two sewage treatment plants**, a **water treatment plant**, and a dedicated electricity line from the powerhouse.
- A Pilgrims Facility Centre of 25,000 capacity to provide medical facilities and locker facilities to the pilgrims.

Other Architectural Facets:

- A **time capsule** has been placed approximately 2,000 feet below the ground, right underneath the temple. The capsule contains a copper plate inscribed with relevant information regarding the Ram Mandir, Lord Rama, and Ayodhya.
 - ♦ The purpose of this time capsule is **to ensure that the identity of the temple remains intact** over time so that it doesn't get forgotten in the future.
- The temple is **an earthquake-resistant structure**, with an estimated age of 2500 years.

Source: **TH**

CANCELLATION OF FCRA REGISTRATION FOR NGOS

Context

- Recently, the Foreign Contribution Regulation Act, 2010 (FCRA) registration of two prominent non-governmental organizations (NGOs) — Centre for Policy Research (CPR) and World Vision India (WVI) have been canceled.

About

- The MHA alleged that CPR diverted foreign donations **to fund “protests and legal battles against developmental projects”** and misused funds to “affect India's economic interests.”
- Since 2015, the FCRA registration of more than 16,000 NGOs have been canceled on account of violation. Currently there are 16,989 FCRA-registered NGOs active in the country.

What is Foreign Contribution Regulation Act, 2010

- **FCRA aims** to regulate the acceptance and utilization of foreign contributions to prohibit activities detrimental to the national interest.
- **Origin:** It was first enacted in 1976 but repealed and later replaced with new legislation in 2010. It was further amended in 2020.
- **Provisions** of the Act are as;
 - ♦ Every person or NGO wishing to receive foreign donations to be registered under the Act,
 - ♦ Registered groups can receive foreign contributions for social, educational, religious, economic and cultural programmes.
 - ♦ To utilize the funds only for the purpose for which they have been received, and as stipulated in the Act.
 - ♦ They are also required to file annual returns, and they must not transfer the funds to another NGO.
 - ♦ The Act prohibits receipt of foreign funds by candidates for elections, journalists or newspaper and media broadcast companies, judges and government servants, members of legislature and political parties or their office-bearers, and organizations of a political nature.
- **2020 Amendment:** Prohibiting the transfer of foreign contribution to any other person or organization.
 - ♦ Reducing the limit of usage of foreign contribution for administrative expenses from 50% to 20%.
- **FCRA 2022 Rules:** In July 2022, the MHA introduced changes to FCRA rules. These changes included increasing the number of compoundable offences from 7 to 12.

- ◆ The regulations also increased the threshold for contributions from overseas relatives, which can be made without the need for government notification, from Rs 1 lakh to Rs 10 lakh. Additionally, the timeframe for informing the government about the opening of bank accounts was extended.
- **Validity:** The registration is valid for five years, after which the NGO has to apply for a renewal.
- The **Union Ministry of Home Affairs (MHA)** monitors the implementation of the FCRA to ensure that such funds do not adversely affect the country's internal security.
- ◆ Concerns often arise when the specific purposes and beneficiaries of these funds are not clearly disclosed.

Way ahead

- While the FCRA has undergone amendments, the challenges in its implementation remain, such as the difficulty in balancing the need for transparency and accountability with the need to protect the autonomy of civil society organizations.
- Nonetheless, it is essential to continue working towards effective implementation of the FCRA to prevent misuse of foreign funds and ensure the transparency and accountability of NGOs in India.

Source: *TH*

Importance of regulating foreign contributions in India

- **Preventing interference in Indian affairs:** The FCRA was enacted to prevent foreign powers from interfering in India's affairs by regulating foreign donations to individuals and associations.
- **Transparency and accountability:** The FCRA ensures transparency and accountability which is important to prevent misuse of funds.
- The MHA has also raised concerns that the NGOs in India are vulnerable to the risks of **money laundering and terrorist financing**.
- **National security:** The FCRA also helps in safeguarding national security interests by preventing foreign entities from funding activities that could be detrimental to India's security.

