

World's Largest Ramayan Temple in Bihar | Bihar | 12 Jul 2024

Why in News?

Recently, The second phase of construction of the "world's largest Ramayan temple" began in **East Champaran district of Bihar.** The construction of the three-storey temple, spread over an area of 3.76 lakh sq.ft., **began in June 2023 and is expected to be complete in 2025.**

Key Points

- The Viraat Ramayan Mandir will be three times larger than the Ram Mandir in Ayodhya.
 - Constructed at a cost of Rs 500 crore, it will feature a 33-foot-tall <u>Shivling</u> in the arghya (sanctum sanctorum).
 - There will be **22 sanctum sanctorum** for different deities in the temple complex.
- The second phase will include the construction up to the plinth level, which will go up to a height of about 26 feet from the ground level.
- In the third phase, the construction of shikhars (spires) and the final finishing touches of the entire temple will be completed.
 - The temple will have a total of 12 shikhars, with the main shikhar reaching a height of 270 feet.
- The temple's architecture draws inspiration from <u>Cambodia's Angkor Wat</u>, the Ramanathaswamy temple in Rameswaram, Tamil Nadu, and the <u>Meenakshi Sundareswarar temple in Madurai</u>.

Angkor Wat Temple

- Angkor Wat is a temple complex in Cambodia and one of the largest religious monuments in the world.
- It was originally constructed as a Hindu temple dedicated to the god Vishnu for the Khmer Empire, it was gradually transformed into a Buddhist temple towards the end of the 12th century.
- It was built by the Khmer King Suryavarman II in the early 12th century in Yaśodharapura (present-day Angkor), the capital of the Khmer Empire, as his state temple and eventual mausoleum.

Meenakshi Sundareswarar Temple

- It is a historic Hindu temple located on the southern bank of the Vaigai River, Madurai in Tamil Nadu.
- The temple is dedicated to **goddess Meenakshi**, a **form of Shakti/Parvati** and her consort **Shiva in the form of Sundareswarar**.
- It was built by Pandyan Emperor Sadayavarman Kulasekaran I (1190 CE-1205 CE).

Ramanathaswamy Temple

- It is a Hindu temple dedicated to the god Shiva located on Rameswaram island in the state of Tamil Nadu.
- It is also one of the twelve Jyotirlinga temples.
- It was built by King Muthuramalinga Sethupathiy.

■ The temple was **expanded during the 12th century by the Pandya Dynasty,** and its principal shrine's sanctum was **renovated by Jeyaveera Cinkaiariyan and his successor Gunaveera Cinkaiariya**n, monarch of the Jaffna kingdom.

Special Grants for Chhattisgarh from Finance Commission | Chhattisgarh | 12 Jul 2024

Why in News?

Recently, Chhattisgarh Chief Minister Vishnu Deo Sai requested special central grants highlighting the state's large tribal population, challenging geographical conditions, and Naxal activities in certain areas.

This appeal was made during a meeting with a delegation from the 16th Finance Commission.

Key Points

- The CM informed the commission about rapid development works being carried out in Naxalaffected areas and effective measures being taken to curb Maoist activities.
 - Under the 'Niyad Nellanar Yojana' basic facilities such as education, health, roads, electricity, and water are being provided in these regions.
 - However, challenging geographical conditions in these areas lead to additional expenditure on infrastructure development.
- The additional expenses incurred to address concerns on environmental damage and health impacts caused by mining activities in the mineral-rich state.
 - Due to the <u>GST (Goods and Services Tax)</u> as a consumption-based destination tax system, the actual benefits of mining activities are accruing to states where mineral value addition and consumption occur rather than to Chhattisgarh.

Niyad Nellanar Yojana

- Niyad Nellanar, meaning "aapka achcha gaon" or "your good village" is the local Dandami dialect (spoken in south Bastar).
- Under this scheme, amenities and benefits will be provided in villages located within 5
 kilometers of security camps in Bastar region.
 - 14 new security camps have been set up in Bastar. These camps will also help to facilitate the implementation of the new scheme. Around 25 basic amenities will be provided in such villages under Niyad Nellanar.

Finance Commission

- The Finance Commission in India is a constitutional body established under <u>Article 280 of the Indian Constitution</u>.
 - Its primary function is to **recommend the distribution of financial resources** between the central government and the state governments.
- The <u>Fifteenth Finance Commission</u> was constituted on 27th November, 2017. It made recommendations covering the period of six years commencing on 1st April, 2020 through its Interim and Final Reports.
 - The recommendations of the Fifteenth Finance Commission are valid up to the financial year **2025-26.**

Ultra High-Performance Concrete (UHPC) | Uttar Pradesh | 12 Jul 2024

Why in News?

