

## Prelim Bits 09-09-2023 | UPSC Daily Current Affairs

### Malaviya Mission

*Union Minister for Education has recently launched the Malaviya Mission in New Delhi.*

- **Malaviya Mission** - It envisages *Capacity-building training* for the faculty and staff across higher educational institutions, in the light of NEP 2020, within 2 years through multiple training centers.
- It aims to provide tailored training programme for teachers and to improve the quality of teachers' training, build leadership skills in teachers and help realize the goals of NEP.
- The Mission **restructures** the existing Scheme of capacity building of teachers in Higher Education such as UGC-HRDCs and PMMMNMTT centers.
- **UGC-HRDC** - The University Grants Commission's (UGC) Human Resource Development Centres (HRDCs) cater to the teachers working in India's non-technical Higher Education Institutions (HEIs).
- These centres conduct Continuous Professional Development Programmes (CPDP) mainly in faculty induction, pedagogy, domain knowledge, and leadership.
- Under the Malaviya Mission, the HRDCs will now be known as Madan Mohan Malaviya Teachers' Training Centres.
- **PMMMNMTT** - Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching (PMMMNMTT) is a Central Sector Scheme launched in 2014.
- It aims to create and strengthen the institutional mechanisms for training teachers.

### References

1. [PIB | Malaviya Mission - Teachers Training Programme](#)
2. [The Economic Times | Malviya Teachers' Training Centres](#)

### Horizon Europe

*Britain recently said it would rejoin the European Union's Horizon science research program and its Copernicus earth observation program, but not the Euratom nuclear research initiative.*

- UK researchers had been frozen out of the scheme by the EU for 2 years, amid disagreements over Brexit.
- Horizon is the European Union's key funding programme for scientific research and innovation with a budget of 95.5 billion euros (\$102.3 billion).
- This programme is a successor to the **Horizon 2020 program** (2014-2020).
- **Aim** - It tackles climate change, helps to achieve the UN's Sustainable Development Goals and boosts the EU's competitiveness and growth.
- **Duration** - It is a 7-year programme runs until 2027.

- It creates jobs, fully engages the EU's talent pool, boosts economic growth, promotes industrial competitiveness and optimises investment impact within a strengthened European Research Area.
- ***Legal entities from the EU and associated countries*** can participate.

Programs	Purpose
<b>Copernicus</b>	<ul style="list-style-type: none"> <li>• It is previously known as GMES (Global Monitoring for Environment and Security).</li> <li>• It is the Earth observation component of the EU'S Space programme.</li> <li>• It gathers data from satellites and other measurement systems to examine the changing climate, shifts in land use, information on oceans and atmospheric conditions such as air quality.</li> </ul>
<b>Euratom</b>	<ul style="list-style-type: none"> <li>• It is a complementary funding programme to Horizon Europe covering nuclear research and innovation, using the same instruments and participation rules.</li> </ul>

## References

1. [The Hindu | Horizon project](#)
2. [European Commission | Horizon Europe](#)

## Konark wheel

*A replica of Konark Wheel from the Sun temple in Odisha served as the backdrop of Prime Minister Shri. Narendra Modi's welcome handshake with G20 leaders.*

- **History** - Konark Wheel was built during the 13<sup>th</sup> century under the reign of King Narasimhadeva-I.
- The wheel with 24 spokes representing the wheels of Lord Surya's sun chariot.
- **Significance** - The wheel has also been adapted into the Indian National Flag.
- Its rotating motion symbolises time, Kaalchakra, as well as progress and continuous change.
- It also embodies India's ancient wisdom, advanced civilisation and architectural excellence.
- The iconic wheel also works as a sundial.





## Konark sun temple

- The Sun Temple at Konârak, located in Odisha, eastern shores of the Indian subcontinent.
- The temple is dedicated to the Hindu Sun God, Surya.
- It was built c. 1250 CE by ***King Narasimhadeva I*** (1238-1264 CE) of the ***Eastern Ganga dynasty***.
- It is a ***UNESCO World Heritage Site*** known for its exquisite architecture and intricate stone carvings.
- The temple is in the shape of a chariot, with 12 exquisitely carved wheels and galloping horses.
- The temple's architecture is an excellent example of the ***Kalinga style of architecture*** (subset of the nagara style).
- The temple also features elaborate stone carvings depicting scenes from Hindu mythology.