Challenges of regulating foreign contributions

- **Administrative Delays:** The registration and renewal process under the FCRA can take a long time which delays their work and impacts their ability to receive funding.
- **Political Interference:** The government's discretionary powers to cancel registrations or freeze accounts of NGOs have been misused in some cases to target NGOs critical of the government, leading to accusations of political interference.
- **Hinders social and economic development:** Stringent Compliance Requirements of foreign contributions affects the social and economic development in India.
- **Lack of Transparency:** Some NGOs have been criticized for lacking transparency in their utilization of foreign funds received under the FCRA.

INDIA-MYANMAR BORDER FREE MOVEMENT REGIME

Context:

- The Union Ministry of Home Affairs (MHA) is planning to end the Free Movement Regime (FMR) with Myanmar.

Free Movement Regime (FMR) Agreement

- The FMR is a mutually agreed arrangement between the two countries that allows tribes living along the border on either side to travel up to 16 km inside the other country **without a visa**.
- It was aimed **to minimise the historical divide** and facilitate cultural and economic ties.
 - ◆ The border between India and Myanmar was **demarcated by the British in 1826, without seeking the opinion of the people** living in the region, which effectively divided people of the same ethnicity and culture into two nations without their consent.
 - ◆ People in the region have strong ethnic and familial ties across the border.
- It was implemented **in 2018 as part of the Act East Policy** and was supposed to **provide impetus to local trade and business** and boost regional ties.
 - ◆ The region has a long history of trans-border commerce through customs and border haats.

Differed Opinion

- Manipur had urged the MHA to suspend the FMR and fence the entire India-Myanmar border in September 2023.

- ♦ It had **already suspended the FMR in 2022** to prevent large-scale migration of refugees from Myanmar.
- However, **Mizoram and Nagaland** have **opposed** this move of MHA, arguing that the FMR allows the tribes residing across the borders to maintain their ethnic, social, and cultural ties, as well as contribute to the economic well-being of people on both sides of the border.
 - ♦ They have also opposed the proposal of fencing the entire border with Myanmar.

Why ending the FMR Agreement is significant to India?


- **Security Concerns:** There are illegal immigrants, drug traffickers, and insurgents from Myanmar have been misusing the liberty of the FMR.
- **Control of Ethnic Violence:** There have been several instances of ethnic violence in the region.
 - ♦ About 200 people have lost their lives in ethnic violence between the Kuki tribes and the Meiteis in the second half of 2023.
- **Border Management:** The decision to end the FMR is part of a broader plan to secure the India-Myanmar border.
 - ♦ The government plans to fence the border, similar to the India-Bangladesh border.
- **Regulation of Movement:** The FMR allowed locals from both countries to enter either side up to a certain distance without visas and passports.
 - ♦ This arrangement will be scrapped, regulating the movement of people across the border.

India's strategy to safeguard its borders

- **Developing Infrastructure:** As part of the strategy to secure the borders as also to create infrastructure in the border areas of the country, several initiatives have been undertaken by the **Border Management Division**.
- These include the construction of the fence, floodlighting, roads, Border Out Posts (BOPs), Company Operating Bases (COBs), and deployment of technological solutions along the India-Pakistan, India-Bangladesh, India-China, India-Nepal, India-Bhutan and India-Myanmar borders.
- **Deployment of Troops & Surveillance:** The Indian Army and the BSF are deployed in multiple layers to form an anti-infiltration grid.

- ♦ The border fence and deployment of other surveillance devices have helped in reducing infiltrations.
- ♦ Improving our intelligence network within the state to nab the drug dealers on our side of the border must be the main priority of our security forces.
- **Along Bangladesh, Nepal, Bhutan, and Myanmar borders:** Our borders with these countries are guarded primarily by paramilitary forces, and they have to deal with the smuggling and trafficking of humans, drugs, arms, illegal migration, and movement of suspected insurgents.
- **Drugs Challenge:** Drones have proved to be an effective tool in smuggling drugs across the border.
 - ♦ It will take more than mere vigilance on the border to deal with this menace.

India-Myanmar Relations



The map shows the geographical context of India-Myanmar relations. India is highlighted in orange, and Myanmar is highlighted in red. The border between them is marked with a thick black line. Neighboring countries like Bangladesh, Vietnam, China, Laos, and Thailand are also shown. Key cities like Mandalay and Yangon in Myanmar, and Naypyidaw in Myanmar are marked. The Bay of Bengal, Andaman Sea, and Gulf of Thailand are also labeled.