According to the sources, The <u>Uttar Pradesh public works department (PWD)</u> will have a tie-up with **IIT-Kanpur** to **develop ultra high-performance concrete (UHPC)** after research and development.

Key Points

- Currently, **M60 cement grade** is used in most civil works in the state.
- UHPC, which has a longer shelf life and can be 4-6 times stronger than M60 grade, and can significantly reduce the department's <u>carbon footprint</u>.
 - This reduction would be achieved by using thinner sections and lower deck heights
 during the construction of bridges, flyovers, elevated roads, railway overbridges, and other
 concrete-intensive infrastructure projects.
 - The product, developed using <u>nanotechnology</u>, is expected to be ready in three years.

Carbon Footprint

- According to the <u>World Health Organization (WHO</u>), a <u>carbon foo</u>tprint is a <u>measure of the</u>
 impact people's activities have on the amount of carbon dioxide (CO2) produced through the
 burning of fossil fuels and is <u>expressed</u> as a <u>weight of CO2 emissions produced in tonnes</u>.
- It is **usually measured as tons of CO2 emitted per year,** a number that can be supplemented by tons of CO2-equivalent gases, including <u>methane</u>, <u>nitrous oxide</u>, and other <u>greenhouse gases</u>.
- It can be a broad measure or be applied to the actions of an individual, a family, an event, an organization, or even an entire nation.

Uttarakhand Breaks Rainfall and Heat Records | Uttarakhand | 12 Jul 2024

Why in News?

As per a **report by Climate Trends**, Uttarakhand has been witnessing **extreme weather events** for the past two months, ranging from record breaking temperatures to extremely heavy rainfall triggering flash floods and landslides.

Key Points

• The rise in global average temperatures has **increased** <u>atmospheric moisture</u>, leading to the **formation of intense** <u>clouds</u> **and triggering heavy rains**.

- As temperatures continue to rise, these intense rain events are likely to become more common.
- In Uttarakhand, the **warming temperature trend is worsening** forest fire events to a greater extent.
- Human-caused climate change is influencing weather and climatic extremes in higher elevation places, and many recent studies have reported on the increasingly prevalent <u>Elevation-Dependent</u> Warming (EDW).
 - EDW influences the <u>Himalayan rivers and glaciers</u> (changes in the glacial mass balance, river discharge, snowfall), which is the only water source for the hilly region's livelihood.

Flash Floods

- These are **sudden surges in water** levels generally during or following an intense spell of rain.
- These are **highly localised events of short duration** with a very high peak and usually **have less than six hours** between the occurrence of the rainfall and peak flood.
- The flood situation worsens in the presence of **choked drainage lines** or encroachments obstructing the natural flow of water.

Landslide

- A landslide is defined as the movement of a mass of rock, debris, or earth down a slope.
- They are a type of mass wasting, which denotes any downward movement of soil and rock under the direct influence of gravity.
- The term landslide encompasses five modes of slope movement: falls, topples, slides, spreads, and flows.

Eradicating Invasive Aquatic Weeds | Madhya Pradesh | 12 Jul 2024

Why in News?

Recently, An exotic beetle named Cyrtobagus salvinia has successfully eradicated an invasive weed species, <u>Salvinia molesta</u> from Sarani reservoir (Satpura dam) built on the Tawa river in the Betul district of Madhya Pradesh.

Key Points

Scientists at Jabalpur-based <u>Indian Council of Agricultural Research</u>-Directorate of Weed Research (ICAR-DWR) revealed that Cyrtobagus salvinia, a **Brazilian bioagent specifically targeting Salvinia molesta**, was imported to India after thorough research and with the necessary governmental approvals.

Salvinia molesta

- It is an **aquatic fern** that is indigenous to **south-eastern Brazil**. It is also known as gigantic Salvinia or Kariba weed since it contaminated a sizable area of **Lake Kariba between Zimbabwe** and **Zambia**.
- Salvinia's characteristics include Small, floaters with branching, creeping stems that have hairs on the papillae of the leaf surfaces but no true roots.
- The leaves are arranged in trimerous whorls, with one leaf being finely divided, petiolate, rootlike, and pendant, while the other two are green, sessile or short-petioled, flat, whole, and

floating.

Indian Council of Agricultural Research

- It is an autonomous organisation under the **Department of Agricultural Research and Education (DARE), Ministry of Agriculture and Farmers Welfare.**
- It was established on 16 July 1929 and was formerly known as the Imperial Council of Agricultural Research.
- It is headquartered at **New Delhi**.
- It is the apex body for coordinating, guiding and managing research and education in agriculture including horticulture, fisheries and animal sciences in the entire country.