## References



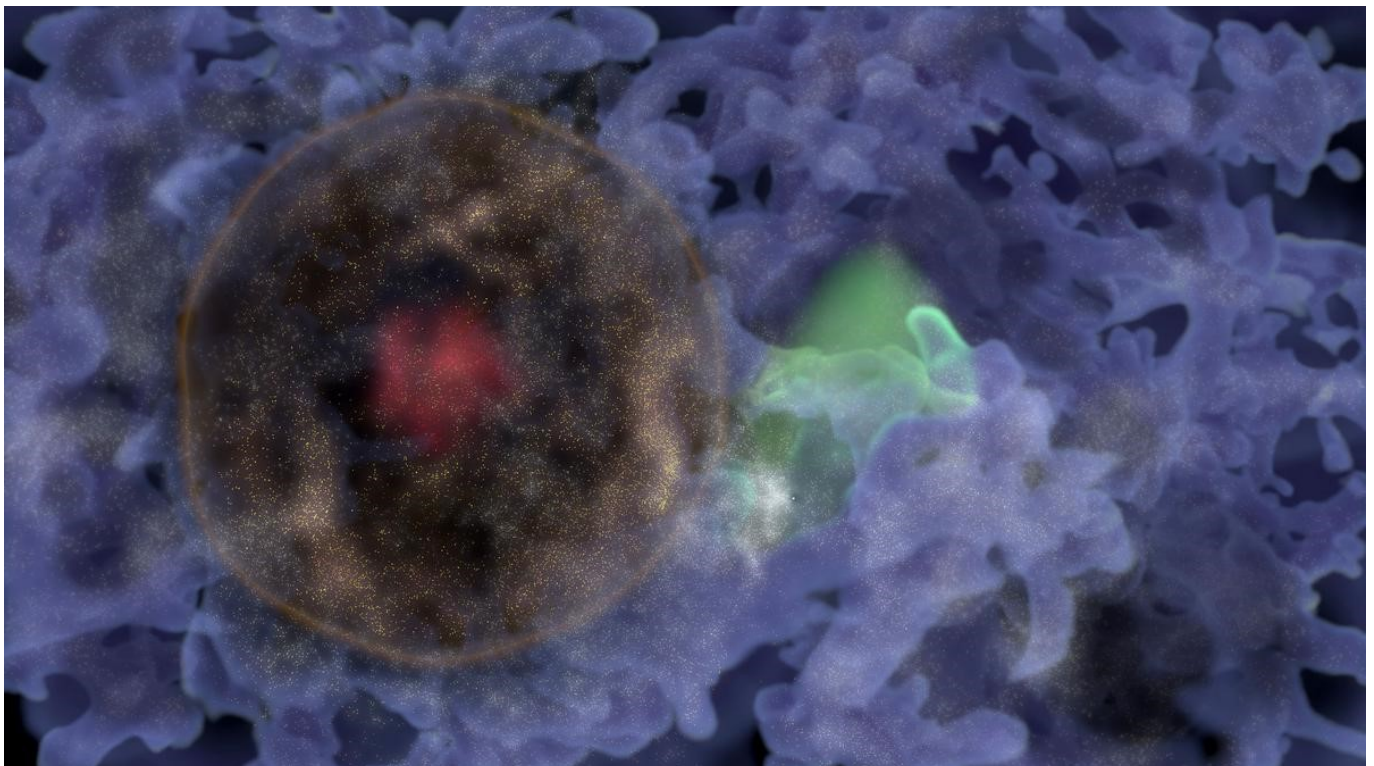
1. [The Hindustan Times | India showcases Konark Temple wheel](#)
2. [The Konark | Konark Wheel](#)

## Bubble of Galaxies

*Astronomers have discovered the first "bubble of galaxies," recently.*

- Bubble of galaxy is an unimaginably huge cosmic structure measuring one billion light-years across that is thought to be a fossilised remnant from just after the Big Bang.
- The bubble spans 820 million light years away from the milkyway.
- The heart of the bubble is the Bootes supercluster of galaxies, which is surrounded by a vast void sometimes called "***the Great Nothing***".
- The bubble contains several other galaxy superclusters, including the massive structure known as the ***Sloan Great Wall***.
- **Formation** - The discovery confirms a phenomenon first described in 1970 by US cosmologist ***Jim Peebles***.
- He theorised that in the primordial universe the churning of gravity and radiation created sound waves called ***Baryon Acoustic Oscillations (BAOs)***.
- As the sound waves rippled through the plasma, they created bubbles.
- Around 380,000 years after the Big Bang the process stopped as the universe cooled down, freezing the shape of the bubbles.
- The bubbles then grew larger as the universe expanded, similar to other fossilised remnants from the time after the Big Bang.

*The newly discovered bubble is the first known single baryon acoustic oscillation, according to the researchers.*



## References

1. [The Hindu | Bubble of galaxies](#)
2. [The Times of India | First 'bubble of galaxies' discovered](#)
3. [Aljazeera | first 'bubble of galaxies' a billion light-years wide](#)

## Minor Irrigation Census (MIC)

*A recent study by the Minor Irrigation Census found that Three-fourths of India's irrigation sources run on electricity*

- **Minor Irrigation schemes** - Irrigation schemes using either ground water or surface water and having a Culturable Command Area upto 2000 hectare individually are categorized as Minor Irrigation Schemes.
- The schemes have been categorized broadly into 6 major types; (1) Dugwell (2) Shallow tubewell (3) Medium Tubewell (4) Deep tubewell (5) Surface flow schemes and (6) Surface lift schemes.
- The need for conducting the census of Minor Irrigation arose as it was felt that a database of these schemes is needed to build agriculture in a big way.

*Out of all MI schemes, 21.93 million (94.8%) were for groundwater (GW) and 1.21 million (5.2%) for surface-water (SW) extraction.*

- Uttar Pradesh had the largest number of MI schemes in the country (17.2%) followed by Maharashtra (15.4%), Madhya Pradesh (9.9%) and Tamil Nadu (9.1%).
- Leading States in GW schemes are Uttar Pradesh, Maharashtra, Madhya Pradesh, Tamil Nadu and Telangana.
- Highest share in SW schemes are Maharashtra, Karnataka, Telangana, Odisha and Jharkhand.
- The number of MI schemes increased by about 1.42 million between the 5<sup>th</sup> and 6<sup>th</sup> editions.
- Most of the schemes (96.6%) were privately owned and small and marginal farmers, having less than 2 hectares of land, owned the majority of MI schemes.

## Minor Irrigation Census (MIC)

- **Released by** - Ministry of JalShakti.
- The recent census finds that electricity is the dominant source of power to extract water, over diesel, windmills, and solar pumps.
- This electrification of groundwater withdrawal corresponds to a rise in the use of tubewells and borewells that are capable of extracting water at greater depths.
- The 6<sup>th</sup> MI Census has been conducted with reference year 2017-18 in all States and Union Territories except Delhi, Daman & Diu, Dadra and Nagar Haveli and Lakshadweep.

## References

1. [The Hindu | India's irrigation sources run on electricity](#)
2. [Ministry of Jalshkati | MI Census](#)