- Both countries share a largely unfenced **1,643 km border**, which goes through the **states of Arunachal Pradesh (520 km), Nagaland (215 km), Manipur (398 km) and Mizoram (510 km)**.
 - ♦ They also share a **India and Myanmar maritime boundary** in the Bay of Bengal.
- India said the whole border with Myanmar will be secured by fencing **like the Bangladesh border**.
- **India-Myanmar-Thailand Trilateral Highway:** It involves the construction of a 1,360 km road from Moreh in India to Mae Sot in Thailand via Myanmar.
- **Energy Infrastructure:** India has been investing in Myanmar's energy sector, including the construction of a gas pipeline from Myanmar to India.
- **Security:** India has been providing training and equipment to Myanmar's security forces to enhance their capacity to deal with security threats.

- ♦ **Operation Sunrise:** It is a coordinated effort between the security forces of India and Myanmar **to target insurgent groups** operating along the border between the two countries.

Conclusion and Way Forward

- Mere scrapping of FMR might not make any difference on the ground, as in the case of Manipur where FMR has remained suspended since September 2022.
 - ♦ The people continue to cross the international border from any point mostly without permits. Crossing the border freely highlights the fact that the India-Myanmar border **continues to be poorly guarded.**
- There is a need to ensure that the border between India and Myanmar is **effectively secured and regulated by all stakeholders.**

Source: *IE*

PROCESSED FOOD EXPORTS UP 150% IN 9 YEARS

In Context

- The Minister of Commerce & Industry highlighted the 150% growth in processed food exports over the last nine years.

About

- There is an immense potential of the Indian food market, catering to a domestic market of 1.4 billion and a global Indian diaspora of nearly three million people who relish Indian delicacies.
- India's agricultural exports stood at an aggregate of about US\$ 53 Billion.
- The government of India has set a vision for the sector to achieve a target of doubling its contribution to the GDP by 2030.

About Food Processing

- Food processing refers to the conversion of raw agricultural products into value-added products for human consumption.
- The processing is done through several processes, such as harvesting, cleaning, packaging, grading, preserving and transportation.
- The sector's size is estimated to be around US\$322 billion, and it is expected to reach US\$543 billion by 2025, growing at a CAGR of 14.6%.

- The food processing industry in India is primarily concentrated in the northern and western regions of the country.
- The states of Maharashtra, Uttar Pradesh, Andhra Pradesh, Tamil Nadu, and Gujarat are the leading contributors to the sector. However, there is a huge untapped potential for the sector in the eastern and north-eastern regions of the country.

Significance of Food Processing Sector

- **Economic Contribution:** The Food Processing sector provides jobs not only in food production but also in packaging, distribution, marketing, and research and development.
- **Food Safety:** The industry plays a key role in maintaining and improving food safety standards. Processing methods often include steps to eliminate or reduce pathogens, contaminants, and spoilage microorganisms.
- **Innovation:** Food processing allows for the creation of a wide variety of food products by combining and transforming raw ingredients. This innovation contributes to diverse food choices for consumers.
- **Export Opportunities:** Processed food products often have a longer shelf life and are more suitable for transportation, making them key players in international trade.
- **Fortification:** Food processing allows for the fortification of certain products with essential nutrients, addressing nutritional deficiencies in populations.
- **Energy Efficiency:** Advances in food processing technologies contribute to more energy-efficient methods, reducing the environmental impact of food production.

Challenges related to Food Processing Sector

- **Lack of cutting-edge infrastructure:** Many food processing businesses operate in the small and medium enterprises (SMEs) sector, which often lacks the resources needed to upgrade their facilities and machinery to thinitiae latest technology.
- **Lack of Cold Chain and Storage:** The industry is also plagued by inefficient supply chains, inadequate storage and transport facilities, and a lack of access to credit and financing.

- **Food Safety Issues:** Contamination risks, whether biological, chemical, or physical, can lead to foodborne illnesses, damaging both consumer trust and industry reputation.
- **Raw Material Sourcing:** Variability in crop yields, weather conditions, and geopolitical factors can affect the availability and cost of key ingredients.
- **Complex Regulations:** The industry is subject to a complex web of regulations, licenses, and permits, which can be challenging for businesses to navigate.

Important Government Initiatives

- **National Mission on food processing:** Launched in 2012 as Centrally Sponsored Scheme (CSS). This mission aimed to encourage the establishment of food processing units, enhance the processing levels, and increase value addition in the food chain.
- **Mega Food Park Scheme:** A mega food park is an integrated facility that provides for storage, processing. Additionally, value additions to a large number of players in the food processing industry.
 - ◆ Under the Mega Food Park Scheme, the Government of India provides financial assistance up to Rs. 50.00 Crore per Mega Food Park project.
 - ◆ The Mega Food Park Scheme is based on the "Cluster" approach and envisages a well-defined Agri/ horticultural-processing zone containing state-of-the-art processing facilities with support infrastructure and well-established supply chain.
- **Other initiatives:** The Ministry is actively implementing three major schemes to promote the food processing sector: Pradhan Mantri Kisan SAMPADA Yojana (PMKSY), Pradhan Mantri Formalization of Micro Food Processing Enterprises (PMFME) scheme, and Production Linked Incentive (PLI) Scheme.
 - ◆ Allowing 100% Foreign Direct Investment (FDI) approval under automatic route for the food processing sector.

Way Ahead

- There is a need for large-scale food processing, product branding, and export oriented strategy.
- Setting up intelligent food processing hubs equipped with cutting-edge technologies such as

the Internet of Things (IoT), artificial intelligence (AI), and blockchain. These hubs have the capability to oversee the entire food supply chain, ensuring quality, traceability, and operational efficiency from the farm to the consumer's table.

Source: *ET*

WORLD ECONOMIC FORUM ANNUAL MEET IN DAVOS

In Context

- The **54th annual meeting** of the World Economic Forum in Davos, Switzerland was concluded recently.

About

- Every year, leaders from various fields, such as business, politics, economics, etc., gather in the Swiss town to discuss challenges facing the world and explore the ways forward.
- The five-day session was held offline for the first time in three years.

Five Takeaways of the 2024 Summit:

- **Artificial Intelligence:** Many transformational abilities for human welfare were discussed, so were the need for regulation, fear of job losses, the risks of impersonation and misinformation, and the inequalities it can potentially worsen.
 - ◆ The overall discussion seemed to be that the **positives outweigh the negatives**, and human intelligence did not face a major threat from AI.
- **War and Uncertainty:** Business leaders spoke of the risk posed by a fragile geopolitical situation, wars in the Middle East and Europe, the threats to global supply chains, and the uncertainty around food security.
 - ◆ Yet, no plans or roadmaps for peace were offered about the Israel-Gaza violence.
- **Climate:** The need for businesses to adapt to climate change and for countries to unite for action against it despite differences was another topic.
 - ◆ The need for the Developed countries to assist in the financing of climate action in the developing countries was discussed.
- **China's Economy:** Facing a slowing economy, China tried to attract more investment from the West, which has witnessed some cooling.

- ◆ At 5.2%, China's GDP growth in 2023 is still below pre-pandemic levels, and it is battling American attempts to isolate it.
- **India:** India seemed to be the **most visible** among its regional Asian peers, with major tech companies staging booths in Davos.
 - ◆ Indian business leaders were seen at the forefront of debates over technology and supply chain issues.
 - ◆ One of the key takeaways from the Forum meeting was the announcement of the launch of a **Global Good Alliance for Gender Equity and Equality** with the support by **WEF and Government of India**.
 - ◆ The objective of this Alliance is to bring together global best practices, knowledge sharing and investments in the identified areas of women's health, education, and enterprise.
- It will **not only reduce the electricity bill** of the poor and middle class, but will **also make India self-reliant in the field of energy**.

Current status

- It is estimated that **there are less than 10 lakh households** with rooftop solar installations in the country.
- There was a **target to install 100 GW by 2022** — 60 GW from utility projects (mega concentrated solar parks) and 40 GW from rooftop solar.
 - ◆ But, according to the Ministry of New and Renewable Energy's website, **solar power installed capacity in India** has reached around **73.31 GW** as of December 2023, while **rooftop solar installed capacity** is around **11.08 GW**. Notably, **solar power has a major share** in the country's current renewable energy capacity, which stands at **around 180 GW**.
- In terms of total solar capacity, **Rajasthan is at the top with 18.7 GW**. Gujarat is at the second position with 10.5 GW.
 - ◆ When it comes to **rooftop solar capacity**, **Gujarat tops the list** with 2.8 GW, followed by Maharashtra by 1.7 GW.

World Economic Forum

- The World Economic Forum (WEF) is an international organization that was founded in **1971 by Klaus Schwab, a German economist**.
- It is headquartered in **Geneva, Switzerland**, and is known for its **annual meeting in Davos**, where global leaders from various sectors gather to discuss and collaborate on pressing economic and social issues.
- **Some major reports published by WEF are:**
 - ◆ Fostering Effective Energy Transition report
 - ◆ Global Competitiveness Report.
 - ◆ Global Gender Gap Report.
 - ◆ Global Risk Report.
 - ◆ Future of Jobs Report.

Source: **IE**

PRADHANMANTRI SURYODAYA YOJANA

Context:

- PM announces a **solar rooftop scheme** to electrify **one crore households with solar electricity**.

About

- The government will launch '**Pradhanmantri Suryodaya Yojana**' with the target of **installing rooftop solar on one crore houses**.

Need for expansion of solar energy in India

- **Growing demand:** India is **expected to witness the largest energy demand growth** of any country or region in the world over the next 30 years, according to the latest **World Energy Outlook by the International Energy Agency (IEA)**.
 - ◆ To meet this demand, the country would **need a reliable source of energy** and it can't be just coal plants.
- **Fulfill commitments:** It aims to reach **500 GW of renewable energy capacity by 2030**.
 - ◆ The country has increased it from less than **10 MW in 2010 to 70.10 GW in 2023**, as mentioned before.

Earlier scheme: Rooftop Solar Programme

- **Launched in:** 2014

- **Aim:** To expand India's rooftop solar installed capacity in the residential sector by providing Central Financial Assistance and incentives to DISCOMs (distribution companies).
- **Goal:** To increase **rooftop solar installed capacity to 40 GW by March 2026** and it is currently in its **second phase**.
 - ♦ The government has extended the **deadline from 2022 to 2026 as it could not meet the target by 2022**.
 - ♦ However, owing to the scheme, the country's rooftop solar has increased from **1.8 GW as of March 2019 to 10.4 GW as of November 2023**.

Other Schemes for Promoting Solar Energy

- **PM-KUSUM (Kisan Urja Suraksha evam Utthaan Mahabhiyan):** Aimed at ensuring energy security for farmers in India, along with honoring India's commitment to increase the share of installed capacity of electric power from non-fossil-fuel sources.
- **Solar park scheme:** For Development of Ultra Mega Renewable Energy Power Parks (UMREPPs) targeting 40,000 MW of solar power installed capacity by 2025-26.
- **Atal Jyoti Yojana (AJAY):** The AJAY scheme was launched in September 2016 for the installation of solar street lighting (SSL) systems in states with less than 50% households covered with grid power.
- **National Solar Mission:** The mission was launched in 2010 with the objective of establishing India as a global leader in solar energy.
- **International Solar Alliance:** The ISA was launched in 2015 in Paris, on the side-lines of the Conference of the Parties (COP-21), with 121 solar resource rich countries lying fully or partially between the tropic of Cancer and tropic of Capricorn as prospective members.
- **One Sun, One World, One Grid (OSOWOG):** It focuses on a framework for facilitating global cooperation, building a global ecosystem of interconnected renewable energy resources.

Source: **TH**

NEWS IN SHORT

BORDOWA SATRA (BATADRAVA THAN)

Context

- Recently Rahul Gandhi was prevented from visiting Batadrava Than.

About

- **The Batadrava Than,** is one of the most sacred sites for Assamese Vaishnavites and was established by Srimanta Sankardev in 1494 A.D.
- **Location:** It is located at the birthplace of revered Vaishnavite reformer-saint Srimanta Sankardeva (1449-1568) in Nagaon district, of Assam.
- **Architecture:** The campus encompasses diverse structures such as Natghar (Drama hall), Alohighar (Guest room), Sabhaghar (Assembly hall), Rabhaghar (Music room), Hatipukhuri, Aakashi Ganga, Doul mandir (festive temple), and others.

Philosophy of Srimanta Sankardeva

- **Teaching:** His teaching focused on prayer and chanting (naam) instead of idol worship.
- **Dharma:** His dharma was based on the four components of deva (god), naam (prayers), bhakats (devotees), and guru (teacher).
- **Ek Saran Naam Dharma:** The saint propagated the Ek Saran Naam Dharma, focussed on worship in the form of bhakti (devotion) to Lord Krishna, through singing and congregational listening of His name and deeds.
- Sankardeva espoused a society based on **equality and fraternity**, free from caste differences, orthodox Brahmanical rituals and sacrifices.
- The saint traveled across Assam, spreading his teachings and establishing the Sattras/Thans as centers of religious, social and cultural reforms in the 16th century.

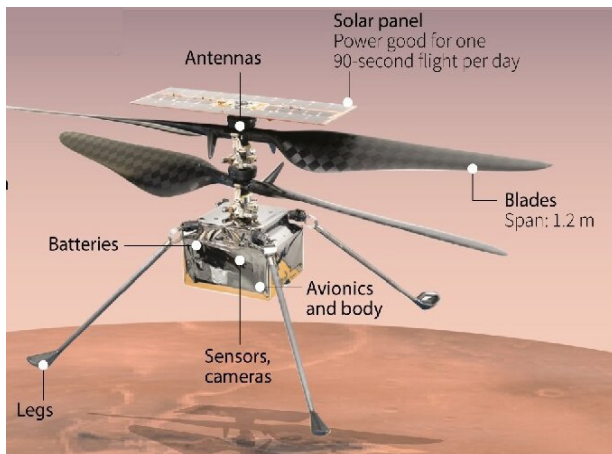
Source: **TH**

INGENUITY: MARS HELICOPTER

Context

- The National Aeronautics and Space Administration (NASA) regained contact with its **Mars Ingenuity Helicopter** after its 72nd flight.

About Ingenuity



- It is a **small robotic chopper** and the **first aircraft** to make a powered, controlled flight **sent to Mars** on an experimental basis.
 - ♦ It has been called a '**Wright Brothers moment**'.
- It flies in Mars' thin atmosphere, which isn't conducive for flying.
- It uses **solar power** to charge its batteries and relies on internal heaters to maintain operational temperatures during the cold Martian nights.
- It paves the way for **future aerial explorers** at Mars and, potentially, other space destinations.

About Mars

- It is the fourth planet from the Sun and is a cold desert world.
 - ♦ It is nearly half the size of Earth.
- It is sometimes called the **Red Planet**, because of **rusty iron in the ground**.
 - ♦ It has **lower gravity (about one-third that of Earth)** but its atmosphere is just 1% as thick, making it much harder to generate lift.
- It is also a dynamic planet with seasons, polar ice caps, canyons, extinct volcanoes, and evidence that it was even more active in the past.
- It has a very thin atmosphere made of carbon dioxide, nitrogen, and argon.
- There are signs of ancient floods on Mars, but now water mostly exists in icy dirt and thin clouds.

Source: **TOI**

MPEMBA EFFECT

In News

- The Mpemba effect caught scientists' attention recently.

About Mpemba effect

- It is named after **Tanzanian** student **Erasto Mpemba**, who brought attention to this counterintuitive **phenomenon** in 1969.
 - ♦ Aristotle, Francis Bacon, and René Descartes had noticed the effect centuries earlier.
- The effect is that **hot water can freeze faster** than **cold water in similar conditions**.
- **Experiments** : Researchers have conducted numerous experiments to determine the causes of this phenomenon
 - ♦ **Microbubbles** : left suspended in water that has been heated by boiling.
 - These cavities **promote convection and transfer heat faster** as the water cools.
 - ♦ **Evaporation**: As warmer water evaporates more, it also takes away some heat (evaporation is inherently endothermic, which is how sweat cools your skin).
 - Both convection and accelerated heat transfer are enhanced in warmer water because such water is less dense.
 - ♦ **The presence of frost in cold water**:
 - Frost is an insulator and could slow the loss of heat.
 - ♦ **Compounds in water**: Scientists have also considered whether compounds in water like calcium carbonate could be precipitated by boiling, and then dissolve, thus increasing the water's freezing point.

Source: **TH**

AID CUBE UNDER PROJECT BHISHM

In News

- Two Arogya **Maitri Disaster Management Cube-BHISHM** have been deployed in Ayodhya to strengthen medical preparedness during the Pran **Pratishtha Ceremony**.

About Aid Cube under Project BHISHM

- It is a revolutionary mobile hospital equipped with cutting-edge technology.

- These mobile hospitals are part of the larger initiative called “**Project BHISHM**” – **Bharat Health Initiative for Sahyog, Hita, and Maitri**.
- **Features**
 - ♦ Tailored to treat up to 200 casualties, the Aid Cube focuses on rapid response and comprehensive care.
 - ♦ Equipped with innovative tools, it integrates Artificial Intelligence (AI) and data analytics to improve coordination, real-time monitoring, and efficient management of medical services during emergencies.

Source: [DD News](#)

EXERCISE KHANJAR

Context:

- The **11th edition of India-Kyrgyzstan** Joint Special Forces Exercise **KHANJAR** has commenced recently in Bakloh, Himachal Pradesh.

About

- The Indian Army contingent comprising 20 personnel is being represented by troops from **The Parachute Regiment (Special Forces)** and the Kyrgyzstan contingent comprising 20 personnel is represented by **Scorpion Brigade**.
- It is an **annual event** conducted alternatively in **India and Kyrgyzstan**.

Significance

- The exercise will **emphasise on developing Special Forces skills**, advanced techniques of insertion and extraction.
- The exercise will also **provide an opportunity for both the sides to fortify defence ties** while addressing common concerns of international terrorism and extremism.
- The exercise will also **accord the opportunity to showcase capabilities of cutting edge indigenous defence equipment** besides achieving shared security objectives and foster bilateral relations.

Source: [PIB](#)

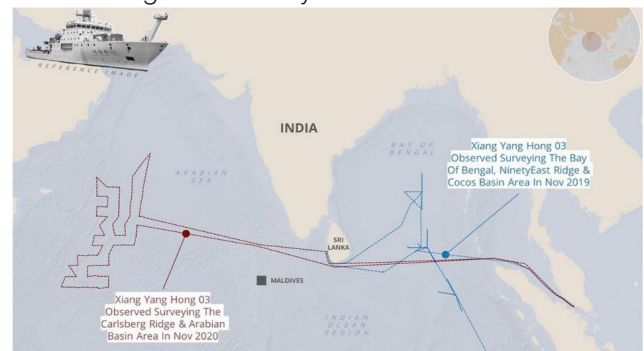
CHINESE SHIPS HEADING TO MALDIVES

In Context

- **India has raised concern** over the steady **rise in the deployment of Chinese research vessels** in the Indian Ocean Region.

About

- Chinese research vessel Xiang Yang Hong 03 is entering the Indian Ocean and **headed to Maldives** and is expected to run an **ocean survey operation in the Indian Ocean Region**.
 - ♦ The development comes amid **ongoing friction between India and Maldives** over stationing of Indian troops.
- **Increase in Chinese Naval Power:** China has grown from having 250 to more than 350 navy ships becoming the **largest navy in the world**.
 - ♦ Along with their numbers, their operations have also expanded and at any point of time, five to nine ships are operating in the IOR in addition to their research vessels, which can influence the security.
- **Presence in IOR:** Chinese presence in the Indian Ocean **began in 2008** under the garb of anti-piracy operations in the Gulf of Aden and the country has since maintained continuous presence in the region, even deploying nuclear attack submarines (SSNs) on occasion.
- **International Law: Research activities are allowed** in international waters as per international regulations.
 - ♦ The data generated have dual nature including military and many times the motive of Chinese vessels had seemed doubtful, on occasion coinciding with the test firing of long range missiles by India.



Source: [TH](#)